

Supplementary File A Observation scheme

Date _____ Time _____ Location _____

Team

- TDT A
- TDT B

Teachers present

Teachers absent

Team learning behaviours

	1 (09.00 – 09.10)	2 (09.10 – 09.20)	3 (09.20 – 09.30)	4 (09.30 – 09.40)	5 (09.40 – 09.50)	6 (09.50 – 10.00)	7 (10.00 – 10.10)	8 (10.10 – 10.20)	9 (10.20 – 10.30)	10 (10.30 – 10.40)	11 (10.40 – 10.50)	12 (10.50 – 11.00)	13 (11.00 – 11.10)	14 (11.10 – 11.20)	15 (11.20 – 11.30)	16 (11.30 – 11.40)	17 (11.40 – 11.50)	18 (11.50 – 12.00)
<i>Construction</i>																		
Team members share relevant information and ideas																		
Team members are listening carefully to each other																		
Team members ask each other questions if something is unclear																		
<i>Co-construction</i>																		
Information from team members is complemented with information from others																		
Team members elaborate on each other's information and ideas																		
Team members draw shared conclusions from the information and ideas discussed																		
<i>Constructive conflict</i>																		
Opinions and ideas of team members are verified by asking each other critical questions																		
Comments on ideas are acted upon																		
Differences of opinions tend to be handled by addressing them directly																		

Note. X = Occurrence of behaviour in a 10-minute time slot

Coaching activities

	1 (09.00 – 09.10)	2 (09.10 – 09.20)	3 (09.20 – 09.30)	4 (09.30 – 09.40)	5 (09.40 – 09.50)	6 (09.50 – 10.00)	7 (10.00 – 10.10)	8 (10.10 – 10.20)	9 (10.20 – 10.30)	10 (10.30 – 10.40)	11 (10.40 – 10.50)	12 (10.50 – 11.00)	13 (11.00 – 11.10)	14 (11.10 – 11.20)	15 (11.20 – 11.30)	16 (11.30 – 11.40)	17 (11.40 – 11.50)	18 (11.50 – 12.00)
<i>Goal-oriented coaching</i>																		
Keeping the team's focus on the goal																		
Encouraging in-depth discussions and provision of feedback																		
Sharing plan of action for current and/or future meetings																		
Summarising ideas, opinions and decisions																		
<i>Content-wise coaching</i>																		
Transferring content knowledge																		
Transferring knowledge on the new curriculum/learning standards or quality indicators																		
Providing feedback or criticising the team's ideas or work																		
Suggesting alternative solutions methods, ideas or materials																		
<i>Organisational coaching</i>																		
Dividing tasks or asking the team members to do so																		
Monitoring the time																		
<i>Group-dynamic coaching</i>																		
Motivating and inspiring the team																		
Letting the team share their concerns and problems																		
Reflecting on the team's experiences and the role of the coach																		
Ensuring that all team members feel heard and can have input																		
Managing the general atmosphere within the team																		

Note. X = Occurrence of activity in a 10-minute time slot

Supplementary File B Coding scheme teachers

- Input factors
 - Teacher level
 - Attitude towards educational change
 - Prior knowledge on reform
 - Inclination collaborative learning
 - Motivation to participate in TDT
 - Request to participate
 - Goals of participation
 - Initial self-efficacy towards reform
 - Team level
 - Team composition
 - Teaching disciplines
 - Experience TDT participation
 - Team history
 - Team size
 - School level
 - Culture educational change
 - Attitude towards educational change of school principal
 - Attitude towards educational change of colleagues
 - Facilitation–support for trajectory
- Process factors
 - Team meetings
 - Attendance–absence–dropout
 - Team learning beliefs
 - Psychological safety
 - Interdependence
 - Social cohesion
 - Task cohesion
 - Group potency
 - Team coach
 - Goal-oriented coaching
 - Content-wise coaching
 - Organisational coaching
 - Group-dynamic coaching
 - Adaptive coaching
- Outcome variables
 - Quality of the material
 - General
 - Didactical innovation
 - Usability in practice
 - Amount
 - Teacher professional development
 - Knowledge
 - New curriculum–learning standards
 - Financial topics
 - Self-efficacy towards reform

Concept	Description	Example
Input factors		
<i>Teacher level</i>		
Attitude towards educational change	References to the attitude of team members towards educational change in general, and the upcoming reform in specific	'The reform itself, I think that each change has its pros and cons'
Prior knowledge on reform	References to team members' knowledge on the reform before the start of the trajectory	'Our school principal kept us quite up-to-date about what would happen, and what we could expect'
Inclination collaborative learning	References to team members' general inclinations to collaboratively learn with colleagues	'I chose to participate because I had always benefited from participating in previous learning communities'
Motivation to participate in TDT	References to the extent to which team members felt motivated to actively participate in the TDT	'I think that we were all there to work and that this went fine. Everyone conducted the tasks they had to do.'
Request to participate	References to by whom the team members were asked to participate in the TDT trajectory	'This was asked by the school principal. Because I would only work for two more years, I did not actually want to participate. But apparently, the team coach had asked the school principal to send one of the teachers of my school.'
Goals of participation	References to what team members hoped to achieve by participating in the TDT trajectory	'Job security for the next school year'
Initial self-efficacy towards reform	References to the extent to which teachers felt self-confident to implement the new learning standards, before the start of the trajectory	'I had seen the new learning standards. And you recognise a few things when you have been teaching economics for so long. But how should you implement this in the first grade?'
<i>Team level</i>		
Team composition		
Teaching disciplines	References to the various teaching disciplines of the team members	'I think that the other two spoke a lot from the material they had developed before, and from their own experience. So it was more my role to somewhat counterbalance.'
Experience TDT participation	References to team members' previous participation in TDTs	'Because I had also participated in previous learning communities related to economic topics, it was not illogical to also participate in this trajectory'
Team history	References to whether team members had worked together before this trajectory	'And then my colleague, we have quite some . . . We will also work together next year.'

