

ISSN: 2464-4153

Vol. 10, No. 2 2025, page 1-19

https://doi.org/10.7577/sjvd.5998

Planning practices to strengthen vocational school improvement

Development of school leaders' planning competencies

Katrine Puge, Line Lindhardt, Bjarne Wahlgren Department of Education Studies, Aarhus University, Denmark Contact: puge@edu.au.dk

Abstract

This article explores the impact of externally initiated interventions on planning practices among school leaders within vocational education and training (VET). Based on empirical data from a longitudinal research and development project involving seven school—university partnerships in Poland, Hungary, Slovakia, and the Czech Republic, we argue that interventions in which researchers and school leadership teams collaborate during the planning process can improve this process.

The article describes the content, form, and results of the planning interventions that are grounded in evaluation theories and approaches to action research in school-university partnerships. The article builds on interviews with the school leaders and recorded online evaluation meetings.

We argue that creating a 'plan for quality improvement' enhance the quality of school improvement processes, by highlighting the improvement perspective, developing leaders' planning competencies, and encourage the leaders to involve teachers in school improvement processes. We explore factors that can hinder successful planning interventions by examining cases in which interventions did not produce the expected results. The study provides new insights into how school leaders planning processes can be improved.

Former research point to the importance of planning in relation to school improvement. Few investigates how the planning processes can be supported. In this article we present a strategy for improving school leaders planning processes at VET schools.

Keywords: School improvement, School leaders, Planning practices, School-university partnerships, Planned Change



Introduction

All schools must be flexible in adapting to change. Vocational education and training (VET) schools in particular must respond when new technologies, educational reforms, and shifting demands from the labour market challenge the school's practices.

Several factors have an impact on school improvement (Kenney et al., 2019), including leadership, which is pivotal for organizational change and sustainable school improvement (Alvesson, 2015; Gillon, 2018; Koh & Askell-Williams, 2021; Poole et al., 2004; Schein, 2010).

Based on a literature study on change leadership in VET contexts, indicating that successful school improvement is connected to leaders' *planning* work and their ability to set goals and build visions for change, we focus on the process of planning school improvement projects.

We analyse experiences from Sustainable Culture for Change, a project on school improvement in VET (SCFC, 2023). The project began in 2019, with the establishment of school—university partnerships (Barnett et al., 2010; Kuriloff et al., 2011) involving a research team and school leadership teams at seven VET schools in Hungary, Poland, Slovakia, and the Czech Republic. Each of these schools are implementing their own improvement project funded by the Villum Foundations as part of a programme to strengthen European VET (Velux, 2018). The research team's role is to assist leadership teams at the schools in ensuring the sustainability of their projects. The first interventions within this collaboration concerned the planning of the school improvement projects, in which the researchers collaborated with school leaders, strengthening their ability to plan school improvement initiatives.

In this article we analyse the planning interventions, focusing on their content, form, and results. Further, we analyse the impact of the collaborations with the research team on the leaders' planning practices and competencies. Finally, we explore factors that can hinder successful planning interventions by examining cases in which the interventions did not produce the expected results.

Leadership and school improvement

Literature on school improvement, educational change, and school effectiveness has long focused on the role of leadership (Day & Leithwood, 2007; Hargreaves & Fink, 2006; Hitt & Meyers, 2018). Fullan has emphasized that school leaders hold the key to change (Fullan, 2020), while Schein has highlighted how the competencies of school leaders shape organizational culture at the school. Consequently, leadership is an important factor in creating a culture of change in which schools are able to continuously adapt to new challenges and changing circumstances (Schein, 2010).

The field of school improvement often draws on theories from the field of organizational change (Goh et al., 2006). Some scholars describe schools as learning organizations (Bowen et al., 2006; Kools & Stoll, 2016; Seashore Louis & Lee, 2016), while others use other concepts from the field to describe project leadership strategies (Bouwmans et al., 2019; Kalkan et al., 2020; Longmuir, 2019). Another body of research uses organizational concepts and theories to study teacher involvement and learning (Widmann et al., 2019; Wierenga et al., 2015).

