Erasmus+ Project LeaFaP

Practices and needs for facilitation of Professional Learning Communities

Report about the results of focus group interviews with student teachers and facilitators

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LeaFaP

Leading and Facilitating Professional Learning Communities
in Schools towards an Inquiry-based and Reflective Practice
KA220-SCH - Cooperation partnerships in school education

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Leading and Facilitating Professional Learning Communities in Schools towards an Inquiry-based and Reflective Practice

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Content

1 Report of the results of the student teacher focus group interviews

Introduction

As part of the LeaFaP project, before developing training material, the aim is to compile, among other things, the state of scientific knowledge about the necessity and quality of external support or internal leadership for successful PLG practice in order to derive the specific training requirements. As a first step, a systematic review of papers of the discourse was compiled (https://www.leafap.eu/about/results/). In the second step, all partners of the international project will gather further findings on this issue by collecting data in their regional area. Therefore, the partners involve those PLG-practicing groups to which they have access in their context and which actually do practice PLCs. Thus, the following presentation of results is based on a random sample and takes information from interviews with people who are experienced in PLG and were willing to participating in interviews during the selected period. The survey was carried out using a questionnaire that was developed jointly in the project consortium and which was adapted slightly to the group of respondents. The questions follow the leading interests: own experiences with PLGs, challenges experienced, competencies of the facilitation, what he/she should achieve and how participation in the PLC can be achieved, support/possible training for the facilitator, support in the online context, what expectations are placed on facilitation/leadership/moderation.

Two group discussions and two individual interviews were conducted to gain insights into the experiences of the group of student teachers. One of the group discussions was conducted and recorded independently by the students using the guiding questions, while the other group was interviewed in the traditional way by an interviewer. Both additional individual interviews were also conducted by the interviewer using the same questionnaire. In total, the sampling comprised 14 students from 9 different PLG groups participated. The group sizes of the PLGs that the students explored varied from 3 to 7 students. In the group interviews student teachers from different PLGs were combined. All of reported from their first experiences of practicing PLGs in the context of a university seminar (one person even was in two seminars practicing PLCs) and all of them were accompanied/facilitated by the same lecturer, who herself has been involved in the academic and advisory discourse on PLCs for many years. The lecturer was not the interviewer, but she set up the contacts between interviewing person and student teachers.

The duration of the interviews is 35-60 minutes. Overall, the students reported quite enthusiastically about their experiences. For this summary, the data evaluation was carried out in a deductive-inductive content analysis procedure, but with the restriction due to the project's capacity that only one interview was transcribed and the others were analyzed by listening to the audio. Thus, the procedure only partially corresponds to the standard of a content analysis approach and does not fully meet the qualitative quality criteria. This will be addressed in a master's thesis coming up and possible additions will be included in a second edition.

As part of the university setting and for 12 weeks of each semester, the student teachers practiced the PLGs at the university, while on other days almost all taught in school practice in the frame of their internship. To this end, the students in their PLC worked on different topics of the seminar and were facilitated by the lecturer. The student teachers and participants of the interviews met in the PLC setting once a week for 90 minutes for three months. They received help from the lecturer to structure their processes and to reflect on the quality of their collaboration, other than that they were allowed to control the collaboration themselves in terms of topics and organization.

At the beginning of the class the students only received a brief introduction about the aim and general procedure of a PLC. They also had access to scientific and partly practical readings (PLG explanations and didactic topics) on a learning platform, which were occasionally supplemented by the lecturer. Most students were except for the day at university in the school placement trying out how to teach. The PLC were obliged to upload their work results as photos for documentation. There was no examination in connection with the seminars, but the lecturer is a possible examiner in other modules of the teacher training programme.

Experiences with PLC

The group of students is familiar with the PLC concept, which pertains to their engagement with PLC activities within the framework of university seminars. The application of PLC is predominantly observed in seminars that coincide with the practical semester. The collective of students understand PLC as a cooperative way of working with the following characteristics:

- Regularity
- Exchange (experience, material,
- Exchange (systematic, current challenges)
- Communication and openness
- Mutual trust
- Finding common solutions
- Discussion
- Reliability of the participants
- Appreciation
- Scientific foundation/relevance
- Common ground
- Constructiveness
- Input and impulses from the facilitator/lecturer

From the students' findings, a pattern can be identified regarding the typical course of a PLC session – but one has to keep in mind that there was a short introduction of a typical PLC procedure at the beginning of the class. The PLC sessions start primarily with a review of the last session. The participants then communicate which topic they would like to devote the session to and then enter into a joint exchange. Some groups agree beforehand who will moderate and who will take minutes of the session. The students then share their experiences and discuss the topic. The content and points of their

discussion is structured and written down on cards. At the end of the session, this results in a chart or mind map like overview. They report about reflection as regular part of their discussion, which relates to both the content and the working methods of a PLC. The sessions usually end with a reflection. If necessary, the topic for the next session is already agreed.

