Research plan and methodology for evaluating the impact of the training course for PhD. students – beginner teachers

Výskumný plán a metodológia pre vyhodnotenie vplyvu školiaceho programu pre doktorandov – začínajúcich učiteľov

Prepared as part of the collaborative project *Extending and reinforcing good practice in teacher development*, ERASMUS+KA203-022551

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Output: O2

This version finalised on: 6 July 2017

This research plan and methodology includes following sections:

I.   **Program's philosophy of change**

Student-centred and Reflective Teaching. From Theory to Good Practice.
Teacher development program for PhD. students at University of Economics and Masaryk University

Expected program outcomes
By the end of the program, participants will have
- recognised the principles of student-centred education as important for their teaching practice;
- demonstrated reflective and critical skills related to planning, implementing and evaluating their teaching;
- obtained a sound knowledge of the essential theories of learning and teaching in higher education;
- used the newly acquired knowledge and skills for designing, implementing and evaluating the outcomes of a teaching innovation

Rationale for change
Both universities participating in the program –University of Economics and Masaryk University – are located in Central Europe, which is a region with a strong tradition of teacher-centred education. Previous studies have reported that universities in post-communist countries tend to rely on frontal lecturing rather than active-learning methods, prefer in-class teaching to independent learning, frequently use end-of-the term exams instead of continuous assessment and individual assignments rather than collaborative work (Pleschová and McAlpine 2016, Renc-Roe 2006, 2008, Karm et al. 2013).

Our survey of prevalent teaching practices at the two institutions, which we undertook in February 2017 and was completed by 80 PhD students (49 from University of Economics and 31 from Masaryk University, Faculty of Social Sciences) has confirmed these practices but also noted the occurrence of student-centeredness approaches. Whereas more than 60% of respondents named frontal lecturing among the three most frequently used pedagogic formats in their department and one third mentioned passive learning seminars, 75% of informants included either interactive seminars or interactive lectures. Concerning the period when students get assessed on their learning, most participants (36%) reported that continuous assessment was used for the majority of courses at their institution, 34% of participants claimed that continuous and end-of-the term assessment were used equally and 18% of participants chose end-of-the term assessment as a prevalent practice (the rest did not know). According to 56% of the survey respondents their institution uses the individual assignments and not collaborative tasks as a prevalent format of assignments. As for the types of assessed work, the survey outcomes are less optimistic: teachers from both universities most often assign traditional formats, such as presentations, tests and seminar papers, and their students rarely do case studies, projects or research papers.

These data suggest that teacher-centeredness has been wide-spread both at University of Economics and Masaryk University (Faculty of Social Sciences), even if this is not an exclusively used approach. Because previous research has demonstrated that student-centred teaching is a more effective driver of student learning than teacher-centred approach (see, for example, studies reviewed in O'Neill and McMahon, 2005), this program aims to stimulate a shift toward a more student-centred practice at both participating institutions.

Changing participants' conceptions before changing their teaching practice
Previous literature uncovered a close relationship between teachers' conceptions of teaching and learning and their pedagogic practice (Entwistle and Walker 2000). Some of past studies even concluded that participants of teacher development programs first need to change their thinking about teaching and student learning and only then they can make more substantial changes to their teaching practice (Ho 1998, Prosser and Trigwell 1999: 155-156). Therefore, we challenge program participants to reconsider their teaching conceptions and how their ideas influence student learning before expecting participants to become more student-centred in their teaching practice.

Levels of expected change
In the short-term, we expect the abovementioned change in practice to materialize at the individual level (i.e. program participants). In the mid-term, we aim to encourage a similar change at the mezzo level, which we understand either as a workgroup (see Roxå and Mårtensson 2013) or a department, depending on what we identify at each institution as the most significant unit for impacting teachers' thinking and practice. From the seven elements below the first five elements relate to the change at the individual level and the last two at the mezzo level.

We assume our program will encourage change due to following elements:

1. Providing participants with theoretical background to understand student learning
2. Creating opportunities for participants to put the acquired knowledge into practice
3. Facilitating participants' reflection of own practice
4. Asking participants to collect and evaluate data on student learning
5. Supporting participants through coaching
6. Securing support from university leaders
7. Encouraging formation of a community of practice

1. Providing participants with theoretical background to understand student learning

Rationale
Literature argues that practice is typically underpinned by theory, though this theory is oftentimes tacit and may be of low quality (Trowler and Cooper 2002). If practitioners achieve to root their practice in "explicit, rigorously evaluated theory," this can significantly help to improve their outcomes (Trowler and Cooper 2002). This is in line with results from previous studies into the effectiveness of teacher development programs in Australia and United States (Martin and Ramsden 1994 and Boice 1992 cited in Ramsden 1994), which found programs that had integrated knowledge about student learning with teaching experience more effective than courses that had only trained teachers in teaching strategies. Therefore, learning activities and assignments we use in this program are designed to equip teachers with theoretical background to understand how learning occurs at the university level, why student-centred teaching is more effective than teacher-centred practice and how teachers can stimulate quality learning at their students.

Method
We ask participants to read about pedagogic concepts and discuss them during the summer school. During the online part of the program, participants design a new way of teaching following their understanding of a pedagogic concept and compare/contrast the presupposition of the concept with the outcomes of student learning.

2. Creating opportunities for participants to put acquired knowledge into practice

Rationale
When left to their own devices, graduates from a number of teacher development programs were shown to struggle and even fail to integrate acquired knowledge into their teaching (Knight & Trowler 2000, Trowler and Cooper 2002, Hockings 2005, Ginns, Kitay and Prosser 2010, Nevgi 2012, Norton, Norton, and Shannon 2013, Karm, Remmik and Haamer 2013). Thus, we find crucial that our program not only widens participants' theoretical knowledge of learning and teaching but also assists them in using their newly acquired knowledge to transform their teaching practice.

Method
During regular morning application sessions at the summer school, we invite participants to present their ideas on how they would integrate acquired knowledge and skills into their classes. Moreover, summer school includes a microteaching session where all participants deliver a 15-minutes demonstration of own teaching. As part of the online section of the program, participants are required to submit a written teaching

innovation proposal and session plans of three classes as well as to teach at least three sessions following these designs.

3. Facilitating participants' reflection of own practice

Rationale
Stimulating individuals' reflection has been found powerful in previous research for bridging the gap between people's personal views and beliefs, newly acquired knowledge and transformation of practice. For example, Josefson (2005: 764) argues that reflection can make individuals to critically and explicitly explore their personal conceptions by developing their responsibility and ability for acting based on what they learned. According to Truijen and Van Woerkom (2008: 318), reflection allows people to achieve a deeper understanding of their actions as well as of the relationship between practice and its results. Also in our previous program for beginner teachers from eight universities in Slovakia, participants could see some of their newly tried methods working well whereas other methods had mixed or undesired results. Overall, program evaluation found participants' enhanced reflection over own teaching practice the biggest change the program could foster (Pleschová and McAlpine 2016). Hence, learning activities and assignments in this program are prepared in a way that they helped to improve participants' ability to reflect on teaching and student learning.

Method
To enhance their teaching practice further, participants will be encouraged to reflect upon their teaching experiences. Participants write a short reflection paper on their microteaching and another one on the results of their teaching innovation following a predetermined structure that is designed to prompt a structured and purposeful reflection.

4. Asking participants to collect and evaluate data on student learning

Rationale
Existing literature suggests that participants who engage in research into student learning can use reflection for improving their teaching practice (Nevgi 2013, Norton, Norton and Shannon, 2013). These findings are in line with conclusions from evaluating our previous program (Pleschová and McAlpine 2016). The program component that asked participating teachers to collect and evaluate data on student learning was identified among the two crucial factors in bringing about the desired improvement in participants' student-centeredness and critically reflective approach to teaching.

Method
Program participants are asked to write a teaching innovation proposal where they include a discussion on what data they will collect on student learning and how they will analyse them. During a teaching practicum, participants collect data and evaluate them in the reflection paper. We provide each participant with a small grant of €200 as a compensation for time and efforts spent formally evaluating their innovation outcomes (paid following the assigned coach considers the paper as having met the required criteria). Also, we offer program participants an opportunity to have their revised paper included in a book published with a recognized academic publisher (targeted). As these are PhD. students, this way they can get a useful experience in transforming their paper into a publishable product. Moreover, we assume that for many participants, this will be their very first publication at a well-reputed publisher. Authoring such a chapter, program participants will make their first step in the area of scholarship of teaching and learning.

5. Supporting participants through coaching

Rationale
Literature has reported that coaching and mentoring help participants of teacher development programs to change their pedagogic perceptions and enhance their teaching practice. In particular, coaching and mentoring have been evidenced to improve participants' teaching-related knowledge and cognitive skills,

enhance their pedagogic beliefs and attitudes, develop their critical thinking about teaching and learning, facilitate their research into student learning and increase teachers' pedagogic effectiveness (Pleschová and McAlpine 2015: 117). Hence, in our program, we use coaching (a form of mentoring) to help participants become more student-centred, reflect critically on their teaching and learning as well as embrace and use pedagogic theory, i.e. to achieve program outcomes. Coaches are moreover expected to help teachers to put their teaching plans into practice to attain desired effects and to assist participants while collecting data on student learning, interpreting this data and reflecting on own practice.

Method
In the summer school, session leaders advise participants to incorporate newly learnt things into their courses and give feedback on the microteaching session. During the online component of the program coaches (who served as session leaders in the summer school) provide comments on participants' proposals for teaching innovation (including session plans and data collection plans), offer participants a possibility to consult about their teaching challenges and give feedback on participants' reflection papers where they discuss the outcomes of teaching innovation.

6. Securing support from university leaders

Rationale
Literature argues persuasively that whereas teacher development programs usually result in participants changing their thinking about teaching, some participants struggle with lack of support and interest from colleagues, supervisors and school leaders, which substantially hinders participants' ability to introduce changes into their courses (Roxå and Mårtensson 2013: 213-214, Ginns, Kitay and Prosser 2010). Literature moreover warns that graduates from teacher development programs hardly bring about any change beyond the individual level, as for example influencing their peers in the departments, unless the program includes mechanisms to facilitate such an impact (Roxå and Mårtensson 2013: 214). This is why we will during the program approach participants' supervisors and managers (department chairs, workgroup leaders) and seek their support to mitigate existing barriers to change participants' teaching practice.

Method
Before the beginning of the online part of the program we send out letters to participants' department chairs and supervisors informing them about the program and asking for their support for the participants. At University of Economics, this letter will be distributed through the vice-rector for research and PhD. study, which is expected to elicit desired cooperation from the department chairs and supervisors. We will seek a similar channel for Masaryk University, too.
Furthermore, we will initiate meetings with individual department chairs, workgroup leaders and supervisors to discuss with them program goals and the involvement of program participants. First meetings will serve the purpose of identifying existing barriers and supportive factors and ways of how change in practice can be facilitated. We target at least five such meetings for each institution. Aside from this, we will identify supporters and allies at both institutions from among the university leadership (deans, vice-deans and vice-rectors). Following this mapping, we will draw up an action plan on how to effectively secure support from the people in leadership positions.

7. Encouraging formation of a community of practice

Rationale
Previous studies, including our earlier research, suggest that teachers' pedagogic environment acts as either an important catalyser or, more often, a barrier to participants' capacity to change their pedagogic practice (Renc-Roe 2006, 2008, Wang et al. 2011, Renc-Roe and Yarkova 2012, Knight and Trowler 2000, Trowler and Cooper 2002, Hockings 2005, Ginns et al. 2010, Nevgi 2012, Pleschová and McAlpine 2016). This not only refers to the factors that can be directly influenced by participants' managers, but also to broader issues like class size, participants' cultural learning styles and prevalent ways of student learning.

To overcome this constraint, research has found effective the creation and functioning of supportive groups. Lave and Wenger use the term "communities of practice," which are groups of individuals who share understandings of "what they are doing and what that means in their lives and for their communities" (Lave and Wenger, 1991: 98). On the other hand, Roxå and Mårtensson (2013:222) speak about "significant networks," which they see as groups of people that operate back-stage and support changes in thinking before change in practice materialize. Therefore, we encourage program participants to initiate such groups, whether they will prefer setting up a community of practice or significant network to catalyse exchange of ideas and provide mental support.

Going more into the depth of how those groups work, research signals the importance of the individuals at the core of the group, whose passion and engagement nurture the community (Wenger, Trayner and de Laat 2011). Hence, we will identify and work further with these leading individuals to provide them with additional theoretical background and encouragement.

Method
Through receiving feedback and exchanging experience with other group members, program participants are expected to more effectively resist pressures to teach in the usual ways that typically come from their institutions' teaching contexts. We create a number of opportunities during the summer school for program participants, including during a boat trip, free late afternoons and evenings, to engage in conversations about teaching and learning. From our previous experience, participants make active use of these occasions. We introduce additional opportunities during the online part of the program: we invite participants to arrange a peer observation by one participant colleague; we encourage them to discuss his/her observation and integrate peer comments into their reflection paper. Aside from this, we organise an informal discussion among participants from the same institution over coffee and cake. In order not to overburden program participants (who still have numerous responsibilities as researchers, teachers, administrators, etc.) these are voluntary - but strongly recommended - program elements. This voluntary aspect should also allow participants to take the initiative and responsibility for building their own community and/or to seek and secure partners ("the significant others") for trustful conversations about teaching (Roxå and Mårtensson 2013: 219).