Fullan developed a three-stage model of dynamic change within the school improvement field comprising "directional vision, focused innovation, and reining in or consolidation" (Fullan, 2016). These stages interact and reoccur as iterative processes throughout school improvement

initiatives. The first stage, directional vision, calls for planning competencies, as leaders must be able to establish a vision that gives direction to school improvement efforts. In the second stage, focused innovation, there is an emphasis on trying out and learning from new solutions. In the third stage, consolidation, the focus is on deciding which ideas to further develop and which to discard or refine (Fullan, 2016, p. 80). The model emphasizes the continuous creation of new plans supporting the school's vision throughout the improvement process. Our approach is aligned with this model and understands planning as a never-ending task. The planning competencies needed in the first stage enables the leaders to set a directional vision that guides the school improvement efforts going forward. Therefore, the interventions analysed in this article concern the initial planning of projects as the foundation for working with evaluation and iterative planning.

Leadership challenges when working with school improvement in VET

The importance of leadership for school improvement in VET is stressed in several of the included studies from our literature study on change leadership in VET.

Among the conclusions of a comprehensive study of leadership in Australian VET was: "Change leadership and change management are the preferred processes for effecting organisational change in VET providers" (Mulcahy, 2003, p. 9). Meanwhile, a study of the relationship between leadership and sustainable improvement at 12 VET schools found that the success of change processes was closely linked to efficient distributed leadership (Zala-Mezö et al., 2020).

In the articles identified in our literature search, a range of different leadership tasks were found to be important for successful change processes in VET. However, two aspects emerged as particularly crucial across the included studies: *planning change* and *involving teachers*. This article concerns the first aspect.

Several studies found that *leaders' ability to plan* and be visionary is crucial to successful school improvement. School leaders must be committed to a vision and a set of clear goals when leading school improvement projects. Furthermore, they must have the necessary competencies to both plan and implement organizational change (Palmer et al., 2017).

Focusing on the planning culture at schools, Bell (2008) identified three key stages of educational change: planning, implementation, and continuous improvement. The authors state, that "there is no one straightforward strategy, solution and or answer to addressing a practical issue" (Bell, 2008) in school improvement initiatives, which is why planning becomes key to finding context specific practices for educational change. Another study highlighted the connection between the school's ability to plan and their ability to respond to changes. The model developed in the study contains six stages when planning initiatives for educational change that are chronologically connected and combined by several feedback loops: "(1) Clarifying the mission. (2) Determination of the long-term aims. (3) Analysis of the environment (internal-external). (4) Policy formation. (5) Determination of the objectives. (6) Choice of actions." (Petridou & Chatzipanagiotou, 2004). The steps allow the leaders to determine the aims, context, and actions of a school improvement project. On this basis, the study developed a framework model for planning school improvement initiatives, outlining the different stages

while also emphasizing the dynamic nature of such planning processes (Petridou & Chatzipanagiotou, 2004). According to the authors, staff participation in planning school improvement efforts is an issue that calls for further research, as participation greatly affects the action plans of schools.

The need for a clear *strategy and mission* was identified as a key consideration for leaders when planning school improvement (Durur, 2007). A part of this is for leaders to ensure the goals are realistic, so that they can be obtained through activities and available resources. Another study suggested that a model for planning change processes can help leaders identify the changes required and potentially prevent staff resistance and provide clarity to the process of change (Wereszczak, 2006, p. 88). Here, staff involvement in planning processes are also emphasized as such involvement ensures that the plans made are aligned with the needs of the people that will be affected by the change effort.

Likewise, Bell argued that a high level of staff involvement in planning is crucial because staff members play a central role in defining the problems that need addressing and identifying and testing potential solutions. Hence, iterative planning practices that involve staff ensure a strong foundation for continuous school improvement (Bell, 2008).

A study exploring organizational structures and cultures that enable VET institutions to respond to rapid change recommended systematic training of school leaders in planning, implementing, and evaluating strategies (Callan et al., 2007). The study concluded that the following factors are important: "a clear vision and strategy, effective leadership and management, empowered staff and a workplace culture that encourages collaboration and networking" (Clayton et al., 2008, p. 4). Similarly, the study by Callan et al. (2007) indicated that highly innovative organizations need leaders who are able to create a learning-oriented culture for change that values communication and staff involvement.

When it comes to change processes, the study by Clayton et al. emphasized dynamic change as a process of ongoing exploration of how to "create sustainable change and continuous improvement" (2008, p. 8). According to Mitchell (2002), the culture must be client-focused to meet changing demands, the organizational structure must encourage cooperation across departments within schools, and most importantly, schools must constantly develop, implement, and review their strategies, culture, and structures. They must be able to evaluate change processes and plan accordingly (Mitchell, 2002). Based on studies of eleven different change processes at VET schools, Mitchell concluded that the need for planning is crucial, especially during the initial stages. Once the plans have been made, how the process develops depends on a range of aspects that include organizational goals, the expectations of staff and facilitators, and external conditions (Mitchell, 2004).