One PLC group tells about how they separated at the beginning of the session into subgroups, which worked on different key topics and towards the end of the session both subgroups came together and shared their results.

The role of a possible internal moderation was worked out differently by the student-PLCs. In some cases, indirect moderation happened, the role of moderator was not actively assigned but someone once in a while took over. This was described as less effective by the students. Overall, the students consider the role of moderation to be important. In most PLCs the students agree on a person who takes over the moderation of the session. In most cases, this role is alternated in a rotating system. The moderating person takes care that deviations from the topic are quickly prevented. The role of the moderator also keeps an eye on the phases of the work process and acts as time manager.

The perception of the issue of effectiveness of the collaboration reveals different aspects. In general, external support or facilitation is seen as important factor to increase effectiveness. If the PLC is able to create its own structure and moderation, that also leads to more effectiveness in the perception of the student teachers. Likewise, if the participants agree on clear role allocations and areas of responsibility, which increases the sense of responsibility altogether. The work in a PLC is perceived by the students as effective and enriching also due to the joint exchange, the change of perspectives and the willingness to help and get help from others. From their point of view it is particularly effective when participants work in a structured manner and are intrinsically motivated.

The duration of the semester in general has an influence on effective collaboration as well. Some students report about high motivation at the beginning of the semester and the tendency to level off towards the end of the semester. Also, the interest in the subject matter correlates with this observation. A higher level of effectiveness and motivation is perceived when participants are free to choose their own topics and the range of topics is diverse.

Uncertainty is an issue that has negative influence on efficacy. Some students report that they are often unsure whether they are practicing PLC correctly and grasped the concept entirely. If this is the case, the effectiveness is perceived as rather weak. Reflecting on their working methods in the PLC is seen as helpful in order to come closer to an effective way of collaborative working.

The role of the external facilitation, in this case the lecturer, contributes to the effectiveness of the PLC work. The external facilitator is particularly relevant until the participants have created a clear structure and role assignments in their PLC. The external facilitator also supports the effectiveness of the PLC by providing impulses and sets opportunities for reflection as much as thematic and methodological inputs. In this way, new perspectives can be taken in regard and in-depth reflection can take place. Impacts from external support reinforces the participants' actions and strengthens the feeling of effectiveness.

The coordination of setting the impulses is perceived as difficult, as the students expect from the external facilitator impulses at the right moment so that they answer their needs and can have a supportive effect. The mere observation by the external facilitator increases the students' motivation to work. It is anticipated that the external facilitator's role will empower them to offer specific stimuli

or input tailored to the specific group needs. There should be no obligation to implement them, though. The impulses should be understood as a suggestion. Trust in the external facilitator is also crucial and linked to the extent to which the offer and input is requested and taken up by the students. The students consider a completely flat hierarchy with regard to external moderation to be of little benefit.

The role of the external facilitator is considered very important with regard to the questioning and researching approach and in-depth reflection. Some would like to see a stronger guidance from the facilitator. This could, for example, take the form of specific question prompts or a joint reflection with the external facilitator in the middle of the semester. In part, the students manage this very well, but the impulses and inputs from the external facilitator are nevertheless seen as support. The inquiring and questioning approach as well as the in-depth reflection can also be supported by methodical working methods (like visualization the discussion of the topic with written notes/cards).

The students report that they independently prepare certain topics that they want to reflect on in greater depth in the subsequent session using literature. However, the perception of most of them is that the in-depth questioning and researching way of working is a challenge for the students. A clear allocation of roles and duties at the beginning of the PLC establishing process could positively counteract this. The intrinsic motivation of the participants is also responsible for the success of this systematic way of discussion and reflection.

Challenges

The challenges identified by the students in the interviews pertain to those they associate with the external facilitator on one hand, and those they recognize within their own group dynamics on the other hand. The students see as quite some challenge for the facilitator how he/she can be availability at any time needed. As the facilitator accompanies several PLs within a seminar session, the opportunities to support are limited. This creates the problem that not all groups can be supported because of time. However, permanent support also entails the risk for the group of students that the participants transfer responsibility for the PLC work to the facilitator and work together less effectively.

It can be difficult for the external facilitator to accurately provide supportive impulses by observing where the PLC participants' discussion is on a particular topic if there are several groups to care for. Planning the PLC concept for the group of students is also seen as a challenge. The external facilitator must define the extent to which the students should practice PLC and which content should be worked on independently and which should be prepared through inputs from the external facilitator. Because of this a conflict arises between the degree of openness and the prescriptive approach.

The students report on further challenges that affect their PLC work. Participation in the meetings by the members and the motivation of the individuals are relevant here, both needs to be invested well but can turn out less reliably. Then there is a potential role conflict between the students and the facilitator as a possible examiner in the semester's examinations.

The students' expectations towards the external facilitation are usually to receive clear and easy to adapt answers to questions. If the facilitator sets impulses that lead to new reflection this can be challenging and frustrating if the impulses during the PLC work usually raise more questions.