To assist further functioning of communities of practice, we will identify several individuals among the program participants who have the potential and willingness to become future leaders in advancing change. As part of our project, we will organize a 5-day, face-to-face training program for them to learn how to become effective facilitators of change in their institution. We will stay in contact with them (via email, Skype and personal contact) to provide guidance and encouragement beyond the workshop.

Scale of desired change

Following Coburn (2003) we think of expected change in teaching and learning practices as having four dimensions:

1) Depth

Rationale
As argued by Coburn (2003: 4) any educational reform that is to be considered a deep change, should go beyond mere structures or procedures like simply changing some teaching material, organising classes differently or introducing a few new activities for students. Instead, teacher development programs should strive to alter teachers' thinking about teaching and learning, e.g. their beliefs, norms of interaction and pedagogic principles.

Method
The entire program is designed around changing participants' thinking about teaching before facilitating change in their pedagogic practice.

2) Sustainability

Rationale
Sustainability implies the persistence of any change induced by this program after the short-term influx of resources and other forms of assistance provided by the program end. Coburn (2003: 6) has found that teachers with a deep understanding of pedagogic principles advocated through a reform can better respond to new requirements and changing conditions. Due to such teachers, change can be sustained and even deepened over time.
In addition, teachers can better uphold change if mechanisms exist at various levels to facilitate their efforts, including a) a supportive professional community at an institution, b) supportive school leadership, c) connections with other schools or teachers implementing similar change and d) alignment between change and policy context (Coburn 2003: 6).

Method
We have built in all four from of these mechanisms to support the sustainability of our program. This includes a) helping the creation of a community of practice and b) seeking support from institution leaders, as described above. For making connections between and among universities (Coburn's point c), we will be alert about possibilities to create new bridges between teacher development initiatives at University of Economics and Masaryk University. We will build upon existing contacts with colleagues from other universities in Slovakia (e.g. Technical University in Bratislava and Košice, University of Žilina), and the Czech Republic (institutions are yet to be identified), Poland (University of Economics in Poznan), and Hungary (ELTE Budapest) so as to assist them in introducing teacher development for their instructors. We will invite them to the multiplier events convened in Bratislava and Brno during this project.
Concerning point d), we will identify existing initiatives at both universities, which we can synergise with, like current efforts at University of Economics to achieve international accreditation of its PhD. programs through improving their programs (AACSB business school accreditation) or the establishment of a teacher development centre (CERPEK) at Masaryk University. We will meet colleagues responsible for these initiatives to make our activities interlinked with these initiatives so that they are perceived by university decision-makers as valuable for their priority initiatives.
To extend support through all these mechanisms, we will seek further funding to support teacher development initiatives at University of Economics and Masaryk University.

3) Spread

Traditionally, spread has been defined as bringing about change to greater number of classrooms and schools. However, Coburn (2003: 7) suggests a broader understanding that includes the ways in which changed norms and principles influence institution's policies and routines.

Method
With Coburn's broader conception in mind, we will work throughout the project to uncover university policies and routines that are i) supportive of student-centred education and ii) contrary to that. We will work to make the existing policies and routines that enable student-centred education more visible and encourage their application in practice. Where necessary, we will strive to initiate a revision of unfavourable policies and routines and we will assist those program graduates who would like to achieve such policy change.

4) Shift in reform ownership

Finally, to achieve the aims of a teaching reform, authority for change should become held by the universities themselves, including their leadership and individual teachers (Coburn 2003: 7).

Method

Our ultimate aim is to achieve that both universities consider student-centred education as their priority, which includes introducing and enhancing initiatives that support student-centred teaching. We wish to achieve this mainly by engaging in our further activities the individuals we had identified as potential change leaders together with supportive institutional leaders. We will moreover contribute to their initiatives that we see as aligned to our program goals. Finally, we will help these leaders to figure out the right institutional structure or program to put in place once we are to leave.

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II.   Research design for evaluating the program outcomes at the individual level

Student-centred and Reflective Teaching. From Theory to Good Practice.
Teacher development program for PhD. students at Masaryk University and University of Economics

The purpose of this research is to
1. Assess to what extent the program achieves its expected outcomes at the individual level (i.e. program participants)
2. Identify and explore the factors that help/hinder participants to achieve the outcomes
3. Suggest strategies to strengthen the influence of catalysing factors/inhibit the impeding factors

Expected program outcomes
By the end of the program, participants will have
- recognised the principles of student-centred education as important for their teaching practice;
- demonstrated reflective and critical skills related to planning, implementing and evaluating their teaching;
- obtained a sound knowledge of the essential theories of learning and teaching in higher education;
- used the newly acquired knowledge and skills for designing, implementing and evaluating the outcomes of a teaching innovation.

Research design
This research will use both qualitative as quantitative methods. Below we describe our research design, data, and method as they relate to our research questions.

Research question #1: To what extent does the program achieve expected outcomes at the individual level?
This research question is to evaluate the first expected program outcome, that is, that by the end of the program, participants will have recognised the principles of student-centred education as important for their teaching practice.

1A. A study assessing the level of change participants made in their thinking (conceptions) about teaching and learning pre/post program

Sources of data
- o   Participants' application materials: motivation letter and an essay on teaching practice;
- o   Participants' assignments completed during the program: reflective paper on microteaching reflective paper on the outcomes of course innovation and teaching philosophy;
- o   Survey questionnaires from the beginning and end-of-the program, where graduates directly and indirectly self-assess the attainment of program outcomes
- -   for all participants with names

Research design
We use a pre-post design to assess the level of change participants made in their thinking. Initial thinking will be assessed based on the materials submitted at the time of application and survey questionnaire administered at the beginning of the summer school part.
Post-program thinking will be assessed by program assignments produced by the participants: reflective paper on microteaching, reflective paper on the outcomes of innovation and statement of teaching philosophy.

Research process
First, we are going to use quantitative data from the survey questionnaires.
Second, we are going to turn our qualitative data from application materials and program assignments into quantitative measures. Application materials and assignments submitted by participants will be assessed

by coaches based on a rubric that will assess the level of student-centeredness, reflective thinking and theory application (see an evaluation form in protocol 2. F).

As for the pre-post design, we will use cross-tabulation with the chi-square to compare pre- and post-program measures given that our dependent variables (i.e. student-centeredness, reflective thinking, and use of theory) are categorical. For this we will use data from all program participants, matching their submission materials and program assignments as evaluated by coding.

1B. A study assessing if the participants achieve program outcomes in terms of their teaching practice (during and post program)

Sources of data
Participants' assignments (reflective papers on microteaching, session plans and reflective papers on the outcomes of innovation)
Class observation protocols as submitted by participants' peers (voluntary assignment, up to 20 protocols, about 2 pages each)

Research design
We use a pre-post design to assess the level of change participants made in their teaching practice. Initial practice will be assessed based on the materials submitted at the time of application: an essay on teaching experience and pedagogic materials, such as class plans used in previous classes.
Post-program practice will be assessed by program assignments produced by the participants: reflective paper on microteaching, reflective paper on the outcomes of innovation and observation protocols.

Research process
The assignments submitted by participants will be assessed by coaches based on a rubric that will assess the level of student-centeredness and theory application (we will not assess reflective thinking as this relates to thinking and changed practice would be an outcome of this).

Research question #2: What are the factors that help/hinder participants to achieve the program outcomes?

This part of the research builds on Pleschova and McAlpine's (2016) study, which examined determinants of a development program for junior university teachers in Slovakia and uncovered the nature of program assignments and mentoring relationships as two essential components that contributed to program achieving its outcomes. In this new research we focus on exploring further elements that help teachers to bring their teaching conceptions and practice more in line with those envisaged by program organisers.

Literature, including our previous research, has identified a number of factors that play a role and relate to participants' teaching context, including class size, student previous/expected ways of learning, institutional tendency for prescribing teaching methods, small institutional support to pedagogic innovations, participants' learning styles, participants' workload and integration of development course into participants' doctoral program. The most salient issue that came out from our previous research has been the level of authority/control that program participants have over the course design and assessment of students. Since program participants are still PhD. students, in many institutions they are not given full authority regarding their courses. However, if program participants are to significantly change the way their students learn, they need certain amount of freedom to influence course design and assessment.

Second important determinant is the overall power relationships in the participants' institutions, in particular 1) if their main working units: departments or workgroups are strongly hierarchical or more collegial; 2) if these units allow and encourage discussion about teaching and learning where the opinion of PhD. students is valued; 3) if PhD. students come with initiatives suggesting change of existing practices. Third factor that may potentially play a role here is the issue of trust between program participants and the members of their workgroups, including, for example, their supervisors, department chairs and departmental colleagues, i.e. "significant others." We assume that if program participants trust their significant others with regard to providing support for improving their teaching, this will facilitate

participants to achieve program outcomes. If the opposite is case, mistrust and distrust may prevent participants from attaining the expected outcomes.

Previous literature discussing the outcomes and factors of success of teacher development programs has so far explored more apparent/visible determinants as, for example, the above mentioned class size, usual ways of teaching and learning at the institution and lacking support from the colleagues. Nevertheless, factors that can not be easily observed can be (more) significant here as program participants teach in the region with a legacy of communism that may cast shadow on current relationships in the departments and/or workgroups (hierarchy of power, lack of stimuli for discussion on teaching and learning, taking innovators as challengers of current power holders, mistrusting leaders, etc.). Due to disciplinary background of some of the involved researchers (political science) this research can bring new insights into the teaching and learning literature by applying relevant findings from the power/authority/trust literature in politics. This is also applicable to research question 3 introduced below.

Research sub-questions:

2.1. Which factors did participants and coaches identify as important?
2.2. How do the issues of power/authority influence participants' ability to introduce change into teaching?
2.3. How much the program participants trust their significant others with regard to providing support for improving their teaching? What are the reasons behind (dis-/mis-)trust-related feelings/behaviour and how the level of trust influences participant teaching-related thinking and practice?

Sources of data
- o Participants' assignments: reflective papers on the outcomes of innovation, in which participants are also asked to discuss hindering and supportive factors completed during the online segment of the program
- o Post-program survey questionnaire
- o Post-program interviews
- Semi-structured interviews with program participants
  Length: 30-40 minutes per interview
  Format: conducted and recorded via Skype
- Interviews with the individuals in leadership positions as recommended by program participants
  Format: recorded face-to-face interviews

Research process
At least two researchers will read and independently code the interview protocols to identify main common themes that are relevant to research sub-questions. They will then seek if these themes are recurrent in various interviews, seeking for similarities and differences between individual respondents. They will also control for participants' institutions: if some of the differences can be attributed to the institution. The outcomes from this will be compared with what the participants revealed in their program assignments and post-program survey questionnaire.

Involved researchers for data collection (interviews), data coding and analysis
Pusa Nastase, Gabriela Pleschova, Eszter Simon, Agi Simon, Zuzana Krkošková

Research question #3: What strategies seem to work well to allow for more authority for program participants to influence their teaching practice?

We will identify these strategies based on what program participants say about their efforts and outcomes during the interviews. Moreover, we will use our research into the impact on mezzo level to find out if creation and functioning of communities of practice/significant networks played any role here.

Sources of data:
Semi-structured interviews with program participants

Semi-structured interviews with individuals in leadership positions as recommended by program participants (same as #2.2)

Research sub-question:
2.3. How much the program participants trust their significant others with regard to providing support for improving their teaching? What are the reasons behind (dis-/mis-)trust-related feelings/behaviour and how the level of trust influences participant teaching-related thinking and practice?

Measuring trust in significant others/institutions

Objective:

To answer the following research questions:

- How much the program participants (SSP) trust their significant others with regard to providing support for improving their teaching?
- How much the SSP trust the microculture with regard to facilitating their teaching?
- How much the level of trust has changed over time: 1.) before the summer school, 2.) after the summer school, 3.) follow-up interview at a later stage.
- What are the reasons behind (dis-/mis-)trust-related feelings/behavior?