Summing up, research points to the importance of planning in school development but offers limited insight into how school leaders can strengthen their planning competencies and practices. This article contributes to the field by presenting a method for supporting leaders in planning school improvement initiatives, developed in collaboration with researchers. It also discusses how, and under which conditions, teacher involvement can be integrated into the planning process, as called for by an earlier study. In this way, the article offers a practice-oriented perspective on developing planning competencies and practices in VET schools.

The aim of the article

Based on the existing literature presented above, we conclude that successful school improvement initiatives require leadership. Planning is a central part of the leadership task, and the leader must thus be able to plan. Furthermore, research indicates that goal setting and maintaining goals are part of planning. Research also indicates that the ability to involve staff in this process contributes to quality improvement at the school. The need for leaders to have a strategy for planning was identified (Durur, 2007). In this article we introduce one way to approach a strategy for planning.

In the project, the researchers introduced a requirement for school leaders to prepare a quality improvement plan for their school improvement project. The plan was to be based on the described research-based elements to guide the school improvement project implementation, including the school's vision for educational change, the goals connected to the project and activities that are realistic within the context of the school and the resources available.

In this article, we describe the impact of working with quality improvement plans on schools, and we describe the barriers that exist in this implementation process. Hence, we answer the following research questions:

Which impact does the work with quality improvement plans have on schools?

What hinders the work with quality improvement plans?

Creating a plan for quality improvement

In this project, it was the research team that stipulated the requirement of a detailed quality improvement plan. In other cases, it may be the funding body, administration, school board, or even the leaders themselves that require a detailed project plan.

The planning intervention is grounded in an action research methodology in which researchers and practitioners work together on practice improvement (Hill, 2009). The starting point for the collaboration between the research team and the school leaders was a bilateral meeting with each school. At the meeting, the framework for the collaboration was discussed and defined. As a first step in this collaboration, the research team asked the school leaders to draw up a quality improvement plan based on their general ideas and desired outcomes of the improvement project as described in their project funding applications. Drawing on approaches to project planning and evaluation from the field of theory-based evaluation (Alkin, 2013; Stufflebeam & Coryn, 2014), the researchers asked the leaders to describe in detail the project's aims, expected short- and long-term outcomes, and assumptions about how the planned activities would lead to the desired outcomes. These content headings are key to developing a programme theory, or a change theory, required when working with so-called theory-based evaluation. At the same time, requiring leaders to write a plan meant that they also had to consider how they would continuously evaluate their progress.

Furthermore, there was a focus on *teacher involvement* when the leaders were writing the plan. As various studies have shown, teacher involvement is key to successful school improvement (Fullan, 2020; Saunders, 2014). Thus, leaders must strive to create a culture in which teachers are actively engaged in envisioning, planning, and implementing ongoing change

(de Jonge et al., 2020; Mulcahy, 2003) and school improvement plans must outline how to promote teacher involvement. The leaders were asked to consider how teachers would be involved in each planned activity, what forms of competency development were necessary for said involvement to succeed, and how they as leaders were going to support teacher engagement in the project.

Key to this process was that it helps the leaders think about the entire improvement process from the outset and continually confronts them with the demands of their plan. Through systematic planning and implementation, the leaders' competencies, and efforts to improve school quality were enhanced.

Quality improvement plans were prepared through discussions at two meetings involving the research team and the school leadership team. At the first meeting, the school's project was discussed, and planning guidelines were established. The leaders then drafted an initial plan, which the research team reviewed and commented on, suggesting adjustments at the second meeting. Once the plan had been finalized, the research team regularly asked the leaders to reflect on the planned activities in light of their goals and overall vision. The intervention design thus builds on a belief that dialogue and collaboration is key in research-practice partnerships aiming at improving practice (Carney et al., 2019).

Data and methods

The seven project collaborations were initiated from the beginning of 2019. Some ended when their project periods terminated after at least three years. Two of the school projects are still in motion at the time of writing this. The research project will run to the beginning of 2026 which makes for a longitudinal study design to follow the progression of the schools' projects and the leader's competencies over time. In this article, we draw on data collected throughout the process of collaboration.

