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Training School Leaders to Improve School Practices ¹ Cooperation Between Vocational School Leaders and Researchers

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Abstract

Context: A fundamental problem in competence development is how the added competences lead to a change in practice. There is a transfer problem from the competence development process to change of actual actions and activities. A similar fundamental problem is found in development projects when the new experiences do not lead to permanent new activities. In this project, an approach is used that qualifies the school leaders to perform new activities and ensure that these activities are used in practice. In the study, we anticipated that the interplay between researchers and school leaders would improve the quality of vocational education program at the participating schools.

Approach: Based on experiences from a project about improving practices at eight vocational schools in four countries, we analyse a cooperation between researchers and school leaders. Through this cooperation, the school leaders were trained to handle educational change. In this project, a development model is used to ensure quality development at the schools and for the competence development of the school leaders. The article describes how this learning process can be conducted and how the leaders' competences are developed, and not least, how they used this competence in practice. The specific activities in this development project include three factors. The first is a process in which the school leaders clarify what the development work is about and what goals they have. The second factor includes leaders' systematic reflection on what they do and what they learn from what they are doing. The third factor concerns systematic summaries of the reflection on the learning process.

Findings: We found that there was a long-lasting process and a systematic and guided interchange between reflections and actions. Mutual trust and positive personal relations are factors that benefit the process. Different understanding of purpose and meaning and the need for reflections are obstacles.

Conclusions: The findings indicate that establishing a constructive dialogue around a learning circle between researchers and practitioners is not a straightforward process. The practitioners' ability to join the process must not be taken for granted.

Keywords: Competence development, school leaders, school development, vocational school

¹ The paper is based on an article Wahlgren & Puge (in print). The process of implementing an internal formative evaluation. *Ceprastriben*, 2022. A description of the project and process can be found in *Sustainable Culture for Change II (2022)*: https://www.epaper.dk/velux01/working_paper_scfc_ii_2022/



1 Introduction

As part of an international program development, projects have been initiated at eight vocational schools in four East-European countries: The Czech Republic, Hungary, Poland, and Slovakia. The aim is to improve the quality of vocational education and training at these schools. A research group from Aarhus University in Denmark has worked with the school leaders at each school to support the projects' development at the local level. By the researchers' training of the school leaders, each leader is expected to develop competence to improve the change process at the school.

In this article, we analyse the competence development of the school leaders. Based on experiences, we describe the content and form of the cooperation between researchers and school leaders. We argue that this is an educational process where the school leaders have to learn how to handle school development. As we will show, this is not a straightforward process.

2 School Leadership and Change

Leadership is pivotal for organisational change and developing new school structures (Schein, 2010; Gillon, 2018; Poole and Van de Ven, 2015). It is important that school leaders are willing and able to implement change. They must have a clear goal to which they are committed (Palmer et al., 2017; Jabri, 2017). Consequently, school leaders must have the necessary competencies to both plan and implement organisational change. External expertise can help support this process, with cooperation between school leaders and researchers comprising a potential source of such expertise.

In various projects, a constructive interplay between school leaders and researchers has been used to improve school practices (Constantinou & Ainscow, 2020). A study by Karagiorgi et al. (2018) showed how school leaders were able to transform the experiences they gained from a research project into modified and improved educational practices. With support from researchers and through systematic reflection in diaries, the school leaders were able to improve their own practices and the educational outcome of the school (Karagiorgi et al., 2018). In another study about interaction between school leaders and researchers, the findings show 'that the thematic and theoretical inputs of the program, practical training, and learning modes stimulated transformations of the principals' thinking and talking about school and leadership practices, what they do in practice, and how they relate to others and the circumstances around them' (Aas et al., 2020, p. 223).

Most research projects concerning school development focus on the advantages of engaging school leaders and teachers in the research process, whether the focus is on making teachers aware of tacit knowledge (Bulterman-Bos, 2017), improving teachers' classroom practices (Saunders, 2012), training mentors (Raaen, 2017), or on teacher training in general (Gibbs et al., 2017). In most of these studies, the interplay between researchers and practitioners is considered unproblematic and is therefore often taken for granted.