Definitions:

Trust, distrust and mistrust are comprised of a cognitive and emotional influences and behavioral consequences (e.g. Guo, Lumineau and Lewicki 2015, 43). We conceptualize trust, mistrust and distrust along a scale where mistrust occupies the centre of the spectrum (see Guo, Lumineau, and Lewicki 2015)

- *Trust*: the trustor makes themselves vulnerable to the actions of the trustee based on the expectation that the trustee has positive intentions and will act benevolently towards the trustor (e.g. Rousseau et al. 1998; Wheeler 2013). Expectations of benevolence may range from the trustor presuming that the trustee will not hurt his interest to expecting that the trustee will further the trustor's interest (Wheeler 2013).
- *Mistrust* (sometimes called suspicion): represents a mental state in which actors have made no clear decision to trust or distrust, and, thus, are uncertain whether to trust or not.
- Distrust: a distrustful actor will avoid making themselves vulnerable to another actor in the expectation of harmful actions from the other actor.
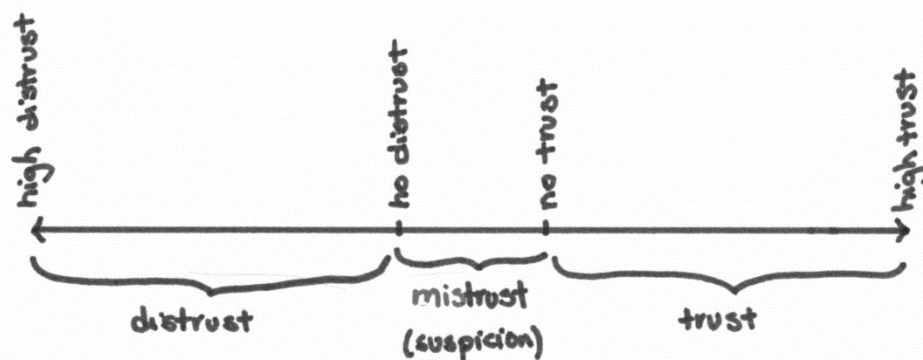

Figure 1. *The conceptualization of trust and distrust*

Sampling:

The goal is to collect data from at least 20 SSPs (10 from Masaryk University—5-5 from each summer school; 10 from EUBA—5-5 from each summer school) at three stages (before school, after school, follow-up interview at a later stage). To ensure that there will be enough research subjects in the sample even at the last data collection point, initial data collection will start with interviewing as many people from the population of SSPs as possible.

Method:

- In-depth semi-structured interview initiated with card sorts.
- The card sorts technique uses trust- and distrust-related and also unrelated emotions/behaviors to start the interview. It allows the researcher to ask about feelings and behavior instead of asking directly about trust and distrust. As a consequence, it avoids sensitizing research subjects to trust

and distrust (for more, see: Saunders 2012; Saunders, Dietz, Thornhill 2014). See table 1 for list of emotions that should be on cards.

Table 1. Trust, distrust, mistrust related feelings and behaviors. Based on: Lewicki et al. 1998; McKnight and Chervany 2001; Abrahms et al., 2003; Koeszegi, 2004; Saunders, Dietz, Thornhill 2014

Card-sort category*	Card-sort words/phases
Trust and distrust	trustful, distrustful
Expressions and manifestations of trust	confident, faithful, hopeful, safe, supported, encouraged, comfortable, active, take the initiative, feeling having a choice, frequent interaction
Expressions and manifestations of distrust	afraid, anxious, sceptical, cynical, watchful for harm, withholding information, passive, avoiding interaction, powerless
Expressions and manifestations of mistrust	hesitant, suspicious, confused, uncertain, surprised, monitoring, insecure
Other	angry, calm, cheerful, concerned, demoralized, depressed, determined, disinterested, eager, enthusiastic, excited, frustrated, grateful, indifferent, involved, keen, on edge, optimistic, overwhelmed, panicky, positive, relieved, resentful, resigned, stressed, under pressure, worried

*feelings can be felt and behaviors enacted to various degree, the card sorting informs us about the strength of these feelings & behaviors

III.   **Research design for evaluating the program outcomes at the mezzo level**

Evaluating pedagogical courses while considering microcultures in higher education

Workshops dominated the early days of professional development for academic teachers (Gibbs 2013). These were often short and voluntary and attracted only a few interested teachers. It was considered sufficient to evaluate these activities with end-of-course surveys, where the participants expressed their appreciation. Since then, courses have evolved into longer sequences of activities in combination with more use of theory. In many places the courses are mandatory. Despite this, there is still no consensus about the benefits of these courses. The debate concerns not only if they lead to better teaching, even though many studies have shown they do (Chalmers, Stoney, Goody, Goerke, & Gardiner, 2012; G Gibbs & Coffey, 2004; Saroyan & Trigwell, 2015); but the debate also concerns whether the courses are in fact tools for disciplining academic teachers inside a neo-liberal and anti-academic agenda (Roxå & Mårtenson, 2017). Despite this debate, pedagogic courses for academic teachers are, most likely here to stay and the question of how to evaluate their effects will also remain an ongoing debate.

One aspect within this debate attracting increasing interest concerns the importance of the local work context (Chalmers et al., 2012; Ginns, Kitay, & Prosser, 2010; Lindblom-Ylänne, Trigwell, Nevgi, & Ashwin, 2006; Pleschová & McAlpine, 2016; Sara Van Waes et al., 2016; S. Van Waes, Van Bossche, Moolenaar, Stes, & Petegem, 2015). Academic teachers who participate in courses may be inspired during the experience, but whether the inspiration lasts, or even better, influences the teaching practice (for the individual or for the local working context as a whole) is a different story. Ginns, Kitay, and Prosser (2010) illustrate this by presenting a story about two former participants in a graduate certificate in higher education as they return to their day-to-day practice. Both had become inspired during the programme but experienced different trajectories when they returned to their workplaces. One teacher, called Anne, returned to a workplace where colleagues showed interest in her new ideas and made use of them. The other teacher, Belinda, suffered from uninterested and even hostile colleagues. Due to this, the inspiration she experienced during the programme fades away. The story illustrates how often institutionalised social phenomena in a workplace can influence the outcome of formal training organised by academic developers. Within the enterprise of evaluating effects from pedagogical courses, this widens the focus from the pedagogical course itself to include a wider perspective incorporating the local working context where the participants are active as teachers. If we seek to influence higher education organisations, it is not enough to design and carry out excellent pedagogical courses. These courses also have to be designed with the variation of local working contexts in mind. Evaluation of these courses too should include a wider organisational perspective (Trigwell, 2012). Furthermore and arguably, if academic managers seek to influence teaching and learning in their institutions, simply organising pedagogical courses is not enough, the local working contexts has to be influenced through other measures as well.

If the increased focus on local working contexts has substance, this insight should influence both the design of pedagogical courses and how we evaluate them. This conceptual text is an attempt to formulate a perspective on how pedagogical courses can be evaluated keeping the above in mind. The approach is foremost a socio-cultural approach where the nature and frequency of collegial interaction is foregrounded.

Local working context – Significant networks and microcultures

If it is accepted that a discussion about effects from pedagogical courses should include the participants' respective local working context, it is important to build a perspective capturing a variation among those contexts. First of all, what constitutes a local working context?

Significant networks Many scholars have reported on how academic teachers have sincere conversations about teaching and learning with a few selected others (Pataraia, Falconer, Margaryan, Littlejohn, & Fincher, 2014; Pyrölälä, Hirsto, Toom, Myyry, & Lindblom-Ylänne, 2014; Roxå & Mårtensson, 2009; Thomson, 2013; Thomson & Trigwell, 2016). It has been argued that these others constitutes an individual teacher's *significant network* (Roxå and Mårtensson 2009) and that it is here, during these conversations, that individual teachers form their beliefs about teaching, test new ideas about teaching, and vent problematic experiences from teaching. It has been suggested that the first signs of impact beyond the

individual is to be found here, in conversations with significant others (Roxå & Mårtensson, 2012). In line with this, Van Waes et al., (2015) empirically shows how individual participants' personal networks are influenced during and after a pedagogical course. She has also shown that different teachers use their personal networks differently (Van Waes et al., 2015). Experienced and well-reputed teachers have richer and more interdependent conversations within their networks than novice teachers. She also notes that experienced teachers lacking a strong reputation in teaching are more similar to novice teachers in this respect. Based on this, she suggests that network diversity and the degree of interdependence in the relations are limiting factors for further development as a teacher.

The above supports a view that evaluation of pedagogical courses should include observations of the conversations taking place in teachers' significant networks. Courses can potentially contribute to constructive changes in the participants' collegial networks, they can evolve and become more diversified and more interdependent in nature. Consequently, evaluations of such courses through a socio cultural perspective can or should target this outcome.

But local work contexts are not networks only; they are social settings with norms, hierarchies, and traditions formed over time. Various scholars moving in this directions have labelled these social setting differently: *the departments* (Gibbs, Knapper, & Piccinin, 2008, 2009; Knight & Trowler, 2000), *the work group* (Harvey & Stensaker, 2008; Roxå, 2014; Roxå & Mårtensson, 2014; Trowler, 2008; Walsh, 2010), and *the disciplinary community* (Henkel, 2005; Hounsell & Anderson, 2009; Jawitz, 2009; Kreber, 2009). Common for most of these suggestions is that they refer to organisational units. One problem with this is that such a perspective risks overlooking the nature of the influence we are interested in. A department is a designed organisational entity with formal authority assigned to some individuals (the chair or a director of study). But it is also culturally formed social setting with its specific traditions and ways of doing things. The question remains whether the department influences members because of formal power or because of culturally formed norms.

The direction taken here rests on Trowler's research on *teaching and learning regimes* (Trowler 2008). These are cultural features of a working context that have evolved over time and influence teachers towards certain ways of teaching. Therefore, in the following we are foremost interested in cultural influence. The way participants returning from pedagogical courses interact with colleagues is inside culturally formed norms and traditions that in many cases have existed before the individuals arrived and long before some of them participated in pedagogical courses. In line with this, and in a series of publications Roxå and Mårtensson (2011; 2014; and 2015) have argued that the influence inside departments, disciplinary communities, or workgroups is cultural in nature and that it is in higher education organisations more important to talk about cultural influence than about formal power, even though this aspect cannot be neglected.

Regardless of whether an academic finds him- or herself in a department, disciplinary community, or a workgroup, he or she is subjected to cultural influence, that is, if the local working context in question has existed for some time. In an attempt to explore this influence it has been suggested that it is accurate to talk about *microcultures.* The term signals that it is a local culture, it consist of a limited number of individuals (in comparison to an entire institution), but it is not necessarily a subordinate culture (something calling for the prefix sub- instead of micro-), on the contrary, many of these microcultures in higher education define themselves as highly agentic and self-governed even though they are placed inside an institution.

By relating two established frameworks for social context and collective action, *communities of practice* (Wenger, 1999) and *commons* (Ostrom, 1990), (Roxå & Mårtensson, 2015) suggest a heuristic model for comparison of microcultures. Key aspects are *trust* and *an experience of shared responsibility* (figure 1). Through this four ideal types are presented: *Commons, Market, Club* and *Square.* Each of the four ideal types either has or do not have an internally formulated developmental agenda, an enterprise (Wenger 1999). Thus, the heuristic model presents in total eight various forms of microcultures.

Figure 1. Heuristic model for comparison of microcultures (Roxå and Mårtensson 2015)

	High level of trust High significance Strong ties Sense of belonging	*Low level of trust* Low significance Weak ties Sense of coexistence
Experience of a shared responsibility Do things together Negotiate what to do Are impacted by what the others do	**The Commons** Share a concern for a practice. Things are being negotiated in relation to the shared concern. An undertow of consensus. 'We're in this together.'	**The Market** Share a concern for a practice. Ideas compete. Things are negotiated with an undertow of conflict. Relationships are formalised through contracts. 'I look after myself.'
No experience of a shared responsibility Do things in parallel No negotiation No interference from the others	**The Club** Members are together without sharing a concern. Descriptions from practice are not challenged. Friendship and consensus is highest priority. 'We'll always support each other.'	**The Square** Members share a space with strangers with no collective concern. Things are negotiated only when necessary. Members enter into relationships and leave them continuously. 'Who are these people?'

From this it can be inferred that two participants with the same experience from a pedagogical course are likely to report different trajectories after having completed a pedagogical course if, for example, one participant belongs to a Commons with an internal developmental agenda in relation to teaching and learning than would another participant who belong to a Club without such an agenda. Consequently, while evaluating a pedagogical course and its long term effects it is productive to know which type of microculture the participants belong to. The challenge to create long lasting and positive change through a pedagogical course varies in difficulty depending on what type of microculture the participants are active in.

Types of pedagogical conversations
If the existence of support or not is important in a specific microculture, then it is also important to clarify what we mean by support. Since this text uses a socio-cultural approach, the support (or lack of support) is relational, expressed among colleagues. One way of doing this is through conversations. But again we need a perspective allowing us to talk about varies types of conversation. Is it enough that teachers talk to each other about teaching and student learning or is it more to it? Can talk be counterproductive, that is, can conversations about students and teaching be neutral in this context, or even negative, counteracting further development for previous participants in pedagogical courses?

The process of conversations
One way to answer this question is to focus on the process of conversation. Roxå and Mårtensson (2009) showed that teachers have trustful conversations about teaching with a limited number of colleagues. These conversations take place privately, backstage (Goffman, 2000). It is likely that such conversations have a

limited impact on others than those present. It is also unclear whether those conversations are developmental. They can just as well be conserving an existing view on teaching, as shown in her sample by (Edström, 2008) while exploring how teachers talk about student evaluations of teaching.