In this article, the term 'school leadership teams' is used to refer to the group of staff with key leadership roles in the project. Thus, the school leadership teams may include school leaders, project leaders, head teachers, and administrators, depending on the organization of project staff within each school. The term 'leader' refers to one person from the school leadership teams, regardless of formal title. The role distribution and titles vary between the participating schools. We have chosen not to differentiate between participants' formal positions as it is their role in the project that is important to our study. The average leadership team consists of three people. The collaborating schools were assigned to the research group by the foundation funding both the schools improvement projects and the research project under the same Vocational Education initiative (Velux, 2018). Thus, the schools were selected for the collaboration because the foundation recognized their potential and saw opportunities for them to benefit from it. The research team consists of three researchers.

The article draws on a literature study on change leadership in VET schools. Our search terms were *VET* and *change* alongside additional search strings stemming from the themes of our research: *evaluation, management,* and *competency development*. We searched in the following databases: Web of Science, Education Resources Information Center (ERIC), Australian Education Index (AEI), and British Education Index (EBSCO). We filtered for peer reviewed, English language studies from 2002-2022.

The researchers were responsible for gathering empirical data throughout the collaboration. The material includes:

Interviews with leaders. Two semi-structured group interviews were conducted at each of the seven participating VET schools, involving key members of the school leadership team. The first interview was conducted within the first year of collaborating with the school. The second interview was conducted approximately three years from the beginning of our project. Following an interview guide, the interviews focused on ongoing activities at the school, the experiences drawn from these activities, and the leaders' reflections on the collaboration with the researchers. The leaders were asked directly what impact, if any, the collaboration with the researchers had made on their school improvement process. The interviews were conducted at the schools and lasted between one and two hours. All interviews were in English, with an English-speaking leader or teacher acting as an interpreter at most schools. This raises several methodological issues concerning validity. For instance, the presence of the interpreter might have caused some interviewees to withhold information or modify their answers, especially in situations characterized by unequal power relations. Furthermore, as the interviews focused on the collaboration process between researchers and leaders, we had to make sure the leaders were not merely paying lip-service when responding positively. We did this by 1) asking for examples when the interviewees made positive remarks, 2) identifying negative responses that showed that the leaders felt comfortable voicing concerns or criticizing the collaboration, and 3) asking questions about the potential difficulties associated with the collaboration, such as how it might be considered overly time-consuming by the leaders. We believe that this has helped strengthen the validity of our interview data.

Recorded online evaluation meetings held approximately one year after the start of each school project, and again after a further 6–12 months. The meetings were conducted in English. The primary purpose of these meetings was to gauge the school's progress in relation to the quality improvement plan. A secondary focus was on the collaboration process between researchers and leaders, offering leaders the opportunity to share their thoughts on the impact of this process. Prior to the meetings, the leaders answered a range of preparation questions about the progress of their projects connected to their improvement plans and these answers were further discussed during the meetings. As the meetings were conducted in English, we often made use of an interpreter, meaning that these meetings encountered many of the same methodological issues as previously outlined in relation to the interviews.

Summing up, the material centres on the leaders' experiences with the school improvement projects at their schools, the research team's interventions, and the leaders' perceptions of the collaboration with the research team.

We conducted a thematic analysis of the extensive data material, focusing on the key factors related to school improvement planning that emerged from our literature review (Peel, 2020). At the same time, we remained open to our data, continuously questioning how the leaders responded to and engaged with the planning interventions, coding any part of the material in which the leaders talked about planning, using the plan or having a plan. We ensured that the findings were applicable to more than a single school, despite inherent variations among schools. This approach allows us to make broader generalizations by analysing planning processes across seven schools in four countries. When analysing potential obstacles, we used

single-school examples as extreme cases to demonstrate how specific factors can hinder successful planning interventions at schools (Flyvbjerg, 2006).

The impact of the collaboration on leaders' planning processes

In a survey conducted among school leaders in 2024, we examined how much importance they attribute to the quality improvement plan among other interventions. We asked: "To what extent has developing the quality improvement plan supported your project?" Respondents rated its significance on a ten-point scale, ranging from 'not at all' to 'very large effect.' The ratings extended from 4 to 10, with an average of 6.9.

All schools recognize the importance of developing a quality improvement plan, but there are differences in how much value they assign to the task. The survey data suggest that these differences are not tied to the leaders' prior planning experience. Instead, they are influenced by the collaboration between the research team and the school leaders. We will explore this connection further.