The students see the reasons for the challenges mentioned in the motivation of the participants, the time factor, private distractions and stress towards the exam period. With regard to the time factor, the limited time also of the facilitator/lecturer was mentioned by some of the students.

Measures that could counteract the challenges relate primarily to the actions of the external facilitator:

- The subject matter of the PLC work should not be part of an examination.
- Time arrangements should be preset to organize external support more regularly and less spontaneously.
- Increase the number of facilitators, depending on the number of PLCs to be supervised in parallel.
- Deeper thematic input to understand the concept of PLCs: Make the characteristics and workflow of PLCs, areas of responsibility more accessible and transparent.
- Plan systematic feedback to the PLCs after Evaluation what support is needed and to analyze PLC processes.
- Systematic reflection with the PLC participants (after evaluation).
- Building trust between the students and the external facilitator in order to make good use of impulses and support.

Democratic processes and heterogeneity

The aspects of democratic processes and heterogeneity are specifically of interest and they are, overall, viewed by the students as predominantly positive and beneficial.

The process of structuring their exchange based on the predetermined concept of a PLC is developing positively. The students develop their own processes, routines and rules largely independent. We see this as a democratic process. It is partly supported externally by the facilitator, though. The less structured initial phase of the PLC most student teachers seen as necessary to be able to form their own suitable PLC structure. The students report that the PLC is strengthened by this from within.

In addition to agreeing on common rules, democratic processes are also observed in moderation and decision-making. The process of role allocation (internal moderation, taking minutes) in particular is perceived by the students as a democratic process. The democratic approach is perceived as collegial and positive. The work benefits from freedom of opinion and a basis of trust. Differences of opinion within the participants' exchange are perceived as greater when the number of PLC participants is higher. The discussion and exchange between participants can then be experienced as timewise negative.

Primarily, the students signal that everyone has the same opportunity to participate in the work of the PLC. There is a need though for external support to intervene in cases of non-democratic events or dominant influences.

Overall, the group composition is decisive for cooperative, interest-driven collaboration on an equal footing. If the motivation is more extrinsic, less democratic interaction is perceived. The external facilitator can control democratic interaction to a certain extent through observations and suggestions. Nevertheless, the students see the processes as an independent and autonomous task of the PLG, which is why the facilitator should not exert too much influence.

Dealing with heterogeneity can be observed at different levels. The students respond to the needs of the (different) participants. Certain roles within the PLC are taken on well or less well by participants, which they understand as diverse level of skills and try to work well with it.

The different subject combinations in their programs they seen as an enrichment for the work of the PLC. The diversity of the participants is perceived as beneficial. This, in turn, is seen as a challenge for the external facilitation as he/she has to be aware of the diversity of the participants.

Competencies and characteristics of PLC facilitation

The group of students appreciate the diverse skills and characteristics of the external facilitation:
- Content knowledge
- Empirical knowledge
- Competence in presenting content in a structured way and applying methods to do so
- Personal experience with the school field
- Personal experience specifically with PLC work
- Social skills
- Conversational skills
- Methodological competence

The students also describe skills that are primarily assigned to social competencies. For example, they perceive it as helpful if the external facilitator knows exactly when the PLC needs support and can then adaptively give impulses and feedback to the PLC at the right time. The same ap-plies to those moments when the PLC does not need support. The external support person should restrain at this point. In addition, there should be no direct steering of the processes. The interests of the PLC participants should always be taken into account.

In order to achieve a positive involvement of the participants, specific services are attributed to the external facilitator. On the one hand, elements of the organizational level are mentioned, such as monitoring the attendance of students in the seminar. The reason given for this is that students would tend to attend seminar sessions more often if there was an obligation to it. The facilitator should be sensitive to the group's development and the individual need when giving impulses to the PLC. With regard to possible decisions by the PLC that the external facilitator would decide on differently, they expect him/her to keep back.

All participants should be actively encouraged to contribute. If necessary, a concrete assignment of roles is recommended in order to transfer responsibility more clairly. Furthermore, responsibility should be distributed among different participants of the PLC in order to distribute the sense of responsibility equally among all. The external facilitator can also provide support to participants in the event of conflicts.

The external facilitator is also seen to have the potential to improve or support the internal moderation of the PLC und help to achieve a higher level of participants' involvement, e.g. show different models of moderation. The same applies to other role allocations (minutes, table setting, etc.). Students should be able to view these as an offer. An offer supports the work process many times more than a pure regulation.

Need for specific support/training for facilitation

A possible training course to prepare students for the role of facilitator should cover the following topics according to their needs:

- Facilitation and discussion
- Professional learning communities (concept, definitions, characteristics, possible implementation, objectives)

The students currently draw on the experience and skills they have gained during their practical semester, as well as experience with student group work. They also mention leading experience from associations there work at in their spare time and processing skills in general, which are learned through their studies.