Little (Little, 1990) considers forms of teacher-to-teacher interaction along a dimension from independence to interdependence. The ways to interact that she considers are *storytelling and scanning, aid and assistance, sharing,* and *joint work.* 1) Storytelling and scanning is a form of sharing anecdotes but not necessarily with personal engagement. Here teaching and students may surface in the every-day conversation, but there are no critical questions being asked and no negotiation of meaning. It is a kind of showcasing, where individual teachers may narrate their experiences from teaching. 2) Aid and assistance, Little argues, on the surface looks like an effective and developmental type of conversation, but due to the culture wherein it takes place it can be problematic. To ask for aid in academia can be interpreted as a low degree of agency, a sign of weakness in a culture where each participant (at least as trained in research) is expected to construct personalised claims about the world. Conversely, someone who offers help can be viewed as a wiseacre. To engage in aid and assistance conversations openly can therefore be risky. 3) Sharing is less risky, since the teachers themselves can decide what to tell. It demands more engagement than storytelling since its aim is to present pieces of information useful for others. 4) Joint work demands from those involved that they take responsibility for what happens. Therefore and as Little claims, joint work requires an interdependence that requires from those involved to be personally engaged.

What Little shows is, firstly, that talking about teaching is in itself a varied activity. Simply sharing information is of little use unless there is an aspect of personal engagement and interdependency built into the situations. In this her argument is consistent with the notion of a shared responsibility in the model above (fig 1.) formulated by Roxå and Mårtensson (2015). Her emphasis on interdependence is also linked to trust, as illustrated in the problem with aid and assistance. Asking for help or for input to a problem can potentially be seen as a sign of weakness, but it can also be a sign of trust. During conversations backstage among significant others it is easier to ask for help then it is during frontstage meetings where also less trusted colleagues are present.

In relation to this, it is striking that when Van Waes et al. (2015) explored teachers' networks in relation to pedagogical course, she found that experienced well-reputed teachers used their networks for wider more interdependent discussions. It was not only a matter of sharing information or asking for help, it was more about jointly constructing curricula and courses. She hypothesises that network evolvement towards interdependency and what was reported by experienced well-reputed teachers is necessary to allow for further development as a teacher.

The outcome of conversations

But, what about the outcomes of these conversations? They can, it can be argued, be built on interdependence without resulting in any changes in teaching. On this, Wenger, Trayner, and de Laat (Wenger, Trayner, & de Laat, 2011) suggest that the outcomes of conversations can be described in terms of the value they create. They describe five cycles of value creation spanning from what did the individual him or herself found meaningful to how did members in the local community change their ways to understand the matter (table below).

Table 1. Outcomes of conversations described in terms of the value they create (Wenger, Trayner, de Laat, 2011)

Cycle of value creation in networks and communities	Guiding questions for telling the story of value creation
Cycle 1. Immediate value: activities and interactions	1. What meaningful activities did you participate in?
Cycle 2. Potential value: knowledge capital	2. What specific insights did you gain: What access to useful information or material?
Cycle 3. Applied value: changes in practice	3. How did this influence your practice? What did it enable that would not have happened otherwise?

Cycle 4. Realized value: performance improvement	4a. What difference did it make to your performance? How did this contribute to your personal/professional development? 4b. How did this contribute to the goal of the organization? Qualitatively? Quantitatively?
Cycle 5. Reframing value: Redefining success	5. Has this changed your or some other stakeholder's understanding of what matters?

From Wenger, Trayner, de Laat. (2011)

The cycles follow a pattern from experienced meaning, via a potential, applied, or realised meaning, and end in a cycle similar to what (Schön, 1983) calls double loop learning. An example in relations to teaching and learning can be to move from a teacher-focused understanding to a learning centred understanding of academic teaching (Prosser & Trigwell, 1999).

It can be noted that there is a potential ambiguity built into the five cycles of value construction. The first cycle deals with immediate value as experience by an individual. The fifth, however, includes meaning constructed by others, alluding to socio cultural processes. The relation between value created for an individual and for other stakeholders, such as a community or a network is not so clear.

Interacting with whom

After having considered variations in the nature of conversations and in the value they bring about; we also have to consider with whom the conversations are taking place. It can be with a significant other and take place in a private space. This we have already talked about and we have already considered that backstage private conversations may be important for the individual in terms of trying out ideas, venting experiences, and in other ways construct a conceptual understanding of teaching and learning. But if the individual participant in a pedagogical course wants his or her ideas tested or even seek to influence the local context, the microculture, then we have to consider the fact that not all people in a microculture are equally influential. There is a distribution of power in any community.

Again Wenger and his associates offer a useful terminology. A community of practice, Wenger, Trayner and de Laat (2011) say, leads or at least is coordinated by a *core group*. This can be a relatively small group whose passion and engagement nurture the community. Just outside this core group, there are *active participants*. These actively contribute to the community but are not as engaged as the members of the core group, neither are they necessarily as clear about what the community is about. Next layer consist of *occasional participants* who contribute to the community when they find it interesting or have something specific to offer. The outer layer of the community is the area for the *peripheral participants*. These may be newcomers or individuals who spend some time in the community. They thereby have less authority and normally show less engagement.

Figure 2. Levels of participation in a community of practice (Wenger, Trayner and de Laat 2011)
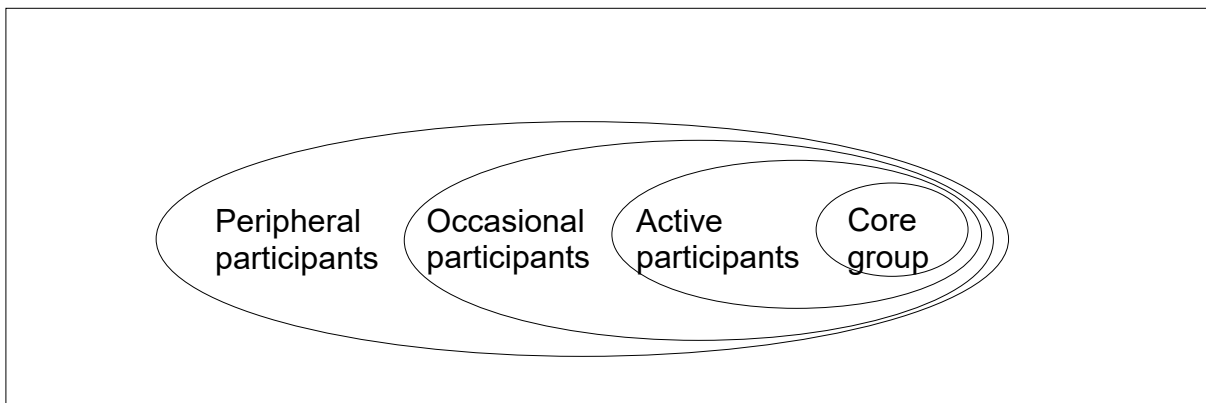
Communities of practice, is one out of eight ideal-types of microcultures (Roxå and Mårtensson 2015). It is a commons with an internal developmental agenda, an enterprise where members trust each other and share a sense of responsibility for the practice they are engaged in. This means that Wenger and Trayner describe various levels of participation within a specific type of microculture. This can be illustrated further in how the core group is characterised by Wenger and Trayner: The core group is a "relatively small group of people whose passion and engagement energize and nurture the community" (Wenger, Trayner, and de Laat 2011). In contrast to this, there are indeed microcultures in higher education where the core group is anything but passionate about nurturing the community; instead they may have built themselves a powerful position from which they have no intentions to abdicate. Despite this, there is likely that many microcultures can display a core group, active participants, occasional participants, and peripheral participants, even though the different categories will present themselves differently from microculture to microculture. It is likely that they consist of a core group surrounded by participants with varying degree of engagement, authority, and commitment.

Researching effects from pedagogical courses taking microcultures into consideration
So far we have constructed a perspective on a well-known phenomenon: Effects from pedagogical courses are inhibited or amplified by the local working context (microculture). If the participant returns from a course to a supportive and positively interested microculture respectively to an uninterested or even negative microculture the effects from the pedagogical course will vary. We have dealt with this as a cultural phenomenon and especially foregrounded interactions and conversations. It is assumed that the microcultural reactions (positive, neutral, or negative) take place during interactions, first of all during conversations. Furthermore, we have argued that in this it is important to consider several variations, such as in
- Microcultures where conversations take place
- Conversations, there nature
- conversational partner, and
- outcomes of conversations.

As we now consider how these variations can be researched it is important to contemplate that we are trying to do several things simultaneously. 1) We evaluate a specific pedagogical course and its effects. 2) We test a perspective under construction. 3) We influence the outcomes as we interfere in the process. 4) We will most likely influence the design of the pedagogical course. Therefore we are dealing with a moving target where several elements within the object of study are likely to change as the investigation proceeds. Lastly, as we have widen the perspective from the pedagogical course and its participants to also include participants' colleagues and the microcultures they together construct; we have also opened up the picture for a series of alternative influencing factors. For example, if the course is successful in influencing teaching practices, it is not clear that this is caused by the course itself. Even the best-designed and taught pedagogical course might fail because of the microcultural conditions, and conversely, even the simplest and naïvely constructed pedagogical course may succeed if the microcultural conditions are favourable. It means that organisational factors like leadership, governance, financial conditions, traditions, degree of research intensity in the institution, and even societal discourses will inevitably influence the outcomes of a pedagogical course. Therefore it is likely that what works in one context does not necessarily work in another context. Most likely, effects from pedagogical courses are localised and they should according to this be more or less tailor made in relation to the organisation at hand. Furthermore, they should probably change over time so they stay attuned with the organisational situation (Roxå, Olsson, & Mårtenson, 2008). But these last assumptions remain to be demonstrated empirically.

Methodology

Research approach
The perspective suggested is not theoretically and empirically firmly established; it is therefore natural to apply an exploratory methodology through a qualitatively approach. The argument is further corroborated by the fact that we are researching at least two things simultaneously: 1) The effects from specific

pedagogical courses, and 2) the accuracy in the theoretical perspective. This could be interpreted as an argument for a grounded theory approach. On the other hand, there already exists research on effects from pedagogical courses and on microcultures (even though to a lesser extent), so arguably there is no need for a grounded approach. Wenger and associates (Wenger, Trayner, and de Laat (2011) argue for an emphasis on "value-creation stories", that is, an interview based approach where respondents are allowed to narrate their experiences. This approach is incorporated in the considerations below.

Subjects It appears natural to collect information from the *participant*. They can already during the pedagogical course reveal information about the experience, both the nature of experience but also more specifically details on what changes in teaching practice the course might inspire. The participants can also offer material on the nature of their respective microculture, at least whether is supports or counters pedagogical conversations. At a later stage the participants can reflect on what actually happened and whom he or she talked to about the experiences from the course. (It is acknowledged that revealing information about one's microculture can be sensitive.)

But since the microculture has such a central position in this perspective, talking to the participant alone is not enough. It would be both constructive and possible to interview a *central person/member of the core group* within the microculture. This person can be identified by the participant. This person can due to his or her position offer a different perspective of the microculture and indicate the cultural interest in ideas and perspective offered in pedagogical course. The descriptions can vary from being negative to neutral to constructively positive and actively encouraging. This variation is most likely important when different pedagogical courses from different contexts are being compared. Over time (if the investigation is repeated), this information will also indicate changes in the organisations and make it possible to discuss whether the pedagogical courses contributed to this change, an important aspect viewed from a managerial perspective.

A third category of subjects in this investigation and following from the perspective constructed are the participants' *significant others*. This category is important since it is assumed that effects will first become visible within the significant networks, due to these interactions private and trustful nature. By, at some stage after the pedagogical course, interviewing a significant other we can gain insight in how the effects from the course are communicated backstage in private settings. The significant other can also report on the microculture at hand. Also the significant other can be identified by the participant.

Selection Due to the volume of the expected material, there are reasons to select a few participants who then name the significant others and the core individuals within their respective microculture. The selections, therefore follows the same principles as in Pleschova and McAlpine (2016), where respondents were selected because they were considered most and least successful within the course.
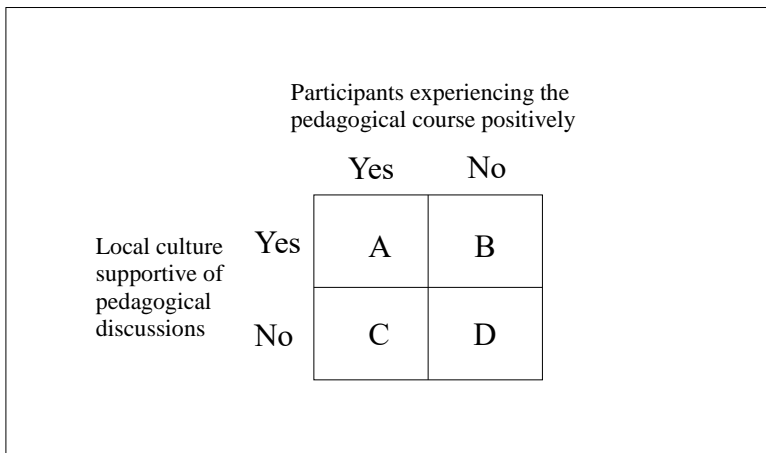
It is possible that this approach is sensitive for the participants. Especially revealing negative information about one's own workplace and further more offer names of central figures there. This is a potential problem for a research attempt. However, since effects from pedagogical courses are influenced by a variation in microcultures, it is hard to investigate this without looking at the pedagogical course also from within the respective microculture. But, if the sensitivity of this is overwhelming it might be an idea to start testing the perspective and start exploring effects by focusing exclusively on microcultures that are positive or at least neutral.