In the following, we present how the quality improvement plan intervention influenced the leaders' focus on school improvement, their planning competencies, and their involvement of teachers in the school improvement processes.

The planning intervention strengthened the leaders' focus on school improvement

Being required to create a structured plan that relates activities to specific school improvement goals heightened the leaders' awareness of their responsibilities in terms of creating positive change through their projects.

The leaders were generally satisfied with the outcomes of the planning intervention. One leader stated: "Of course, we were planning before, but now we are more aware of what we will achieve. I think we spend more time on developing the whole plan". Other leaders explained how the intervention influenced their approach: "because of you, we are supposed to think long term about some actions. It's not this simple: do something and get immediate results. That is not how it works", Another said: "First we didn't know that it was not enough to plan a project thoroughly, the exact planning of the follow-up of the project is just as important element of the implementation". The intervention helped the leaders set long-term visions and accept when school improvement processes did not provide a quick fix. Another leader explained how the intervention opened the door for strategic planning at his school: "every time [I] wanted to talk about strategic planning before, people did not want to. Now it is easier to sit down and talk about what are the essentials for the future and people are willing to discuss relevant topics". Summing up, the planning interventions let leaders spend time on planning and helped them set long-term goals and develop a vision for school improvement, contributing to a strategic planning culture at the schools.

We found that had it not been a requirement, it is unlikely that the school leadership teams would have drawn up such detailed project plans. When asked about the significance of writing the plan and how the project would have proceeded without it, one leader explained:

"So, it's complicated to answer, but if we did not have this quality plan, we would purchase some machines and teachers would automatically learn how to operate them. It is automatic. But the higher value of this process – how to educate, how to set up the goals and how to achieve the goals – would be missing. So, I think that the result could be similar but not so deeply embedded in our organization".

As such, this leader believed that the project would still have been implemented without the planning intervention, there would have been no systematic evaluation or feedback loops to qualify the process. Instead, it would have been a project solely focused on the procurement of new machines for the school workshops. However, such initial project planning is essential for the success of school improvement projects (Mitchell, 2004).

Another leader wrote about their experiences a few years after the initial planning of their project. It is clear that the process of developing a plan and reflecting on its implementation resulted in a more dynamic understanding of the project at their school: "We recognized the importance of continuous information, open communication, and transparency. The need for planned and regular reviews of the implemented activities, the importance of evaluation when planning the next step". The leader hereby acknowledged the importance of regularly adapting plans, using the results of evaluation to guide the planning of the project's next steps. This change in the leader's perception of planning and evaluation is seen as a result of the collaboration on the planning intervention.

Thus, the requirement of making a plan strengthened the projects because the leader's reflection upon the plan gradually led to a focus on school improvement as an ongoing process. The plan outlines concrete goals, subgoals, and strategies for implementing and evaluating the project, all of which contribute to the project's success.

The planning intervention enhanced the leaders' planning competencies

The requirement that leaders create a plan was coupled with ongoing support from the research team through dialogue-based guidance, which was crucial in enhancing the leaders' planning competencies. Initially, leader's competencies to plan varied. For instance, some leaders were not experienced with planning which were evident when they set directional visions and goals that were unrealistic to reach within the context and resources of the school (Durur, 2007). Another example was seen when school leaders formulated broad visions for improvement but struggled to connect their project's chosen activities to its overall goals or sub-goals. In addition, limitations in planning competency became apparent when large investments, such as procurement of new teaching equipment or machinery, were not aligned with the project's educational aims and were not integrated into the school's didactical practices in the plans: "We probably didn't even know exactly how important it is to promote a change in attitude in addition to technical developments" said a leader concerning their initial planning of procurement activities.

The planning intervention made leaders work with their project's initial visions and translate them into realistic goals and subgoals with connected activities.

One leader described the process as follows: "So the fundamental key was the main goal: to be a prestigious school. We made a path to this goal and [the researchers] asked questions. With these questions, we set up some milestones and we specified the path to this goal, and that was our purpose with making this quality plan".

The school leadership team effectively crafted a plan by remaining focused on their main goal and addressing feedback questions from the researchers during the supportive dialogue. This interaction strengthened the team's planning competencies.