The resources that facilitation should be entitled to include a) suitable spaces, b) time for preparation and follow-up, c) a variety of methods, d) subject-specific experience with PLC work from different perspectives and e) access to materials.

PLC-meetings in an online-setting

With regard to the online context, various opportunities and challenges they face are described by the students. Holding the PLC purely online is seen as problematic as direct social interaction is missing and this is considered to be extremely important. Close collaboration, respectful interaction, motivation and trust also suffers from the online format. The technical connection may also pose a challenge since not all students really can secure it. They must also be possible to handle technical resources, as otherwise the workflow could be unnecessarily hindered.

Clear structuring with the help of online tools, which everyone can work on in parallel, is seen as a good opportunity. The fact that people are not tied to a specific location is also seen as an opportunity and it saves time from travelling.

The use of tools can be a challenge for the PLC participants. Especially if the function of these tools is not sufficiently known. It can be challenging to moderate the speaking parts, too. The flow of conversation is inhibited in an online context as gestures and facial expressions can only be perceived to a limited extent. It is also a challenge to maintain the concentration of the participants due to the distractions of the home location.

In terms of the skills required for online moderation, the students primarily mention technical skills. According to the students, there are also some challenges for the external facilitation. It is difficult for the external facilitator to recognize the mood and the number of people actively involved. It is also difficult to direct the activity of the participants. Observations of processes during the PLC meetings are only possible to a limited extent, meaning that the specific support provided by the external facilitator may not always meet the needs of the PLC. It is also considered difficult if the external facilitator does not regularly participate in the online sessions.

Expectations of external facilitation of a PLC

Looking back, the students identify certain aspects, skills, and competencies that enable them to lead PLCs and for which they would still need preparatory support. Primarily, the students can draw on their own positive and negative PLC experiences. Additionally, they can utilize the methodological knowledge acquired through external facilitators. Furthermore, general background knowledge on cooperative work methods is mentioned.

The students recognize the need for training in subject-specific content that would be addressed within a planned PLC. Furthermore, they consider conversation management, discussion moderation, methodological knowledge, and a professional introduction to the PLC concept necessary.

The students describe the scope of potential training depending on personal benefit. If the students see no benefit (ECTS or money), training would not be considered. A specific training duration is suggested to be one to two workdays or two sessions of three hours each.

2 Report of the external facilitators/ leadership focus group

Introduction

The group of external facilitators for PLGs who were surveyed in individual interviews comprised only three people, as there are hardly any experts in the region who actually carry out PLG facilitation. The three people who provided information about their experiences can be assigned to two different groups of people that they facilitate: Teacher-PLCs in the context of single schools and PLGs in the second phase of teacher education, which is internationally rare. In connection with this, the question of voluntary participation in PLCs is relevant: The teachers-PLCs work together primarily on a voluntary basis, as in the field of experience of the interviewees they were able to decide in most cases whether they wanted to participate in the PLG work independently of the expectations of the school management. In these PLGs, the external support is largely present on a permanent basis.

The group of trainees of the second phase of teacher education are introduced to PLC work within the framework of their regular training. Trainee-PLCs are carefully composed with a focus on the regional proximity of participants. The aim here is to facilitate personal meetings of the PLC and enable classroom observations. The PLC size is limited to four participants. Trainee PLCs receive an introduction to the PLC concept. They are visited once during their PLC sessions by external facilitators. The sessions are self-organized and led by the trainees themselves.

The sampling can be understood as a partial insight into experiences with external support of PLCs. It is made possible by facilitators/lecturers who have been involved in the issue of PLCs for many years and are practicing this particular support in first stages. It should be added that they were not involved with the student teachers reported about above. It was not possible to interview the trainees and teachers involved in the PLCs they facilitate.

Experience as a PLC facilitator

The external facilitators of PLCs primarily see their activities in structuring and organizing the PLC. Their tasks include scheduling meetings, introducing and guiding the sessions thematically, as well as documenting and visualizing the PLC work. The facilitation explicitly emphasizes that participants should actively contribute to topic selection and may bring relevant materials to session dates. Especially at the beginning of PLC work, specific topics regarding the characteristics and goals of PLC work are addressed by the external facilitator. However, this approach encounters resistance from teacher PLCs, as educators prefer topics they have chosen themselves. Additionally, the external facilitator provides suggestions and impulses to structure and direct participant exchange, aiming to facilitate deeper reflection if necessary.

The teacher-PLCs receives support from the facilitator, as they tell us, in terms of structuring and organizing the tasks. The facilitator manages scheduling, organizes rooms, and allocates specific time

frames. Furthermore, the facilitator communicates with school leaders to align expectations regarding topics, organization, and structure of the PLC work if needed.

In addition, trainee-PLCs receive observation tasks for their schools, which can then be integrated into the PLC work. They are also encouraged to utilize seminar topics as a basis for their work within the PLC. The external facilitators communicate these impulses as offers, relinquishing responsibility to the PLC. Moreover, the facilitators regularly prompt participants to discuss their own expectations transparently within the PLC work.