In some studies, the conditions for cooperation between researchers and practitioners are analysed. Motivation, trust, mutual respect, and resources (particularly time spent) are mentioned as important conditions (James & Augustin, 2018, p. 333). The practitioners' ability to reflect is mentioned in another study (Luttenberg et al., 2018). In a study on facilitating evidence-informed teacher practices, it is underlined that the stakeholders' different expectations must be 'negotiated', and the translation of research-based knowledge into practice must include practitioners (Flynn, 2018, p. 17). Another study explores how to develop a research relationship between researchers and school leaders, which the authors refer to as a school/university alliance. As part of this alliance the researchers asked the school practitioners to reflect on and write down their thoughts and feelings about being part of a research project, using their reflections to develop a research relationship (Solvason et al., 2018).

An action research project centred on leadership training demonstrated that the training made educational leaders more efficient. However, a lack of support in the form of ‘critical companionship’ - defined as personal support - reduces the effect (Manley & Titchen, 2017).

Research point to the possibilities for developing school leaders’ competencies through an interactive process. However, the referred studies indicate the need to address obstacles such as different goals, a lack of professional respect, and a lack of support for the cooperation between researchers and school leader is to be successful.

3 Theoretical Background

In this project, the researchers qualified the school leaders based on a model of reflection. This model focuses on the mechanisms linking objectives and outcomes (Patton, 2011, 2012; Stufflebeam & Coryn 2014). According to this model, a qualified development of practice is based on an evaluation of the improvement. A qualified evaluation requires goals and procedures for collecting data to assess the improvement. Accordingly, one of the main activities in the cooperation between researchers and school leaders was for the former to support the latter in conducting a theory-driven evaluation of the new practice at their schools and to develop an action plan for quality improvement – including a plan for data collection.

The strategy to elaborate the action plans includes the reflection circle as a model for the action research process. The model, named ‘model for emancipatory action research for organisational change’, includes four elements in the change process: Plan, act, observe and reflect. The model describes the procedures for action research (Cohen et al., 2011, p. 352-358). In the model, inspired by Schön (1983, 1987) and Kolb (1984), development is a continuous reflection process starting with goals and new activities, resulting in new and improved practice through reflections and new experiences. The reflection process begins with a clarification of the goals for the development program at the school. What do the leaders mean when they talk about improving the quality of vocational training? What do they want to obtain? The next step is to realise these goals through relevant activities. Consequently, the leaders were asked to reflect on why and how the activities were expected to improve the quality. E.g. leaders from a school wanting to improve the quality of the teaching program (goal) and consequently focusing on the cooperation between the teachers (activities) were asked to reflect on why and how the cooperation improved the educational quality. Accomplishing the activities, the leaders were expected to reflect systematically on whether these activities actually improved the quality and, if so, in what way and to which degree. The school leaders were then asked to make a formative evaluation of the outcome of the activities (to qualify new experiences).

The researchers’ main contribution to supporting the development process at each school was to implement the model mentioned above. In practice, the leaders in dialogue with the researchers drafted and qualified an action plan for developing quality.

4 Data

To understand how cooperation between researchers and school leaders progressed during the development of the leaders’ competence, we collected the following data:

The different versions of the written plans drafted by the school leaders. By analysing this data, gradual improvements in quality can be illustrated and documented. The eight participating schools each drafted between two and four versions in a dialogue with the researchers. In total, 20 action plans were drafted. The improvement of the action plans included clarifying the goals for the school’s improvement and for the gathering of experiences.

Interviews with the school leaders. The leaders were interviewed twice regarding their reflections on the process of developing local action plans for quality development and on the dialogue with the researchers. The first interview was conducted after filling out the plan, and the second after the first year of filling the reflection papers. The interviews were conducted as

semi-structured interviews focused on: a) the school leaders' experiences with the cooperation, b) their work with the local action plan for quality development, and c) their reflections on the usefulness of the learning process. The interviews, each lasting 30-60 minutes, were transcribed.

Reflective descriptions from the school leaders (reflection papers). The school leaders provided written descriptions of their reflections on their experiences during the process of implementing the new activities describe in the action plans. This data was used to analyse the extent to which schools had implemented the plans.