Team size	References to team members' perceptions of the number of members within the team	'You should minimally be . . . we were with five, and that is the minimum. You need for our five people to be able to deliver.'
<i>School level</i>		
Culture educational change		
Attitude towards educational change of school principal	References to team members' perceptions of the school principals' attitude towards educational change in general, and the upcoming reform in specific	'Our school principal was very involved with the reform; she read a lot about it and knew about the terms while I still had no idea. She also encouraged us to participate in the TDTs.'
Attitude towards educational change of colleagues	References to team members' perceptions of the attitude of their colleagues towards educational change in general, and the upcoming reform in specific	'The responses of colleagues are mixed. Ranging from 'we simply go for it' to "we'll see what will happen", or even anxious.'
Facilitation—support for TDT trajectory	References to the school facilitation or support that team members could rely on during the TDT trajectory	'The school principal allowed us to go. Told us to go, in many cases.'
Process factors		
<i>Team meetings</i>		
Attendance—absence—dropout	References to the presence and absence of team members at the meetings, and references to dropout during the trajectory	'Sometimes, and I can imagine that they felt the same when I was not there, it is challenging when certain people are absent.'
<i>Team learning beliefs</i>		
Psychological safety	References to aspects such as the possibility for team members to freely share ideas in the TDT, to ask others for help and to raise concerns	'I think that there was more trust towards the end'
Interdependence	References to aspects such as team members obeying agreements, and the extent to which team members prepared for the physical meetings	'This was promised, and I think it was already in my inbox that same evening. That was comforting.'
Social cohesion	References to the extent to which team members got along and felt connected	'The atmosphere was positive. Yes, work-related.'
Task cohesion	References to the extent to which there was consensus on the TDT's goals and how these should be reached	'That choice was based on a team discussion. And I think that it also played a role that the team coach was present'
Group potency	References to the trust among team members that the TDT would succeed in achieving its goals	—Code not present in interviews with teachers—
<i>Team coach</i>		

Goal-oriented coaching	References to team members' perceptions on the extent to which the team coach engaged in activities such as setting the goals and keeping the team focused on reaching its goals	'The team coach took a bit of a coordinator role to control the whole, I guess'
Content-wise coaching	References to team members' perceptions on the extent to which the team coach engaged in activities such as transferring knowledge on the new curriculum and guarding the quality of the material	'At the end, the team coach made decisions once or twice, by telling us which elements needed to be deleted, because they were irrelevant'
Organisational coaching	References to team members' perceptions on the extent to which the team coach engaged in activities such as ensuring that agreements were met and writing reports after the meetings	'The team coach initially had a coordinator role, divided the tasks'
Group-dynamic coaching	References to team members' perceptions on the extent to which the team coach engaged in activities such as managing the general atmosphere within the group	
Adaptive coaching	References to team members' perceptions on the extent to which the team coach was able to match the provided support with the needs of the TDT	'There was this combination of remaining on the background whenever possible, but making decisions whenever necessary'
Outcomes		
<i>Quality of the material</i>		
General	References to team members' overall satisfaction with the developed material, in which the team member does not elaborate on specific aspects of the material	'What we have, I consider usable. I'm satisfied. It's your own material, after all.'
Didactical innovation	References to the extent to which elements of didactical innovation were integrated into the material	—Code not present in interviews with teachers—
Usability in practice	References to the usability of the material in practice, and references to whether team members are planning to use the materials that were developed	'In the first place, I'm very satisfied with the material that has been developed. It will definitely form the basis of what I will use in the classroom next year.'
Amount	References to (satisfaction with) the amount of material that was developed	'We just chose one learning standard. But there are many others where there will be questions. I consider that a problem.'
<i>Teacher professional development</i>		
Knowledge		

New curriculum–learning standards	References to the extent to which team members felt their knowledge of the new curriculum and the learning standards had increased due to TDT participation	‘My insight increased into how you should interpret the learning standards. And how you should try to reach them.’
Financial topics	References to the extent to which team members felt to which their knowledge on financial topics had increased due to TDT participation	‘Everyone has of course, purely content-wise, some sort of knowledge on economic-financial competences. Me too, but my view on this has broadened a bit.’
<i>Self-efficacy towards reform</i>	References to (changes in) self-confidence to implement the new learning standards and references to aspects that had remained unclear	‘I still have, to a certain extent, a wait-and-see attitude. Because I don’t know yet how it will eventually turn out. Because it is not the case that because we have material now, it will all be alright.’