Further factors of support and improvement include the presence of the external facilitator and his/her providing impulses to participants to actively engage and reflect on their experiences. Additionally, personality aspects such as the facilitator's sympathy towards participants are mentioned as possible help for the work process.

In the context of trainee-PLCs, the supporting and improving aspects are similar. The theoretical introduction into the concept of PLCs is described as essential to clearly differentiate PLC work from other collaboration. Trainee-PLCs are visited once by the external facilitator to provide feedback on the PLC's working methods. This visit takes place in the initial phase of the establishment of the PLC primarily to support participants in deeper reflection. The external facilitator further supports with thematic suggestions, impulses, and visualizations.

All external facilitators report a similar workflow for PLC sessions, emphasizing the importance of a recurring and consistent structure. Teacher-PLC sessions typically begin with the exchange about the current practical situation and concerns. A retrospective is then conducted to report on experiences between the last PLC session and the current one. Based on this, the topics and objectives to be addressed in the session are identified. In the elaboration phase, materials are exchanged if necessary, and work is done on the agreed topics and goals. Towards the end of the PLC session, a phase of summary takes place where the current status and tasks to be completed are transparently named and assigned. A new date is agreed upon in consultation with the external facilitator. Finally, the quality of the work of the PLC is reflected upon from the perspective of each individual. The PLC work of trainees follows a similar setting.

The perception of PLC effectiveness varies and depends on individual's concept of effectiveness. External facilitators in trainee-PLCs observe that individuals with a strong need for communication prolong the process unnecessarily until participants enter an intensive working phase.

Regarding teacher PLCs, it is worth mentioning that they appear satisfied and happy when they have achieved what they set out to do.

Overall, there is a high level of effectiveness observed on the part of the external facilitators. Guiding and reflecting on topics steer the PLC's work processes and also enable increased effectiveness. The professional dialogue is also considered a requirement for effective collaboration. Furthermore, responsibility for the success of PLC work is increasingly transferred to the participants, which is also seen as effective.

The questioning and exploratory approach (inquiry) as well as deep reflection are attempted to be fostered by the external facilitation. At appropriate moments, participants are encouraged to approach like in research, question practice, and reflect more thoroughly.

Especially with teacher PLCs though, there is significant resistance noted. The lack of time is cited as a reason for teachers' defensive stance. Most teachers perceive deep reflection and the inquiry

approach to be of too little benefit. The facilitators describe the impact of these methods as underestimated by the teachers and that only a few teacher-PLCs engage well in such a process.

In the case of trainee-PLCs, it should be noted that the inquiry approach, and deep reflection depend on the trust and learning culture/how to live with mistakes within the group. External facilitators often emphasize trust as a fundamental factor for successful collaboration. Personal visits to PLCs are explicitly used to highlight deep reflection and inquiry. The stagnation of this process is observed in situations when participants collectively agree on a particular aspect.

Challenges

The challenges faced by external facilitators differ between the PLCs they are supporting, particularly between teacher PLCs and trainee PLCs.

Challenges of facilitation with teacher-PLCs

One main challenge is the discrepancy between the expectations of teachers regarding the PLC concept and the actual concept of PLCs. This is reflected, for example, in their understanding of the facilitator's role. Teacher-PLCs often expect facilitators to provide thematic input. It is also difficult to make sure that the participants themselves are responsible for their collaboration quality in their PLC. The quality of facilitation thus depends on the intensity of the topics addressed by the participants. An experience of external facilitators is that teachers don't get easy in engaging deeply in reflection about their content issue. Teachers are accustomed to work on the organizational level due to their daily professional tasks and thus to take time to reflect deeply is challenging.

The role of school leadership is also crucial for teacher-PLCs. Differences in the planning of PLCs arise due to variations in the expectations and visions of school leaders. Some school leaders exert more influence than others regarding the composition of teachers and the topics to be addressed. Conversely, some school leaders may be so absent that it is barely helpful. Some decisions necessary for the PLC's continued work must be made by school leadership. If this is not the case, it can adversely affect the PLC's work process.

In the group of teachers, resistance partly occurs hindering the PLC work. This is especially evident when teachers directly express disinterest in PLC work. There is a correlation regarding the role of school leadership, as allocation to PLC work is decided based on existing hierarchical structures.

Challenges of facilitation with trainee-PLCs

A specific challenge that explicitly concerns trainees is a role conflict when the external facilitator is also an examiner. This can influence the participants' work process, leading them to want to present themselves more during personal visits to PLC sessions. To counteract this, visits to PLC sessions are scheduled at the beginning of the traineeship, when the exam is still distant.

Additionally, challenges arise that are mentioned for both professional groups. The implementation of PLC characteristics is difficult to enact directly.