Longitudinal perspective Since we are investigating effects we also need a longitudinal perspective. We can make observations before the course, during the course and after the course. Moreover, after the course can mean various points in time in relation to the course. The more points for observations the better, but making observations is also a matter of resources. Both collecting and analysing observations take time.

Exploring the microcultures Even though the focus here is on the individual participant's (and others') deliberations there is a need to establish a functional perspective on the microcultures that participants come from. We have already described the heuristic model introduced by Roxå and Mårtensson (2015). However, it might be advantageous to simplify this model and to relate it to the participants' personal experience of the course.

Therefore, we suggest a simplified model offering us four alternative settings, illustrated with A – D (Figure 2). A participant can have a positive experience during the course and return to a microculture either supportive A) or non-supportive B) of pedagogical conversations. The same goes for a person with a negative experience during the course.

Figure 2. A functional overall perspective on the microcultures (simplified model with 4 settings)

Participants experiencing the
pedagogical course positively

|	Yes	No
Local culture supportive of pedagogical discussions — Yes	A	B
No	C	D

Aligned with this, it is fair to assume that interviewed 6 – 12 month after participating in the same pedagogical course, participants will tell different stories due to whether A – D is applicable.
Through this it would be possible and fairly easy to ask participants early on in the course, how they assess their local workplace (example given below).

Place a (X) on the line, to what extent you experience that your workplace (those collectively with whom you work) encourages versus discourages conversations on teaching and pedagogy.

Encouraging   Discouraging
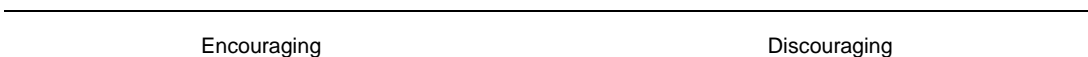
At the end of the course, and the later interview (6-12 months later), the participant can indicate his or her experience of the course as

Very meaningful   Meaningless
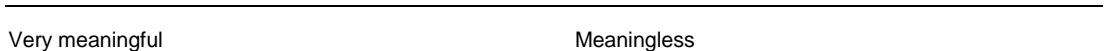
Interview
Wenger, Trayner, and de Laat (2011) suggest the collection and critical investigations of "value-creation stories"; in this they emphasis five cycles of value creation. Here it is suggested that these five cycles are related to the individual level that is the participant's individual experiences from the pedagogical course, but also the level of significant other, and the microculture at hand. It means that subject is encouraged to formulate narratives about the course in relation to individual thinking and acting, in relation to significant others, and in relation to the microculture.

Table 2. Five cycles of value creation (adapted from Wenger, Trayner, and de Laat 2011)

Cycle of value creation in networks and communities	Guiding questions for telling *the story* of value creation	Individual level of analysis	Significant network	Microcultural
Cycle 1. Immediate value: activities and interactions	1. What meaningful activities did you participate in?			
Cycle 2. Potential value: knowledge capital	2. What specific insights did you gain: What access to useful information or material?			
Cycle 3. Applied value: changes in practice	3. How did this influence your practice? What did it enable that would not have happened otherwise?			
Cycle 4. Realized value: performance improvement	4a. What difference did it make to your performance? How did this contribute to your personal/professional development? 4b. How did this contribute to the goal of the organization? Qualitatively? Quantitatively?			
Cycle 5 Reframing value: Redefining success.	5. Has this changed your (or some other stakeholder's) understanding of what matters?			

Proposal for research questions: examining the program impact at mezzo level

The overall question concerns this: If, as believed, pedagogical courses aim for an impact on microcultures within the organisational meso-level, how can these effects be detected and described?

The following aims at formulating research questions through which we can assess whether the pedagogical course has effected: 1) the participant, 2) a significant other, and 3) a central member of the microculture. (2 & 3 can be the same person, even though this is assumed to be rare.)

The first assumption formulated in the drafted framework predicts the degree a local culture supports respectively not support pedagogical discussions, will (at least partly) determine the long term effects from a pedagogical course on a microculture at hand.

RQ1: How do participants rate their local working context's support of pedagogical conversations?

Previous research has shown that in microcultures that support pedagogical conversations, academic teachers have more (up to twice as many) significant conversational partners with whom they discuss teaching and learning, than in microcultures not being supportive of such conversations.

RQ2: Wit how many individuals do participant have sincere conversations about teaching and learning?

RQ3: Where are these conversational partners found? (Possible answers: PhD students from workgroup, other members from my workgroup, PhD students elsewhere than my workgroup, university teachers outside my institution, my PhD. supervisor, department chair, friends and family members, other people – specify, I have no conversational partners)

RQ4: With how many colleagues within the local academic workgroups do the participants report having sincere conversations about teaching and learning?

RQ2 – RQ4 offer an indication of the variation among the microcultures to which participants belong. It allows for a comparison among the participants, but also among the various contexts investigated.

Data collection method: questionnaire survey completed by all program participants during Session 1 of the program.

Data collection method: semi-structured interviews with **4 participants** from Brno and 4 participants from Bratislava (reputational sampling), post-program (June 2018), alt. with all participants, recorded and transcribed

4 interviews with participants from Tartu – post-program – either in January 2018 or in June 2018. In Tartu they offer the course for doctoral students during Autumn semester and sometimes also during Spring semester, which means that usually having two groups a year (or a group either during Autumn semester or during Spring semester)

The same for Lund.

It has been assumed (Roxå and Mårtensson 2012), that if a microculture is influenced by a pedagogical course beyond the participant, this influence will first surface within the participant's significant network.

RQ5: Does a significant other, named by the participant, report having interacted with the participant about the course and its content in a constructive and meaningful way?

RQ6: If and if so how have the conversations about teaching and learning changed, according to the significant other?

Here the five cycles of meaning (Wenger, Trayner, and de Laat, 2011) can be used. The more complex the impact is as analysed through the five cycles, the more profound is the impact.

Previous research indicates a lack of engagement from the leading figures in the microculture (Pleschova & McAlpine 2016). Therefore, it is important whether the course and the ideas it sparkles reaches the central members of the microcultures.

RQ7: Does a central member in the microculture, named by the participant, report having interacted with the participant about the course and its content in a constructive and meaningful way?

RQ8: If so, what level of meaning did that interaction imply?

Data collection method: semi-structured interview with **central members in the microculture** as recommended by 4 interviewees from Brno and 4 from Bratislava (each of those mentioned above will be asked to identify and recommend one person), post-program (June 2018), recorded and transcribed

4 interviews with central members recommended by participants from Tartu – in January or in June 2018.

The same in Lund.

Working definitions of "sincere conversations," and "interaction in a constructive and meaningful way"

These are the questions we asked and the procedure we used in our initial study on significant networks. (Roxå and Mårtensson, 2009) The same would most likely work here. "These discussions were concerned with whom academics talk to seriously about teaching" "As part of the instructions for answering the questionnaire, we introduced the respondents to the concept of critical friends (Handal, 1999), as a way to focus the respondents on individuals with whom they had sincere and serious discussions about teaching and learning." (p. 550)

  a) With how many people do you have engaging conversations about teaching and learning?
  b) Where are these conversational partners found?
  c) What characterises your conversations? (Please describe them.) – a short written narrative
  d) Do you consider your local professional culture to be supportive or non supportive of such conversations about teaching and learning?

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Plan for researching the program outcomes at mezzo level

We will:

1. Focus on researching how the program participants, their "significant others" and central individuals from a microculture perceive what has changed in participants' thinking and teaching practice during and following the program

Proposed research question: What is the influence of microcultures in higher education on the ability of graduates from ED programs to improve their teaching? How can the positive effects of these microcultures be enhanced and undesirable influences be mitigated?

2. Data collection method: interviews (sampling as suggested above).
3. Timing of research. During the first session of the summer school, participants will report as part of the pre-program survey questionnaire on the existence and nature of conversations about teaching.
4. Given the main program outcome in Bratislava and Brno (i.e. helping teachers to become more student-centred) we will focus our research (interviews) on the student-centred aspects of teaching
5. We could try to trace also induced change concerning other two program outcomes (helping teachers to become more reflective about teaching and use pedagogic theory, depending our capacities to collect and analyse data.
6. We can compare different microcultures as existing within one institution (for example in Bratislava) and within two institutions (Bratislava and Brno)
7. If feasible, we will design a joint study with Tartu and Lund to look into how microcultures influence their program results, including if program participants achieve to encourage any change in these microcultures or not.

IV. **Protocols**

Overview of all protocols

Collection of quantitative data

A. Pre-program questionnaire survey – for all program participants (online)
B. Post-program questionnaire survey – for all program participants (online)

Collection of qualitative data

C. Classroom observation protocol – voluntary assignment for program participants
D. Pre-program and post-program interview with program participants (initiated with card slots) – for all program participants
E. Post-program interview with program participants – for all program participants
F. Post-program interview with faculty members: participants' supervisors, department chairs or similar people in leadership positions at participants' institutions as recommended by program participants
G. Coaches' evaluation form on the attainment of participants' program outcomes – for all program participants
H. Participants' self-evaluation form on the attainment of program outcomes – for all program participants

Research consent

I. Participant information sheet
J. Participant consent form

A. Pre-program questionnaire survey – for all program participants (online)

Part A. Your name

We ask you to provide your name here so that we can match your pre- and post-program surveys. Once we matched the surveys, we are going to remove and destroy this cover page.

1. What is your name?

Part B. Demographic Information

1. What is your gender?
   a) Male
   b) Female

2. What is your current institution?
   a) Masaryk University
   b) University of Economics, Bratislava

3. How far along are you in your doctoral studies?
   a) 1st year
   b) 2nd year
   c) 3rd year
   d) 4th year
   e) 5th year
   f) Spent more than 5 years in the program

Part C. Background, Experience in Teaching and Learning and pedagogic conversations
The purpose of this section of the questionnaire is to find out about program participants' teaching experience, teaching context and conversations about teaching and learning.

4. Have you completed your undergraduate degree (Bachelor's or Master's) at your current institution?
   a) Yes, both
   b) Yes, one of them
   c) No

5. Have you studied in a liberal arts college?
   a) Yes
   b) No
   c) I have no idea what a liberal arts college is.

6. Do you have some teaching experience (including a teaching practicum) either at university or lower level? Choose as many as possible.
   a) Yes, I have taught at a university – Bachelor's program
   b) Yes, I have taught at a university – Master's program
   c) Yes, I have taught in a high school
   d) Yes, I have taught in elementary school
   e) Yes, I have taught at another place (please specify)
   f) No, I have not taught at any level yet

7. How many courses have you taught at the university level?
   a) 0
   b) 1

c) 2
d) 3
e) 4
f) 5
g) More than 5

8. How many of the courses you taught at the university level were in your current institution?
   a) 0
   b) 1
   c) 2
   d) 3
   e) 4
   f) 5
   g) More than 5

9. Have you taught in a liberal arts college?
   a) Yes
   b) No
   c) I have no idea what a liberal arts college is.

10. Have you ever undergone a course to develop your teaching skills (a teacher training/development course; at any level)?
    a) Yes
    b) No (Skip question 11)

11. Did this development course include any of the following
    a) theoretical concepts?
    b) practical teaching methods?
    c) both of the above?
    d) none of the above?