Recorded observations from summing-up meetings. The leaders' responses in the two summing-up meetings to the questions asked of the researchers concerning what they have done and what they have learned when they worked on implementing the new activities at the schools.

Based on the total data set, we analysed the progress in the leaders' competences and actions. The objective of this analysis was to pinpoint all significant statements that demonstrated the learning process and the obstacles and progress in this process.

5 The Content of the Competence Development

As the first step in the cooperation process between researchers and school leaders, the latter was asked to describe what they wanted to achieve regarding quality development at the school. The researchers asked school leaders to elaborate on these descriptions, posing the following questions: What do you regard as high-quality education? How will you assess the improvement of the quality? What data will you collect for this purpose? On the basis of these questions, the school leaders revised the original plan.

Through the researchers' work, the school leaders became aware of how the effectiveness of the development work was dependent on precise and elaborated descriptions of what is meant by quality of vocational education and of how this quality will be assessed and evaluated.

In this part of the dialogue, the researchers told the school leaders: 'It is important that you make clear what you perceive as an improvement of quality – not in general terms, but specifically in relation to your school.' The school leaders were thereby asked to reflect on the concept of 'quality' in relation to the particular context of educational practice at their school.

As the second step in the cooperation between school leaders and researchers, the concept of continuous evaluation was introduced. The researchers presented the reflection circle (see above) to illustrate the interrelations of goals, actions, experiences, and implementation. The idea was that development work was not primarily about 'describing what you do,' but instead 'reflecting on what you have learned from what you are doing'. As such, the focal point was a reflection on action.

As part of this process, the researchers developed a data collection tool that the school leaders were asked to continuously evaluate their experiences. The tool was primarily used to provide a short description of what school leaders had learned in the process of improving quality. The researchers asked the school leaders to give examples of improvements and to reflect on their experiences.

The third part of the training process was two summing up-meetings. At this meeting, the school leaders were asked to tell what they have done and what they have learned from what they have done.

The dialogue between the researchers and the school leaders was a highly structured and planned process based on continuous feedback from researchers to school leaders over a lengthy period. This feedback was rooted in the school leaders' initial action plans and ideas of how to improve and assess quality at their school.

6 What Have we Learned About the Process?

6.1 Conduction of a Quality Action Plan

From the work to develop the local action plans, we found that dialogue between researchers and practitioners requires a common understanding. It should not be assumed that such a common understanding already exists. Initially, the school leaders did not see the point in drawing up an action plan and found it difficult to understand what the researchers had in mind. In the interviews, the school leaders expressed some scepticism regarding the researchers' role and the need for an action plan. When asked about his experiences with compiling a plan, one school leader answered:

It was mixed. However, this was our first time – the first time we produced such a document. Later on, it was easy because we had the goal at the back of our minds.

When another school leader was asked if the requirements from the researchers to develop an action plan was understandable, he replied:

The answer is no. (...) In March or April, we did not really understand what the researchers communicated to us. We read it, we translated it (to the national language), but we didn't get it. It might as well have been in Swahili. Now I understand a lot more about your thoughts than I did at the time.

In the interview, this school leader explained that it was difficult to understand what the researchers had in mind, and it was not clear what the researchers expected of the school:

It is quite stressful when you want to do your best. When I don't know what is expected of me, I become stressed. That happened back then, but now I understand what you expect of us.

Most school leaders saw developing a local action plan for quality development as hard work. One school leader described it as a difficult job, stating she considered giving up due to the pressure but eventually succeeded and got the 'reward'. She even compared the working process with giving birth:

You are in extreme pain, and there's no end in sight. But when you hold the child in your arms, you forget the pain and are happy with the result. Now I have the plan, and I am happy with it.

The general experience from the dialogue between researchers and school leaders was that, after a turbulent start, the leaders began to recognise the many advantages of drafting a local action plan for quality development. One school leader commented on the work process and the outcome:

Now we have some rules, perhaps a pathway to achieve our goals. (...) I see the plan as an important guideline for the work to improve the quality of the training [programs].