Also, the role of the external facilitator needs to be clarified further. There are difficulties in defining this role and determining the extent to which method differentiation should be employed. Furthermore, it is challenging to maintain one's own professional distance while also building closeness with

participants. The openness of the external facilitator to the implementation of participants' chosen topics is also a challenge, influenced by the facilitator's personal expectations. The facilitator's expectations regarding the intensity of topic discussion and choice should not negatively impact the PLC. Another challenge is engaging participants actively in the PLC process. The question of monitoring, determining actual effectiveness, also concerns external facilitators.

A frequently mentioned challenge is the lack of time. On one hand, external facilitators aim to create time slots, but their own time is limited. They cannot attend and moderate all PLC sessions. Furthermore, there is a desire to involve participants in realizing that PLCs are beneficial and that time invested in them can ultimately save time.

Needs of facilitators

The external facilitators identify various needs to counteract the challenges. Regarding teacher contexts, there is a need to change the perspective about how schools function. Additionally, there must be a change in how teachers manage their working hours and presence. It is observed that younger teachers, who are close to completing their studies, are more open to change. It is crucial for the school culture to be receptive to the PLC concept. Furthermore, the role of school leadership and their influence must be clarified in advance to effectively support the PLC process.

In general, there is the idea to institutionalize PLCs by a top-down innovation process to provide clarity and security. Additionally, there is a need to promote motivation and appreciation for cooperative collaboration from different levels.

External facilitators of trainee PLCs report that systemic problems are not easily solvable but try to handle them positively. This is achieved through a strength-oriented approach with participants. All suggestions offered by the external facilitator are to be seen as offers, without imposing any obligation. The facilitator points out that when there is explicit rejection and resistance within the group regarding a topic, it is worthwhile to address it at the appropriate time, as there are often hidden fears that the PLC can work through together.

Democratic processes and heterogeneity

The aspects of democratic processes and dealing with heterogeneity, especially in terms of facilitation, yield various observations. The external facilitator tries to accommodate the participants' needs as much as possible. This means, for example, abolishing methods if the group prefers others. Furthermore, the facilitator endeavors to be open to the participants' topics, focusing on their needs and interests. The external facilitator also handles group size openly.

Heterogeneity can be viewed from different perspectives—the group as a diversity of individuals and the diversity of topics. Ideally, there is mutual trust among participants regarding each other's abilities and knowledge, fostering cooperative work. The external facilitators actively utilize the strengths of the participants and how they can benefit everyone involved. It is also noted that participants practicing PLCs for the first time may initially require a hierarchical structure. If inequalities are perceived regarding participation rates and interests, the external facilitator sees the need to address them to counteract them. The varying willingness to engage in PLC work is also attributed to

democratic processes and dealing with heterogeneity. It is also beneficial to use PLC facilitation to collectively reflect on processes and actions.

Competencies and characteristics of external facilitation

To appropriately accompany and facilitate a PLC as an external person certain competencies and competency aspects are described by the interviewed facilitation persons:

Social Competence: External facilitators bring openness towards the participants and their interests. There is no pressure to work on specific themes. The impulses are always understood as offers to the participants. This competency includes dealing with group dynamics and especially with difficulties within group dynamic processes. Moderation intervenes specifically when the group struggles or finds it difficult to collaborate. Personal expectations are not imposed on the participants. Patience is described as a necessary trait, as PLC processes can appear lengthy. Having a certain degree of empathy is advantageous. The external facilitator also possesses a strong self-reflection competency. A compassionate and understanding communication style and the ability to actively listen is important, too.

Methodological Competence: This includes structuring and visualizing the thoughts and topics of the participants. Positive and beneficial experiences with collaboration and achieving common goals as a basis/foundation are required. Recognizing and responding to the needs of both the group and individuals and proceeding in a strength-based approach. Additionally, the skill of facilitating conversations is attributed to methodological competence. Observation skills and the perception of underlying structures must be included in the skills.

Subject Matter Expertise: Subject matter expertise encompasses general knowledge about PLCs as well as specific knowledge related to the topics within the PLC. This may also include personal experiences with group collaboration.

It is also beneficial if the external facilitator can work with different group sizes. Additionally, having personal experiences in collaborating with groups and within the particular field of PLC work is advantageous.

The external facilitators report several aspects of their competencies that are open to development. Firstly, they mention the need to be able to use moderation methods more effectively. Secondly, there is a need to be guided within a PLC themselves to generate a change in perspective. Furthermore, they aim to deepen their conversational skills to engage with participants more effectively and include them thematically.

The external facilitators perceive their performance in terms of influencing the active participation of the participants by conveying the primary purpose and meaning of PLC work. They strive to actively involve everyone in the process and request topics and materials when needed. Regular emphasis is placed on the topic at hand. They consistently encourage questioning of actions and needs. Additionally, they create a space where everyone feels they can and should contribute. The value of PLC work is communicated, and opportunities are regularly created to reflect on actions, goals, challenges, and individual feelings within the PLC.