12. Describe your teaching development course in a few sentences. [Open-ended question.]
13. Which of the following teaching responsibilities do you have experience with? Choose as many as relevant.
    a) Designing a syllabus or a part of it
    b) Leading seminars
    c) Lecturing
    d) Supervising student thesis
    e) Assessing/grading student work
    f) Sitting on the graduation committee (defence of student thesis)

14. Which of the following teaching methods have you personally used during your teaching? Choose as many as relevant.
    a) Frontal lecturing
    b) Interactive lecturing

c) Student presentation
d) Simulation/game
e) Pair or group work
f) Case study
g) Classroom discussion
h) Classroom debate
i) Problem-solving exercise (including calculating)

15. How many individuals have you had sincere conversations about teaching and learning with?
   a) 0
   b) 1
   c) 2
   d) 3
   e) 4
   f) 5
   g) More than 5

16. What is the smallest unit of three people or more at your university that you identify with and that influences your teaching?
   a) my department
   b) research group lead by my PhD. supervisor
   c) research group lead by a senior researcher different than my PhD. supervisor
   d) my faculty
   e) other (Please specify)

17. How many members is this unit comprised of?
   a) 3-9
   b) 10-15
   c) 15-20
   d) Over 20

18. With whom of the individuals listed below do you have sincere conversations about teaching and learning? Choose as many as relevant.
   a) PhD students from this unit
   b) Other members from this unit
   c) PhD students elsewhere this unit
   d) University teachers outside this unit
   e) My PhD. supervisor
   f) Department chair
   g) Friends and family members
   h) Other people. Please specify:
   i) I have no conversational partners

19. On a scale of 1–10, 1 not supportive at all and 10 very supportive, how supportive is this unit of these pedagogical conversations?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

20. In these conversations about teaching and learning are you mainly talking about teaching-related problems?
   a) Yes
   b) No

21. If you are mainly talking about something else, what is it? [Open-ended question.]

22. Do you receive suggestions for how to address teaching problems during these pedagogic conversations?
   a) Frequently
   b) Sometimes
   c) Not at all

23. Do you consider these suggestions useful?
   a) Yes
   b) Sometimes
   c) No
   d) I don't receive suggestions

24. Do you often offer suggestions for how to address teaching problems during these pedagogic conversations?
   a) Frequently
   b) Sometimes
   c) Not at all

25. Do your partners consider your suggestions useful?
   a) Yes
   b) Sometimes
   c) No
   d) I don't offer suggestions

Part D. About the Program

26. Has anyone encouraged you to apply for this program? Mark as many relevant.
   a) Yes, my supervisor
   b) Yes, fellow PhD student
   c) Yes, my department chair
   d) Yes, another instructor/professor at my university
   e) No

27. What do you expect to gain from the current program? [Open-ended question.]

Part E. Opinion regarding Teaching and Learning
In this section, we would like to know more about your perception of a series of issues in teaching and learning.

28. Please choose the statement which is closest to your thinking about control over the teaching and learning.
    a) The instructor should have absolute control over the teaching and learning process in the classroom.
    b) The instructor should have full control only over teaching and learning in the classroom (students should take full control of the process outside of the classroom).
    c) The instructor and students should share control over teaching and learning in the classroom.
    d) The instructor and students should share control over the process of teaching and learning both in and outside of the classroom
    e) Students should have most control over the process of teaching and learning.

29. Please choose the statement which is closest to your thinking about the number of assessment exercises.
    a) There should be only one or two assessment exercises during the course.
    b) Students should be assessed based on several exercises during the course.

30. Please choose all the statements which are closest to your thinking about the form of assessment.
    a) Assessment should be based on written test(s) (including multiple choice and short answer questions).
    b) Assessment should be based on essay(s), problem solving or other more complex written piece(s).
    c) Assessment should be based on oral presentation(s) or examination(s).
    d) Other, less conventional forms of assessment, such as performance in group exercises, role plays or simulations should also be part of assessment

31. Please choose the statement which is closest to your thinking about the determinants of the form of assessment.
    a) Assessment exercises should continue university/departmental traditions.
    b) The instructor should select assessment exercises with which he or she feels most comfortable with.
    c) The instructor should select assessment exercises with which students feel most comfortable with.
    d) Assessment exercises depend on the purpose of the course.

32. Please choose the statement which is closest to your thinking about the nature of feedback to students.
    a) Student assessment should be in the form of a single numerical or letter grade or percentage to each exercise.
    b) Student assessment should always include textual/verbal feedback.
    c) It depends on the nature of the assessment exercise whether to do it through a single grade or textual feedback.

33. Please choose the statement which is closest to your thinking about the purpose of feedback to students.
    a) Assessment exercises give feedback to students about their learning.
    b) Assessment exercises give feedback to the instructor about their teaching.
    c) Assessment exercises give feedback to students about their learning and instructors about their teaching.
    d) Assessment exercises give feedback to students about their learning and instructors about their teaching.
    e) Assessment exercises give feedback to students about their learning and instructors about their teaching as well as student learning.

34. We list below the most common teaching activities in the classroom. Indicate how effective you think each method is for student learning by putting an "X" or "✓" to corresponding column.

	Very effective	Effective	Ineffective	Very ineffective	I don't know
Frontal lecturing					
Interactive lecturing					
Student presentation					
Simulation/game					
Pair or group work					
Case study					
Classroom discussion					
Classroom debate					
Problem-solving exercise (including calculating)					

35. On a scale of 1–10, 1 very little and 10 being a lot, how much do you think you know about teaching and learning?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

36. On a scale of 1–10, 1 having very little confidence and 10 being very confident, how confident do you feel as a teacher?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

B. Post-program questionnaire survey – for all program participants (online)

Part A. Your name

We ask you to provide your name here so that we can match your pre- and post-program surveys. Once we matched the surveys, we are going to remove and destroy this cover page.

1. What is your name?

Part B. Opinion regarding Teaching and Learning

In this section, we would like to know more about your perception of a series of issues in teaching and learning.

2. Please choose the statement which is closest to your thinking about control over the teaching and learning.
   a) The instructor should have absolute control over the teaching and learning process in the classroom.
   b) The instructor should have full control only over teaching and learning in the classroom (students should take full control of the process outside of the classroom).
   c) The instructor and students should share control over teaching and learning in the classroom.
   d) The instructor and students should share control over the process of teaching and learning both in and outside of the classroom
   e) Students should have most control over the process of teaching and learning.

3. Please choose the statement which is closest to your thinking about the number of assessment exercises.
   a) There should be only one or two assessment exercises during the course.
   b) Students should be assessed based on several exercises during the course.

4. Please choose all the statements which are closest to your thinking about the form of assessment.
   a) Assessment should be based on written test(s) (including multiple choice and short answer questions).
   b) Assessment should be based on essay(s), problem solving or other more complex written piece(s).
   c) Assessment should be based on oral presentation(s) or examination(s).
   d) Other, less conventional forms of assessment, such as performance in group exercises, role plays or simulations should also be part of assessment.

5. Please choose the statement which is closest to your thinking about the determinants of the form of assessment.
   a) Assessment exercises should continue university/departmental traditions.
   b) The instructor should select assessment exercises with which he or she feels most comfortable with.
   c) The instructor should select assessment exercises with which students feel most comfortable with.
   d) Assessment exercises depend on the purpose of the course.

6. Please choose the statement which is closest to your thinking about the nature of feedback to students.
   a) Student assessment should be in the form of a single numerical or letter grade or percentage to each exercise.
   b) Student assessment should always include textual/verbal feedback.
   c) It depends on the nature of the assessment exercise whether to do it through a single grade or textual feedback.

7. Please choose the statement which is closest to your thinking about the purpose of feedback to students.
   a) Assessment exercises give feedback to students about their learning.
   b) Assessment exercises give feedback to the instructor about their teaching.

c) Assessment exercises give feedback to students about their learning and instructors about their teaching.
d) Assessment exercises give feedback to students about their learning and instructors about their teaching.
e) Assessment exercises give feedback to students about their learning and instructors about their teaching as well as student learning.

8. We list below the most common teaching activities in the classroom. Indicate how effective you think each method is for student learning by putting an "X" or "✓" to corresponding column.

	Very effective	Effective	Ineffective	Very ineffective	I don't know
Frontal lecturing					
Interactive lecturing					
Student presentation					
Simulation/game					
Pair or group work					
Case study					
Classroom discussion					
Classroom debate					
Problem-solving exercise (including calculating)					

9. Have your attitude toward teaching changed compared to how you approached teaching before enrolling in this program?
   a) Yes.
   b) No.

10. If you answered "yes" to the previous question, describe the nature of this change. [Open-ended question.]

11. Do you plan to change any of aspect of your teaching based on what you have learned in this summer school?
   a) Yes.
   b) No.

12. If you answered "yes" to the previous question, describe what changes you plan to make into your teaching both in the short and the long run. [Open-ended question.]

13. Have any aspect of your teaching changed compared how you taught before enrolling in this program?
   a) Yes.
   b) No.

14. If you answered "yes" to the previous question, describe the nature of this change. [Open-ended question.]

15. Have the amount of change or the lack thereof corresponded to what you had hoped to effect after the summer school?
    a) Yes.
    b) No, it is less.
    c) No, it is more.

16. On a scale of 1–10, 1 very little and 10 being a lot, how much do you think you know about teaching and learning?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

17. On a scale of 1–10, 1 having very little confidence and 10 being very confident, how confident do you feel as a teacher?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

18. There are a series of factors below. Please indicate about each factor whether it helped or hurt your ability to make your course more student-centered? (Use your own definition of student-centeredness).

	Helped	Hurt	Not applicabl
University regulations or traditions.			
My PhD advisor.			
The professor who was responsible for the course.			
My peers at the university.			
Size of class.			
My coach in this program.			
Lack of equipment or resources.			
Student resistance.			

19. List here any additional factors that you think have influenced your ability to realize your ideas when teaching your course. Indicate whether they hurt or helped. [Open-ended question.]

Part C. Experience in Teaching and Learning

The purpose of this section of the questionnaire is to find out about program participants' teaching experience, teaching context and conversations about teaching and learning.

20. Which of the following teaching responsibilities do you have experience with? Choose as many as relevant.
    a) Designing a syllabus or a part of it

b) Leading seminars
c) Lecturing
d) Supervising student thesis
e) Assessing/grading student work
f) Sitting on the graduation committee (defence of student thesis)

21. Which of the following teaching methods have you personally used during your teaching? Choose as many as relevant.
a) Frontal lecturing
b) Interactive lecturing
c) Student presentation
d) Simulation/game
e) Pair or group work
f) Case study
g) Classroom discussion
h) Classroom debate
i) Problem-solving exercise (including calculating)

22. How many individuals have you had sincere conversations about teaching and learning with?
a) 0
b) 1
c) 2
d) 3
e) 4
f) 5
g) More than 5

23. What is the smallest unit of three people or more at your university that you identify with and that influences your teaching?
a) my department
b) research group lead by my PhD. supervisor
c) research group lead by a senior researcher different than my PhD. supervisor
d) my faculty
e) other (Please specify)

24. How many members is this unit comprised of?
a) 3-9
b) 10-15
c) 15-20
d) Over 20

25. With whom of the individuals listed below do you have sincere conversations about teaching and learning? Choose as many as relevant.
a) PhD students from this unit
b) Other members from this unit
c) PhD students elsewhere this unit
d) University teachers outside this unit
e) My PhD. supervisor
f) Department chair
g) Friends and family members

h) Other people. Please specify:
i) I have no conversational partners

26. On a scale of 1–10, 1 not supportive at all and 10 very supportive, how supportive is this unit of these pedagogical conversations?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

27. In these conversations about teaching and learning are you mainly talking about teaching-related problems?
a) Yes.
b) No.

28. If you are mainly talking about something else, what is it? [Open-ended question.]

29. Do you receive suggestions for how to address teaching problems during these pedagogic conversations?
a) Frequently.
b) Sometimes.
c) Not at all.

30. Do you consider these suggestions useful?
a) Yes.
b) Sometimes.
c) No.
d) I don't receive suggestions.

31. Do you often offer suggestions for how to address teaching problems during these pedagogic conversations?
a) Frequently.
b) Sometimes.
c) Not at all.

32. Do your partners consider your suggestions useful?
a) Yes.
b) Sometimes.
c) No.
d) I don't offer suggestions.

Part D. About the Program
The purpose of this part of the questionnaire is to find out about your experience with this program and the nature of your cooperation with the coach.

Basic Information

33. In which institution have you taught the course that you had changed as a result of undergoing this teacher development program? [Open-ended question.]
a) The University of Economics in Bratislava

b) Masaryk University
c) Other

34. What was the title of the course? [Open-ended question.]

35. Was it compulsory or an elective course?
   a) Compulsory
   b) Elective

36. What was your responsibility regarding the course?
   a) Teaching the whole course
   b) Serving as a teaching assistant for a course led by a professor or another teacher or doctoral student

37. How many students were in the course?
   a) Fewer than 10
   b) 11-20
   c) 21-30
   d) More than 30

38. What is the number of students who attended the changed/innovated part of the course?
   a) Fewer than 10
   b) 11-20
   c) 21-30
   d) More than 30

39. How many course sessions did you lead that followed the teaching innovation plan?
   a) 1
   b) 2
   c) 3
   d) 4
   e) 5
   f) 6
   g) 7
   h) 8 or more

40. Did you assign grades to students?
   a) Yes
   b) My assessment relevant for the innovation contributed towards students' grade.
   c) My assessment of other course assignments contributed towards students' grade.
   d) No

41. Could you decide freely over learning activities for your students?
   a) Yes
   b) Partly
   c) No

42. Could you decide freely over the assessment tasks for your students?
   a) Yes
   b) Partly
   c) No

43. How useful have you found the following preparatory assignments for the success/effectiveness of the summer school?

	Very useful	Useful	Neither useful nor [...]	Unuseful	Very unuseful
Questionnaire about the course you were to teach after the summer school					
Interview with an experienced educator					
Gathering course evaluations					
Gathering session plans					
Readings					

44. How useful have you found the following assignments for the development of your teaching in preparation for the summer school?

	Very useful	Useful	Neither useful nor [...]	Unuseful	Very unuseful
Questionnaire about the course you were to teach after the summer school					
Interview with an experienced educator					
Gathering course evaluations					
Gathering session plans					
Readings					

45. Name or describe the top three summer school sessions or ideas that you have found most beneficial to the development of your teaching? [Open-ended question.]