There is independently a mutual agreement amongst the leaders that 'The plan is a must.' The plans helped the schools focus on the development process from a long-term perspective. As expressed by one school leader:

Because we were asked questions, we needed to set up some answers in our minds and think about the whole project in terms of an organizational metamorphosis or change. Now I am thinking about change in terms of the whole organization'. 'They (the researchers) taught us to think about the project holistically. Not only in a material way (to buy new machines), but also in the range of organization and how to improve the organization.

According to another school leader, at first, the researchers' questions were annoying and difficult to understand; however, as the project progressed, this started to change, and she began to see the benefit of having a plan:

In the beginning, I was complaining about your questions. However, it was the same questions that somehow showed us that we can see technological development in a pedagogical context and why the pedagogical content is important. It was your questions that opened our eyes to that.

The collaboration between this school leader and the researchers to develop a local action plan highlighted the educational and developmental perspectives in the quality development work at the school, linking technological and educational development.

In the dialogue concerning the local action plans, it was crucial to make the school leaders understand the importance of ongoing formative evaluation. As we see it, this understanding developed along the way. As mentioned by one school leader:

What you have helped me to understand is that the process is more important than the target. It was difficult to understand, but now I do.

Said by another school leader:

If we had known you before the beginning, we would have structured the project quite differently. We have learned a lot from this process.

Some of the difficulties in the dialogue between researchers and practitioners were rooted in the fact that most of the school leaders had no previous experience with systematic development of the educational quality at the school level.

6.2 Filling the Reflection Papers

The filling of the reflection papers drawn up by school leaders developed the school leaders' ability to reflect on their actions.

The leaders were asked what they believed they benefit from filling the reflection papers. The general answer was that they learned to reflect. Reflect on the progress in the development process at the school and on the activities, they were involved in. A leader expressed it like this:

I become more reflective and more inspired for my work and for *life in general*. I know now that it is important to reflect on the process and not only on the outcome of this process.

How do you think we have influenced your project? We asked a school leader. She answered:

The most important is the reflection papers because then we get time to reflect and find solutions. The content of the meetings between the managers has been quite different.

Filling the reflection papers has an informative function at the school and highlights the progress in the development process:

It will actually be good that we stop op every second month and also that we can document. Also, to show the teachers what we have achieved in this project.

From an interview with the management group at one of the schools, the experiences with the reflection papers are expressed in different ways:

These reflections also helped us implement the sustainable strategy and to find out how we can keep going on after the VELUX project. The whole group of leaders find it very useful now after they have been used to reflect more systematically on the activities. I am sure we will keep on doing so. We have to. This is one of the things we can't really succeed doing as an organization, it's more individually. But it's important that we somehow get it inside people's minds. We have learned it.

The headmaster of this school:

When we start asking ourselves to answer the question to fill out the reflection paper, then we realize how much we have done. Maybe when you read it first, nothing comes to mind, but then you start to reflect about the questions more and more comes up.

6.3 Experiences from the Summing-Up Meetings

Concerning the summing-up meeting the data tell that the meetings and the process before these meeting were important elements in the school leaders' competence development.

The meeting gave us a chance to summarize the progress. It seems very useful to sit together and talk about what we have done and what to do in the future.

Another leader says:

We are glad to have you as a part of the project and for your mentoring. It is very valuable for us. We need to improve the implementation, and I feel you are something like a mirror for us. The discussions about the progress of the project are very important to us. We believe it develops a new culture for us.

Another school leader stressed the importance of the question before the meeting:

The preparation questions for the midterm meeting helped a lot; it gave us time to be prepared it was very helpful. For us, it was interesting what you highlighted in our reflection papers to be discussed at the meeting. We all feel we understand each other. We understand you, and you understand us.

7 Which Factors Benefit the Process?

A key to understanding the cooperation between researchers and school leaders in this project is the fact that establishing such cooperation was a requirement for the schools' participation in the broader quality development program.

Therefore, the process of compiling an action plan, filling the reflection papers, and participating in the summing-up meetings was an integrated part of the development project at the different schools and a condition for receiving a grant from the VELUX-foundation. A vital part of the cooperation process is therefore convincing the school leaders that it is rewarding and relevant for them to engage in this process. If they do not initially understand the benefits of working with these activities, they will not be engaged in the process, and they will not be motivated to join the competence development.