Supplementary File C Coding scheme team coach

- Input factors
 - Team level
 - Team composition
 - Teaching disciplines
 - Experience TDT participation
 - School level
 - Facilitation–support for trajectory
- Process factors
 - Team meetings
 - Attendance–absence–dropout
 - Overall motivation in TDT
 - Team learning beliefs
 - Psychological safety
 - Interdependence
 - Social cohesion
 - Task cohesion
 - Group potency
 - Team coach
 - Goal-oriented coaching
 - Content-wise coaching
 - Organisational coaching
 - Group-dynamic coaching
 - Adaptive coaching
- Outcome variables
 - Quality of the material
 - General
 - Didactical innovation
 - Usability in practice
 - Amount
 - Self-efficacy towards reform

Concept	Description	Example
Input factors		
<i>Team level</i>		
Team composition		
Teaching disciplines	References to the various teaching disciplines of the team members	'The group was diverse. Because some of the teachers who would teach economic-financial competences did not have prior knowledge on this.'
TDT experience	References to team members' previous participation in TDTs	'This teacher has been participating in other learning communities for six years now. So she knows the ins and outs.'
<i>School level</i>		
Facilitation—support for TDT trajectory	References to the school facilitation or support that team members could rely on during the TDT trajectory	'That school principal was not willing to ensure that this teacher would not have to teach at the time of the meetings'
Process factors		
<i>Team meetings</i>		
Attendance—absence—dropout	References to the presence and absence of team members at the meetings, and references to dropout during the trajectory	'The varying team composition impacted the . . . the teachers didn't like this, let's state it like that. You're dependent on each other.'
Overall motivation in TDT	References to the perceptions of the team coach regarding the motivation of the team members	'Not all team members were equally enthusiastic. And this also became clear when the trajectory progressed.'
<i>Team learning beliefs</i>		
Psychological safety	References to perceptions of the team coach regarding aspects such as the possibility for team members to freely share ideas in the TDT, to ask others for help and to raise concerns	'I find an open culture extremely important. And that was clearly the case there.'
Interdependence	References to perceptions of the team coach regarding aspects such as team members obeying agreements, and the extent to which team members prepared for the physical meetings	'The material was very well brought together, agreements were met, and the teachers continued to work hard between the meetings'
Social cohesion	References to perceptions of the team coach regarding the extent to which team members got along and felt connected	—Code not present in interviews with team coach—
Task cohesion	References to perceptions of the team coach regarding the extent to which there was consensus on the TDT's goals, and how these should be reached	'By talking about the contents of the learning standards, together with the teachers, the choices were made relatively quickly. It was decided in consensus.'

Group potency	References to perceptions of the team coach regarding the trust among team members that the TDT would succeed in achieving its goals	'She has really caused that positive feeling in the others. Okay, we are going to tackle this, going to perform well, we are going to make sure that we are prepared.'
<i>Team coach</i>		
Goal-oriented coaching	References to the engagement of the team coach in activities such as setting the goals and keeping the team focused on reaching its goals	'Every now and then it was important to re-determine the focus in the team. So that it could continue.'
Content-wise coaching	References to the engagement of the team coach in activities such as transferring knowledge on the new curriculum and guarding the quality of the material	'I was definitely a 'critical friend' to the team members, but also an expert'
Organisational coaching	References to the engagement of the team coach in activities such as ensuring that agreements were met and writing reports after the meetings	'Ensuring that at the end of each session, there were decent agreements, and ensuring to send the reports to the schools relatively quickly.'
Group-dynamic coaching	References to the engagement of the team coach in activities such as managing the general atmosphere within the group	'It needs to be ensured that, especially in the beginning, there is a comfortable, safe space, wherein people can collaborate'
Adaptive coaching	References to the perceived ability of the team coach to match the provided support with the needs of the TDT	'My expectations are often higher than what I should actually be expecting. The process is usually slower. You need to adapt to the rhythm of the group.'
Outcomes		
<i>Quality of the material</i>		
General	References to the overall satisfaction with the developed material, in which the team coach does not elaborate on specific aspects of the material	'I'm fairly satisfied with the material considering the limited time that we had, and the fact that the group was inconsistent.'
Didactical innovation	References to the extent to which elements of didactical innovation were integrated into the material	'There is still the opportunity to give an extra dimension to the material that has been developed now. In terms of formative evaluation, to elaborate on how teachers can provide students with good feedback . . . '
Usability in practice	References to the usability of the material in practice	'I think that it is important that they can test the material that they have developed in this first phase in their own teaching practice'

Amount

References to (satisfaction with) the amount of material that was developed

'There are a few learning standards that have not yet been covered. So, there are definitely opportunities to develop material for those.'

Self-efficacy towards reform

References to (changes in) self-confidence to implement the new learning standards, and references to aspects that have remained unclear

'I think that this has mainly given them a sense of comfort. Okay, we have material that we can start with.'