46. How much you think you have learnt by completing the following assignments for the development of your teaching during the summer school?

	A lot	Some	A little	Nothing
Assignment on course design/session plan				
Assignment on learning activities				
Assignment on assessment				
Microteaching				
Reflection on microteaching				

47. We would appreciate if you shared here your suggestions on how best we could improve the summer school program in the future. [Open-ended question.]

Feedback on Online Program Element

48. How useful have you found the following assignments for the development of your teaching during the online element of the program?

	Very useful	Useful	Neither useful nor unuseful	Unuseful	Very unuseful	Not Applicable
Design and implementation of teaching innovation session plans						
Research design to assess the effectiveness of teaching innovation						
Reflection paper on the outcomes of innovation						
Classroom observation						
Statement of teaching philosophy						
Informal coffee and cake session						

49. Of the major exercises during the entire program, which one have you found the most useful for the development of your teaching?
   a) Microteaching exercise and reflection paper
   b) Teaching innovation session plan(s) and implementation
   c) Research design and reflection paper to assess the outcomes of innovation
   d) Statement of teaching philosophy

50. To what extent do you feel satisfied with the practical results of your teaching innovation?
   a) Very satisfied
   b) Satisfied
   c) Neither satisfied nor unsatisfied
   d) Unsatisfied
   e) Very unsatisfied

51. Please explain briefly why you feel satisfied/unsatisfied with the results of your teaching innovation. [Open-ended question.]

52. How useful did you find the feedback by your coach about…

	Very useful	Useful	Some was useful, some useless	Useless
your design of teaching innovation?				
the draft report on the results of your teaching innovation?				
the final report on the results of your teaching innovation?				

53. In your opinion, what have been the major benefits of your cooperation with the coach? Please, choose one or more options. [If software allows have them rank order the items]
   a) Critical comments on how I designed the teaching innovation
   b) Generating ideas and putting them into practice
   c) Emotional encouragement
   d) Increased confidence and willingness to try new skills
   e) Receiving useful advice on teaching problems

f) Feeling that I was not the only one responsible for the changed teaching and student learning
g) Encouraging passion for teaching
h) Having an opportunity to discuss teaching and student learning
i) Having an opportunity to reflect on teaching and student learning
j) Advice on how I should evaluate the results of my teaching innovation
k) Comments on how I should interpret results of my teaching innovation
l) Helping to reduce anxiety in teaching
m) Other – please specify

54. In your opinion, what have been the major drawbacks of your cooperation with the coach? Please, choose one or more options.
a) Lack of time on my part
b) Lack of rapport (positive relationship) between me and my coach
c) Feedback from my coach came usually too late
d) I did not find comments from my coach useful
e) Coaching was mostly realised online – without having a chance to meet in person
f) Changing a coach during the program
g) Tensions between what my coach suggested to me and what my department chair/supervisor wanted me to do
h) Limited competences I have as a teacher of this course
i) Other – please specify

55. On a scale of 1–10, 1 entirely negative and 10 entirely positive, what is your overall evaluation of your coaching experience?

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

56. We would love to hear more on your experience while being coached in this program. You are welcome to put more comments here. [Open-ended question.]

57. We would appreciate if you shared here your suggestions on how best we could improve the online element of the program in the future. [Open-ended question.]

58. Is there anything else you would like to share with us about the program? [Open-ended question.]

C. Classroom Observation Protocol Erasmus+ *Extending and Reinforcing Good Practice in Teacher Development*

Complete the questions in the box before you arrive to the classroom.

Name of university:

Name of instructor:

Title of course:

Number of students present:

Type of class (lecture, seminar, lab, etc.):

| Topic of class observed: |
| Name of observer: |

Fill in the information during the observation. In case of tables, **check or circle** the relevant answer. If you have further information to explain your response, add your comments to the respective column. In case of open ended questions, record your observations during class and, if necessary, augment your notes immediately after the class.

GENERAL ISSUES

1. Classroom layout and arrangement

	✓	Comment
Traditional (tables and chairs in several rows)		
U-shape		
Theater seating (auditorium)		
Several tables with chairs around them		
Other. *Please describe.*		

2. Instructor's presentation, clarity, and leadership during the class

	Yes	No	Comment
Has the instructor shared the learning of objectives with the students?			
Has the instructor explained what students can expect from the class regarding both activities and content?			
Is the class well-organized? (Does one activity logically follow the other? Are the activities are linked together sufficiently? etc.)			
Has the instructor kept reasonable control over the class (i.e. have students followed his/her lead or diverged from instructions in some way)?			

ACTIVE LEARNING

3. Active Learning in the Classroom

Number of active learning exercises in the class:

0	1	2	3	More than 3

Percentage of class time devoted to active learning:

0-25%	26-50%	51-75%	76-100%

The level of student engagement during active learning exercise(s) was

High	Medium	Low

Compared to the lecturing segment of the class, the level of student engagement during active learning exercises was

Higher	Lower	About the same	N/A

4. The Active Learning Exercise

Fill the information below about the active learning exercise used during the class you visited. If there was more than one, choose the most substantial one.

a. What type of an active learning exercise has teacher used? (e.g. group-pair work, simulation, student presentation, etc.)

b. What was the purpose of the active learning exercise (e.g. teach new concepts, reflect on material learned, assess students)?

c. Evaluate the instructor's activity on the following statements using a 0-2 scale, where 0 means the condition was not present at all and 2 marks the best possible manifestation of the condition. Where you are asked to explain, or when you find something noteworthy, use the comment column.

	0	1	2	Comment
The learning objective of the exercise was clearly communicated.				
The learning objective of the exercise was in line with the learning objectives of the class.				
The students were given clear instructions.				
The students had the opportunity to ask questions at the time of introducing the exercise.				
The assigned time for the exercise was satisfactory.				
The instructor circulated around the room, looked over students' work, or monitored student progress in another way.				
The instructor intervened if it was necessary (e.g. when the students misunderstood the exercise or did something else than required).				
The instructor responded to student inquiry (e.g. questions of clarification) during the exercise.				
The instructor encouraged non-participating student(s) to engage in the exercise. *Explain how*.				
The instructor encouraged students to draw non-participating student(s) in the exercise.				
The active learning exercise was explicitly linked to class material.				
The instructor used various tool (e.g. the board, .ppt, handouts, instruction sheet, cards, dice, etc). *Explain what/how*.				
The lessons learnt from the active learning exercise were communicated to the students (i.e. via a brief lecture or debriefing session). *Explain*.				
Assessment or feedback was used in relations to the active learning exercise. *Explain*.				
Teacher treated students as partners (rather than acting as the supreme authority).				

Evaluate students along the following dimensions using the same 0-2 scale as above.

	0	1	2	Comment
Students appeared to have understood instructions and acted upon them promptly.				
Students asked questions to clarify the task or some other issue related to the exercise.				
Students appeared to feel comfortable to participate in the exercise.				
Student choice has been facilitated. Students could choose from a variety of activities.				
Students tried to draw each other into the exercise.				
Students interacted with each other with ease.				
Students appeared to understand the purpose of the class and connected it to the course material.				
Students seemed resistant to the exercise. *Explain*.				

FINAL REMARKS
5. Is there any other important thing that caught your eye during the observations?
6. What suggestions do you have for further improvement? (Use an additional sheet, if necessary.)

Classroom Observation Protocol

Instructions

Thank you for your time and effort to visit a fellow participant's class and help him or her improve further as a teacher. We have prepared a classroom observation protocol for you to use during the classroom visit and collected a set of advice on how to make the best of this occasion below.

In preparation for the classroom observation,

1. contact the fellow Ph.D. student whose class you'd like to visit and agree on a mutually convenient date.
2. ask your colleague to share his/her syllabus and session plan with you.
3. read the attached classroom observation protocol and make sure you understand the questions and what the form requires you to do. If you have questions, contact your coach *before* the observation takes place.
4. fill in the top box of the classroom observation protocol.

During classroom observation,

1. complete the provided classroom observation protocol. You can either complete it using your laptop or take notes to a printed version.
2. feel free to take additional notes if you think it is warranted.
3. pay attention to both the instructor and student behavior and activity.

After classroom observation:

1. Augment your notes immediately, if necessary.
2. Upload the completed observation protocol (electronic version or a scan of the printed document) and any additional notes you may have taken to the relevant section of the course site as soon as possible but no later than 17 December, 2017).
3. Discuss your thoughts and suggestions with the colleague whose class you have observed at a time and setting convenient for both of you. We ask that you do it within a week after the actual observation and that you share your observations and ideas respectfully. Otherwise, it is up to you to decide on the format of your discussions (e.g. if you share the observation sheet or only use it as a note for yourself during the discussion, etc.).

D. Pre-program and post-program interview with program participants (initiated with card slots)

Instructions for card sorts & interview

These two segments should be followed right after one another with no break.
The whole process should be repeated once for the significant other (see research question 1) and once for the microculture (see research question 2).

Card sorts
1. [clarifying question to be asked only with regard to the workgroup:] "What is the smallest unit of 3 people or more at your university that you identify with and that influences your teaching?"
2. [shuffle cards into random order before starting]
   "In the next section of the interview, I would like to establish and understand your feelings and behavior in relation to the teaching support you receive. The cards I placed in front of you contain labels describing feelings and behaviors. Please, think of [insert name of a significant other/unit identified by participant] and sort the card into two columns: 'what you do not feel or you don't do', 'what you feel or do to some extent'."
3. [once the participant finished the sorting, remove the card under the 'do not feel/do not do' list and record their content in the table below. You will need this in in the interview phase].
4. "Please categorize the remaining cards into two groups: 'feel/do to some extent', 'feel strongly/do often'."
5. [once the participant finished the sorting, remove the card under the 'feel/do to some extent' list and record their content]
6. "Please categorize the remaining cards into two groups: 'feel strongly/does often', 'feel most strongly/does most often'."
7. [once the participant finished the sorting, remove the card under the 'feel strongly/do often' list and record their content.]

Interview
The purpose of the interview is to ask after (dis-/mis-)trust-related feelings & behaviors as listen in table 1. All these feelings regardless of where they were placed are interesting. Use the following questions to inquire about them.
NB! This must be repeated for each feeling/behavior:
8. "I've notice that you categorized [insert one (dis-/mis-)trust-related feeling/behavior on card] [insert column the participant put this card] can we talk about this?"
   [allow respondent time to volunteer an answer, if it is not happening, ask:]
9. "Why did you categorized [insert feeling/behavior] into [insert column name]?"
10. "What happened?"
11. "Can you bring an example? Could you describe a situation that would illustrate why you feel/act this way?"
12. "How do you feel all this influence your improvement as a teacher?"

Appendix 1: Recording results of the card sorts

Interview number: _____[should also be stated on the recording as well]
Interview start date: _____[time and date]

Does not feel/do	Feels/does to some extent	Feels strongly/does often	Feel most strongly/does most often

Appendix 2: Cards to use

When used there should be no indication on the cards if the feeling is related to trust. Cards should be given to participant in random order.

active	afraid	angry	anxious	avoiding interaction	calm
cheerful	comfortable	concerned	confident	confused	cynical
demoralized	depressed	determined	disinterested	distrustful	eager
encouraged	enthusiastic	excited	faithful	feeling having a choice	frequent interaction
frustrated	grateful	hesitant	hopeful	indifferent	insecure
involved	keen	monitoring	on edge	optimistic	overwhelmed
panicky	passive	positive	powerless	relieved	resentful
resigned	safe	sceptical	stressed	supported	surprised
suspicious	take the initiative	trustful	uncertain	under pressure	watchful for harm
withholding information	worried				

E. Post-program interview with program participants: semi-structured

Part 1: Perceived results of teaching innovation and factors influencing these results

1. To what extent do you feel satisfied with the results of your teaching innovation?
2. Please explain briefly why you feel (un)satisfied with the results of your teaching innovation.
3. What is the smallest unit of three people or more at your university that you identify with and that influences your teaching?
4. What in this unit do you think has helped you to achieve the aims of your teaching innovation?
5. What in this unit do you think has hindered you from achieving the aims of your teaching innovation?
6. What has helped you, in your opinion, to overcome these hindering factors?
7. Do you feel somehow limited in changing your teaching by the authority you have as a junior member of your workgroup? If yes, in what sense?

Part 2: Nature of conversations about teaching and learning

8. How many individuals have you had sincere conversations about teaching and learning with? Please name these individuals (for example, PhD students from your workgroup, other members from your workgroup, PhD students elsewhere than your workgroup, university teachers outside your institution, your PhD. supervisor, department chair, friends and family members, other people, I have no conversational partners)
9. Could you please describe the nature of these conversations?
10. How many colleagues within your workgroup do you have sincere conversations about teaching and learning with?
11. Do you consider your workgroup to be supportive or not of conversations about teaching and learning?
12. Can you please identify one person from your workgroup with whom you have had most important conversations about teaching and learning?