To support and enhance moderation internally among PLC participants, it is suggested to involve individuals who have been highly engaged and interested from the beginning more actively in the facilitation. Moreover, it is deemed beneficial to maintain ongoing communication with the external

facilitators, which may include sending protocols and informing about planned PLC sessions. The facilitators also emphasize trusting the participants to conduct moderation and create their own structure. Furthermore, continuous opportunities for reflection, including questioning individual satisfaction, are seen as helpful.

Need for specific support/training for facilitation

As preparation for the task of facilitation, the external facilitators primarily rely on their own experiences from professional practice. Additionally, they make use of regular communication opportunities with experts in PLCs. Their own experiences from professional workgroups and coaching sessions are also considered preparatory aids.

If there had been any preparation, support, or training, the desire for a predominantly practice-oriented training was mentioned. This could potentially include video analyses and deeper exploration of moderation methods. Furthermore, there is interest and potential seen in conducting facilitation in pairs. Finally, the institutionalization in the form of a top-down strategy is seen as a process facilitator to clarify the framework conditions for Professional Learning Communities uniformly and to start the work process more promptly.

Time is identified as a crucial resource to adequately implement PLC work. In order for facilitators to fulfill their role and adequately prepare for and follow up on facilitation, temporal resources are needed. Especially in the group of trainers who accompany the PLCs of trainees, the need for at least one hour of workload allocation is expressed. Moreover, multiple trainers should receive this time allocation so that the PLC groups can be distributed among them and adequately supported. Furthermore, it is meaningful to create space and time for PLCs within the training volume of the traineeship. Currently, PLC work in this context is seen as an additional task.

For the planned implementation of a training regarding the preparation of facilitation, there is a desire for a continuous system. This could also adopt the format of PLCs (Facilitation PLC). Depending on the foundational knowledge, theoretical input for participants is meaningful. The training can be carried out alongside work to regularly enable opportunities for self-reflection and to receive impulses. Proposed timing for this would be approximately 90 minutes once a month, continuing over the course of a year.

Facilitating sessions in an online context

Experiences within the online context are predominantly described as unsatisfactory. The main factor is the distance from the group. The only positive experience mentioned is online meetings related to the COVID-19 pandemic, as this was the only way to establish contact and exchange ideas at the time. Moderation activities can be conducted online, requiring only knowledge of technical and methodological tools. However, group dynamics processes are more consciously experienced and perceived in person. Spontaneous exchanges with individuals within the PLC are not facilitated in the online context.

The external facilitators see the focus on the communicative level as a challenge. A key aspect of PLC work in the context of teachers and trainees is the exchange and collaborative work with materials. This is made difficult by the online context. Particularly, teacher groups focus on collaborative learning

and would find the online context unsatisfactory. The only advantage of the online context mentioned is the saving of time resources and the ability to bring together individuals with greater spatial distances.

Expectations of external facilitation

The expectations of external facilitation revolve around aspects of expertise, skills, and techniques. Primarily, this individual should be able to clearly define the specific roles within a PLC (Professional Learning Community) and explain what the PLC concept entails. The necessary methodological competence should allow for facilitating exchanges, visualizing work processes, and structuring topics. Furthermore, the structures of the PLC should be observed and reflected back to the participants.

It is expected that the facilitating person possesses expertise related to the topics of the PLC and can provide input if requested by the participants. Additionally, it is advantageous if the facilitator brings an openness to the topics and can engage with the self-selected themes of the PLC.

Regarding communication skills, the external facilitator is expected to demonstrate leadership qualities, enabling supportive intervention in the work process at appropriate times. The facilitator's role should support rather than hinder the work of the PLC participants. It appears beneficial if the facilitator can effectively manage challenging group processes.

3 Summarizing conclusion

By summarizing the experiences of student teachers with PLGs first, a number of findings can be summarized and then contrasted with those of the external facilitators:

1. Student teachers gain a lot of positive things from the particular type of collaboration in a student-PLG if, if, this is emphasized, they are thoroughly introduced to the specific format so that they understand it in its entirety and feel confident in carrying it out 'correctly'. They thus emphasize the introduction and scientific justification of working with PLGs as an important task for the external support. The possibility of becoming familiar with the PLG format through intensive reading is not an option named by the students. Instead, they see the support services primarily in the direct teaching responsibility of the lecturers, their external facilitator.

2. The student teachers appreciate the opportunity they are given to work on topics of their own choice and intensity within the structure of the PLG work and how the meetings are planned in general. Not least due to the targeted exchange, this type of collaboration is particularly trusting and committed, and this is also helped by the high intrinsic motivation of the students. On the other hand, the students note that it is a hindrance if they are influenced by external guidance, be it in the setting of topics, by guidelines for specific processing or by impulses that are not asked for. Ultimately, the greatest possible attractiveness of external facilitation is given when it provides the desired support suitably and simple in response to the group's self-expressed needs.