An important factor in the competence development process is 'trust building', which means that the school leaders feel confident with us, the researchers. Some of the leaders express that they feel good to be in dialogue with us. They underline the importance of the smiling faces and the good vibes we were sending in the dialogue.

Another factor is the mutual respect in the dialogue: "The fact you ask us to be a mentor school touches our hearts because we feel you recognize our work", a school leader says in the interview.

However, we could also find examples of communication that went wrong:

We feel that the communication was on two levels. We were on a very practical level on how the school works. And your communication was very scientific and not so practical. You used a different language. You should not speak in such a sophisticated way. After the first meeting with you, we had to discuss what was the aim and the focus in the process you were telling about. I would recommend you to listen better to the school what they do and then start the discussion after that. We had a feeling that you did not listen to us.

In general, the researchers' systematic and prepared questions to the school leaders were a vital part of the competence development process. The dialogue must be based on concrete questions for school leaders to answer. The data suggest that the more specific and concrete these questions were, the better the understanding of what 'we have learned'. It is important to ask questions that make school leaders reflect on their own project. The researchers must maintain the school leaders in this process and support them in refining their reflections.

In the dialogue between researchers and school leaders, a change occurs when the school leaders are told that the development process includes systematic reflection on one's experiences. The researchers introduced a paradigm shift from describing 'what we do' to reflecting on 'what we have learned from what we do' - a shift in focus from action to reflection on actions. Our observations show that competence development takes time - much longer than we had expected. Only through a long-lasting dialogue between the researchers and the school leaders did we succeed in making the school leaders think in a new way.

To sum up, an important factor in qualifying the school leaders was an ongoing dialogue where we insisted on the need for an evaluation process. This process must identify a goal for the work and include systematic reflection on how to gather relevant experiences concerning new knowledge generated in the project. Such dialogue, and especially the form of the researchers' questions to the school leaders, is crucial in improving the development of the school leaders' competence.

8 Discussion and Conclusion

The strategy behind this project is based on collaboration between researchers and practitioners. A prerequisite for successful collaboration is that both parties understand the usefulness of cooperation. In this project, it has been essential to convince the school leaders that systematic reflections and evaluation are appropriate when seeking to improve educational quality at the schools. An important part of this process is that we insisted on the importance of the school leaders' continuous reflection on what they planned to do, what they actually did, and what they have learned from what they did.

Our findings confirm the results of other studies in demonstrating the importance of mutual respect in the relationship between researchers and practitioners (Raaen, 2017) and in underlining that successful competence development depends on 'motivation, trust, mutual respect, and recourses' (James & Augustin, 2018, p. 333). Through our study, we became aware of the importance of 'common relevance, shared responsibility for research and mutual trust and respect for differences in professional identities' (Leeman et al., 2018, p. 9). Likewise, we found that a structured process supported school leaders in their efforts to improve educational quality (Karagiorgi et al. 2018, p. 252). We found that an 'important factor in promoting the relationship between research and practice is individual coaching or supervision' (Korthagen, 2007, p. 308).

The findings we have presented in this article have certain limitations in relation to generalizability - partly because of the limited number of participating schools and partly because of the specific contexts for cooperation and the specific schools. On the other hand, the descriptions of cooperation processes are very similar from school to school. Although we are talking about four different countries and different cultures.

The fact that we collected and analysed data about a cooperation we were part of limits reliability. However, we sought to counteract some of these limitations through extensive use of the school leaders' own statements. Likewise, we have compared the findings in our data with data from an external evaluation of our activities. The conclusion seems to be rather similar: The school teachers have learned to reflect on their activities. They have learned to evaluate these activities and reflect on the results.

We found that running this circle for the actual school leader demands a systematic and guided process. This process was long-lasting. Only after a while – in this case, more than half a year – the school leaders have learned to reflect systematically on the experiences gained. Mutual trust and positive personal relations are factors that benefit the process. Different understanding of purpose and meaning and the need for reflections are obstacles.

Based on experiences across all eight schools in the four countries, we argue that establishing a constructive dialogue around a learning circle between researchers and practitioners is not a straightforward process. The practitioners' ability to join the process must not be taken for granted.

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