Part 3: Conversations about teaching and learning with a leading person from a unit

13. Can you please identify the leading person from your workgroup that has influence over your teaching?
14. In what ways have you interacted with this leading person about the course you were innovating and its content?
15. What was the nature and content of your conversations about teaching and learning?
16. Have you had similar discussions with the leading person also prior to your enrolment in the teacher development program? (August 2017)
17. If yes, have your conversations changed somehow since your enrolment in the program? In what ways?

Part 4: Conversations with the program colleague(s)

18. Have you undertaken peer observation of other participant's teaching as part of this program and had a follow-up conversation with your colleague?
19. If yes, have you found it beneficial? What aspects? If not, why did not you do the observation or follow-up discussion?
20. Have someone else from the program participants observed you while teaching and have you had a follow-up conversation?

21. If yes, have you found it beneficial? What aspects? If not, why such observation did not take place?
22. Have you participated in the informal coffee meeting organized as part of this program?
23. If yes, what aspects did you find beneficial and which not? If not, why did not you attend such meeting?
24. Have you had pedagogic conversations with any other program colleagues?
25. If yes, could you please describe the nature of these conversations?

F. Post-program interview with faculty members – "significant others": semi-structured

(with participants' supervisors, department chairs or similar people in leadership positions at participants' institutions, course leader in Lund or a study director, for a sample of participants)

1. Tell us about this participant's teaching. What do you think about it? How does s/he contribute to teaching here?

2. In what ways have you interacted with the participant about the course he/she was teaching and its content?

3. What are the main themes you have addressed in discussions with your colleague(s) (after the interviewers gets some hint that they also discuss teaching, then he/she'll ask for more precise description, as for example, ask the following

4. Can you please describe an example of your pedagogic conversations with the program participant(s)?

5. Have you had similar discussions with the participant also prior his/her enrolment in the teacher development program? (August 2017)

6. If yes, how do the pre-program and post-program conversations compare?

7. Is it usual that you discuss teaching and learning with your colleagues?

8. Can you please describe an example of such conversation?

9. Can you give an example of an initiative in this institution that aimed at enhancing quality of education and you supported it?

10. Have any of the PhD. students come up with such an initiative?

G. Coaches' evaluation form for the assignments produced by program participants

Please assess each from the assignments of your coachee for the attainment of the program outcomes

1. Reflection paper on microteaching
2. Reflection paper on the outcomes of innovation
3. Teaching philosophy

Coach's name:
Coachee's name:

Outcome 1: Student centeredness	Teacher's focus is on how his/her students learn, rather than on own performance in all activities related to teaching from curriculum design and lesson planning across leading learning sessions to student assessment. Students' choice in their education is facilitated; the student is encouraged to do more than the lecturer and/or the shift in the power relationship between the student and the teacher can be observed. Teacher pays attention to who his/her students are and how they learn, so that good learning can occur.
high-level manifestation	Student-centeredness as defined above is manifested in numerous parts of the text, it shows that teacher embraced student-centeredness in a complex way, and there are not any parts where teacher contradicts herself using statements that demonstrate teacher-centred approach. Teacher pays a lot of attention to who his/her students are and how they learn, so that good learning can occur.
mid-level manifestation	Student-centeredness as defined above is manifested in some parts of the text, it documents that teacher has embraced some elements of student-centeredness; there are no parts where teacher contradicts herself using statements that demonstrate teacher-centred approach. Teacher only pays some attention to who his/her students are and how they learn, so that good learning can occur.
low-level manifestation	Some aspects of student-centeredness as defined above are manifested in a few parts of the text; there are parts where teacher contradicts herself using statements that demonstrate teacher-centred approach. The teacher pays little attention to who his/her students are and how they learn.
no manifestation	no evidence at all

Outcome 2: reflective and critical attitude to teaching	Teacher demonstrates that he/she has thought about the reasons of why good/poor quality learning occurs at his/her students; these reasons are summarized in a clear and comprehensive way and seem realistic. Teacher can identify not only positive but also negative/problematic aspects/outcomes of own teaching and assumed reasons for them. Teacher may also demonstrate the connections he/she can see between own research and teaching. Based on this understanding, teacher can suggest changes for the future teaching and their expected effects on student learning.
high-level manifestation	Reflection and critical attitude as defined above is demonstrated throughout the text and relates to planning, implementing and evaluating own teaching.

mid-level manifestation	Teacher demonstrates that he/she has thought about the reasons of why good/poor quality learning occurs at his/her students. Teacher analyses negative aspects/outcomes of own teaching and their reasons only to a small extent. Teacher can suggest some changes for the future teaching but can not explain well their expected effects on student learning. Reflection and critical attitude is demonstrated throughout the text but only relates to some of the following: planning, implementing and evaluating own teaching.
low-level manifestation	Teacher demonstrates that he/she has thought about the reasons of why good/poor quality learning occurs at his/her students, but he/she could not summarize them in a clear and comprehensive way, they are only outlined and/or do not seem realistic. Teacher can not identify negative aspects/outcomes of own teaching and assumed reasons for them: the evaluation of the effects of own teaching is uncritically positive. Based on this, teacher can not suggest changes for the future teaching and explain their expected effects on student learning. Reflection and critical attitude is demonstrated in a few parts of the text, these are disconnected and related only to only some stages of teaching (planning, implementing and evaluating own teaching).
no manifestation	no evidence at all

Outcome 3: Use of theory	Teacher has learnt a set of concepts, theories and principles in various aspects of teaching and learning.
high-level manifestation	Teacher can properly and correctly define one or several concepts/theories or principles related to teaching and learning in higher education (i.e. using own words). Theory is used to design (a new way of) learning for the students. The teacher uses the chosen concept, theory or principle to explain the outcomes of student learning.
mid-level manifestation	Teacher demonstrates familiarity with one or several concepts/theories or principles related to teaching and learning in higher education. These are properly and correctly defined (i.e. using own words). Theory is used to design learning for the students. The teacher, however pays little attention to how the described concept, theory or principle can explain the outcomes of student learning.
low-level manifestation	Teacher demonstrates familiarity with one or several concepts/theories or principles related to teaching and learning in higher education. These are not properly defined (i.e. using own words) or the definition reveals misunderstandings. The teacher does not use the chosen concept, theory or principle to explain the outcomes of student learning.
no manifestation	no evidence at all

Suggested format for the form

Coach XX, Student XY

	Student-centeredness	Reflective teaching	Use of theory	Coaches' comments
Assignment 1	High/mid/low level or no	High/mid/low level or no	High/mid or low level	

Assignment 2	High/mid/low level or no	High/mid/low level or no	High/mid or low level	
Assignment 3	High/mid/low level or no	High/mid/low level or no	High/mid or low level	

Evaluators will be asked to use following chart when coding:

3 = High level

2 = Mid-level

1 = Low level

0 = no manifestation

1 Participant's self-evaluation form on the attainment of program goals

Please assess your teaching practice by choosing what characterises you best (choose one of each set of 3 characteristic) – characteristics to be put in (quasi-)random order

I am focusing on how my students learn, rather than on my own performance in all teaching-related activities from curriculum design and lesson planning across leading learning sessions to student assessment. Students' choice in their education is always facilitated; the student is encouraged to do more than the lecturer and/or the relationship between the student and me is collegial rather than hierarchic. I pay a lot of attention to who my students are and how they learn.

I am focusing on how my students learn, rather than on my own performance in most teaching-related activities from curriculum design and lesson planning across leading learning sessions to student assessment. Students' choice in their education is mostly facilitated; the student is encouraged to do more than the lecturer and/or the power relationship between the student and me is mostly collegial. I pay some attention to who my students are and how they learn.

I am focusing on my own performance rather than on how my students learn, which refers to teaching-related activities from curriculum design and lesson planning across leading learning sessions to student assessment. Students can rarely make choices in my courses, such as suggesting the topics of classes, choosing the topics of their assignments or questions in their exams. The students are rarely encouraged to do more than the lecturer and/or the relationship between the students and me is hierarchic rather than collegial. I am little interested in who my students are and how they learn.

I believe that for good teaching the performance of teacher is essential. I keep good control of all teaching-related activities from curriculum design and lesson planning across leading learning sessions to student assessment. I am not allowing students to make choices in my courses and students are usually not very active in my classes. I keep the relationship between the students and me hierarchic. I am not really interested in who my students are and how they learn.

--

I frequently think about the reasons of why good/poor quality learning occurs at my students. I have identified these reasons and I can describe them into detail. I can moreover identify not only positive but also problematic aspects/outcomes of my teaching and assumed reasons for them. I can well explain the connections I see between my research and teaching. Based on my understanding of student learning, I can suggest changes for my future teaching and their expected effects on student learning.

I have thought about the reasons of why good/poor quality learning occurs at my students. I can identify and describe some of these reasons. I can identify both positive and problematic aspects/outcomes of my teaching and assumed reasons for them. I can explain some connections I see between my research and teaching. Based on my understanding of student learning, I can suggest changes for my future teaching but I am not sure about their expected effects on student learning.

I have thought about the reasons of why good/poor quality learning occurs at my students but I can not identify or describe these reasons very well. I see very few if any negative or problematic aspects/outcomes of my teaching. I do not see many connections between my research and teaching. I prefer introducing only minor changes into my future teaching.

To be honest, I have not yet thought about the reasons of why good/poor quality learning occurs at my students. I can not see any negative or problematic aspects/outcomes of my teaching nor any connections between my research and teaching. I prefer not changing my teaching in the future.

--

Using my own words, I can define one or more concepts/theories/principles related to teaching and learning in higher education and I think this definition is correct. I often derive from my knowledge of pedagogic theory while designing learning for my students. I also think of how theory can explain the outcomes of student learning.

I am familiar with one or several concepts/theories/principles related to teaching and learning in higher education. I can define them using my own words and I think this definition is correct. I sometimes derive from my knowledge of pedagogic theory to design learning for my students. I am not using theory to explain the outcomes of student learning.

I am familiar with one or several concepts/theories/principles related to teaching and learning in higher education. I have, however, difficulty to define them using my own words. I rarely if ever derive from any theory while designing learning for my students. I do not use theory to explain the outcomes of student learning.

I do not feel familiar with any concept/theory/ principle from higher education pedagogy. Neither do I use them while designing or evaluating student learning.

2 Participant information sheet

Purpose of the study

This study examines the outcomes of a teacher development program. The research findings will be used to enhance the program for the future and to allow similar programs to derive from this experience for program improvement purposes. This research is undertaken as part of the project "Extending and reinforcing good practice in teacher development" funded through an Erasmus+ grant (Grant No. 2016-1-SK01-KA203-022551). Consortium of project partners includes Central European University in Budapest, University of Economics in Bratislava, Masaryk University in Brno, Lund University, University of Tartu and Staff and Educational Development Association. Program participants will be asked to provide documents related to their program participation, fill out online questionnaires and interviewed using audio recording.

Anonymity and confidentiality

Information provided by research participants will be handled in strict confidence. No data from this research will be published with a name of a research participant or information that would allow the research participant to be easily identified (for example his or her institution). Identifying information will be removed from all data once they are matched up with each other. Demographic data will only be reported in aggregated form.

Data storage

The data will be stored on personal computers of the involved researchers (laptops and desktop computers). Primary location for data storage will be the institutional computers at the involved research institutions. At the end of the research, the data will continue to be stored for the purpose of comparing results of later researchers with this research. After seven years, all data sources will be destroyed.

Raising a concern and/or making a complaint

To raise any concerns regarding this research, please contact in the first instance the research coordinators Dr. Pusa Nastase and Dr. Gabriela Pleschová, preferably either by e-mail (nastasep@ceu.hu, gabriela.pleschova@euba.sk) or by phone (0036 1 327 3000 /2398, 00421 2 67295307). If you feel that your concerns have not been properly answered, you may contact Assoc. Prof. Denisa Čiderová, the vice-rector of the University of Economics , at denisa.ciderova@euba.sk or **tel: 00421** 2 6729 5192 or Dr. Petr Suchý, the chair of the Department of International Relations and European Studies, at psuchy@fss.muni.cz. Or tel: 00 420 54949 8126 at Masaryk University.

Publication of research results

This research will be published as a series of open access studies at the Erasmus+ dissemination platform: http://ec.europa.eu/programmes/erasmus-plus/projects. Additionally, it is expected that parts of the research will be reworked and submitted for publication in peer reviewed academic journals.

3 Participant consent form

With my signature I agree to participate in this study and I declare that as a participant I:

- o have read the participant information sheet;
- o understand that I will be asked to provide documents related to the teacher development program and I will be interviewed using audio recording;
- o have had the opportunity to ask questions about the study and have received satisfactory answers to questions, and any additional details requested;
- o understand that I may withdraw from the study without penalty at any time by advising the researchers of this decision;
- o understand that this project has been reviewed by, and received ethics clearance through, the Central European University Research Ethics Committee;
- o understand who will have access to personal data provided, how the data will be stored; and what will happen to the data at the end of the project;
- o understand that the results of this research project will be published as studies;
- o understand how to raise a concern and make a complaint;

Date, names and signatures of the research coordinator and the participant.