3. The expectation of the students about the external facilitator, in this case lecturers, extends across several areas of competence, which on the one hand requires professional competence in all relevant aspects (PLG knowledge, content knowledge, didactic knowledge, etc.), as well as communicative and moderating skills and the ability to use versatile group leading methods. In addition, the external facilitator should be able to recognize the respective development status not only of the group, but also of the individuals in the group, and always be supportive and encouraging, but not overbearing.

4. The students recognize that an online PLG practice would save time, but would lack interactive moments in this format. And they see the need for all participants to be technically well-equipped and have the ability to use collaborative online tools confidently - neither of which they take for granted.

5. The diversity within the PLG is appreciated by the students because they get other ideas, can make interesting contributions from different subject combinations and their different personalities complement each other. Heterogeneity is mostly communicated in a positive way; only rarely are there indications of an awareness that not all PLG members are equally competent in content-related, subject-related or PLG-moderating or communicative aspects.

6. From the experience of having practiced PLGs the majority of student teachers emphasize that they particularly value the autonomous processes and the democratic cooperation within the group. This leads both to the desire for a correspondingly considerate co-direction by the external facilitator and to the group assigning the steering roles to each other and thus ensuring

a balance of participation for all. Interestingly, in the context of higher education, there is a hierarchical expectation of the external mentor to support the participation of all through appropriate formal opportunities such as compulsory attendance or the assignment of coursework.

7. As long as the external support provides impulses that are experienced as suggestive or stimulating, structuring aids as well as reflection support or monitoring tools are accepted measures for improving cooperation. Many students explicitly want a direct evaluation of their results by the facilitator/lecturer and feedback to the group based on it, so as to obtain an external view of whether they are on the right path of development with regard to both their content issues and their PLG skills. Accordingly, they see the facilitators' time resources as an important aspect of PLG support, suggesting that several accompanying persons should be made available if several PLGs are to be accompanied. They also suggested that the stages for such feedback should be specifically planned as part of the seminar concept.

8. When asked about the interest and willingness to participate in a possible training course that would enable students to lead a (their) PLG, the response is very hold back and is likely they would involve only a small amount of time (one to two days in total).

Although the perspective of the external facilitators does not come from the same context, but relates to the second training phase and single school development, it can be seen that a thorough introduction about PLG work is seen as necessary for all participants. However, in PLG settings other than universities, the problem mentioned several times is that the (prospective) teachers do not want to spend time on this part of the reflection. In contrast to the students, this shows that PLG is perceived as a commitment that takes place outside of working hours, so to speak (with the problem that working hours are thought of in terms of workload). This is not the case in the seminar context because the students carry out their activities within the usual workload of the seminar.

In the majority of the listed aspects of what external facilitation should do, the range of tasks and competencies named by the interviewed persons is similar to that of the students, but with one decisive difference: The accompanying persons repeatedly emphasize how important the inquiry approach and the in-depth reflections are and how much their support is necessary for the PLCs to enter into correspondingly more thorough processes - possibly also under the experience of resistance on the part of some of the groups. So while the student teachers hardly report this topic as problematic in their own view, and may not even recognize it because they are satisfied with the status quo of improved student cooperation close to the questions they are interested in, the external supervisors see the untapped potential in the groups they supervise and focus more clearly on this in their experience reports.

Another difference can be seen in the awareness that external facilitators express about how the context of the learning setting for PLGs is or should be consciously controlled by other actors, be it the training program curriculum or the school development mandate. While in the seminar context, the dynamics of tasks, structure and accomplishment are only relevant between the group and the facilitator/lecturer, the external facilitators settings closer to the single school level experience, not least due to resistance experienced from the groups, that supportive guidelines or pre-structuring within the context would be helpful for their own external facilitation work.

While the idea of training themselves to be able to independently guide their PLGs met with little response on the part of the students, the external facilitators definitely see a need for development in themselves and a corresponding willingness to participate in training - as long as this is arranged very closely to the practical needs of their facilitation and is not too tightly scheduled, but regularly. The idea of practicing this in a PLC is even mentioned.

Given the fact that the focus of the interviews was on the experience of practicing PLCs and the support that is needed, it may not be surprising that little information is given about the real impact of this engagement outside of the PLC work. Here, the expectation of the accompanying persons, derived from the discourse is that improvements in teaching will unfold and thus ultimately also professionalization occurs, is latently expressed, but not stressed and explained in detail. The students also seem to assume something similar. Overall, there are few statements in the interviews as to whether the activity in the PLC actually changes any teaching practices - in the semester internship, traineeship or everyday teaching practice. When looking at the teacher-PLCs, there is the information of creating joint material and planning practice together, but nothing is said about the broader impact.

Last but not least, it can be seen that the external facilitators see one task to guide PLC participants towards independent PLG processes in order to ultimately make themselves superfluous. This perspective does not appear on the part of the student teachers. Instead, they think of their PLC practice primarily in the seminar context, in which they are constantly accompanied by a lecturer. From both perspectives, however, an intensive, differentiated support structure that is provided by competent persons is a central, necessary resource for PLC development.