Another leader reviewed a document provided by the researchers that served as a supplementary guide for drafting their project plan. This document, containing plan headings and descriptions of expected content, was intended to support the dialogue approach. However, despite its intent, the leader did not find the document helpful, stating, "We read it, we translated it, and we couldn't get it". This highlighted the team's limited planning competencies. Merely mandating planning without providing adequate support proved ineffective among leaders with limited planning experience. Later, this team successfully developed a plan through ongoing dialogue with the research team. Once again, this underscores the necessity of coupling planning requirements with supportive dialogue and feedback.

Evaluation is central to the success of school improvement projects (Petridou & Chatzipanagiotou, 2004) and as such a part of the planning process and a competency needed. As one leader explained: "First, we thought the project was a 'goal-oriented process', but you taught us to think more and more about the process". When guiding leaders to include formative evaluation in project planning as a tool for continuous learning, their understanding of change processes shifts – from focusing solely on outcomes to an emphasis on the importance of the process itself.

Summing up, requiring a quality improvement plan fosters commitment among school leadership teams despite the challenging nature of the task, particularly at schools with less experience with such planning processes. Overcoming resistance requires more than just mandating a plan; it also requires guidance during the planning process. Dialogue plays a crucial role in enhancing leaders' planning competencies by allowing them to experiment and receive feedback. Our findings emphasize the benefits of mandating a plan coupled with feedback and dialogue to support leaders' development of planning competencies when initiating projects.

The planning intervention enhanced teacher involvement

Research has highlighted the importance of teacher involvement in planning (Bell, 2008; Mitchell, 2004). Teachers possess firsthand knowledge of practical challenges and potential solutions, insights that are essential for designing relevant and realistic projects. However, when teachers are not accustomed to engaging in planning, they may lack the motivation and skills needed. Our findings suggest that planning interventions can enhance teacher involvement, though the impact varies depending on the context. For school leaders, especially those with limited experience in both planning and encouraging teacher engagement, involving teachers in the planning process presents a challenge. The planning intervention helped strengthen the leaders' understanding of teachers as key participants in the planning

process. Thus, teacher involvement was enhanced at varying paces across the participating institutions.

At one school, the leader initiated the planning process and gradually involved more colleagues as their input became necessary. The requirement to write the plan and the researchers posing questions for which the leader had to find answers created a progression towards increased teacher involvement:

The short one-page plan was made by me (...). The project became too big, and I couldn't keep it in one hand. As more and more people got involved, it came with more and more information. Now comes this bigger chart [second draft of the plan]. [My colleague] fixed a huge wrap of paper to her office wall and we started sticking our ideas on this paper. Colleagues kept coming to add their ideas.

In this case, teacher involvement in the planning process was iterative. Teachers had the option to participate voluntarily, with some highly motivated individuals actively engaging in the planning phase, while others joined later in the project. This approach relied on the presence of teachers who were already motivated to engage in quality improvement processes, as well as the leader's recognition that the teacher's expertise and ideas were crucial to solving the task of writing the quality improvement plan.

At schools with no or very little traditions for teacher involvement in planning, the leaders changed their view on teacher involvement in planning.

For instance, one leader reflected on the benefits of involving teachers in the planning phase during an interview after a workshop for teachers held after the initial project planning. During the workshop, they brainstormed project goals and activities on Post-it notes. The leader shared how the experience made them realize the importance of teacher involvement in the planning process:

Yesterday, teachers answered the same questions that I had to answer by myself [when writing the plan]. When I had read the Post-its, I put them in my desk because I wanted to keep them. It would have given me inputs to give the answers [in the plan].

At this school, it would not have been possible to include teachers in the project prior to the development of a plan due to there being little tradition of involving teachers in such processes. The leader did not attempt to involve teachers. Additionally, the teachers were initially sceptical about the project, expressing disbelief that the school had even received such a large grant. Therefore, the leader planned the project without much teacher involvement, even though the teachers could have made a positive contribution in this regard.

As project planning entails a learning process and as teacher involvement, at least at this school, seems to require a project plan, the leaders must decide which action to take first. It might be possible to involve selected teachers in project planning as a learning process. In this case, while doing so could have supported the leader, they did not involve teachers in the planning and thus experienced a steep learning curve, having to plan the project single-handed.

For most of the schools involved in the project, teacher participation was enhanced through the planning intervention, following a pattern similar to the school where teacher involvement gradually increased. However, the connection between planning and teacher involvement presents a challenge, as leaders must determine the approach from the outset depending on the context of each school, their experience with project planning and the existing traditions of teacher involvement. As the planning intervention requires leaders to access teachers' expertise,

leaders come to recognize the value of teacher involvement, and in most cases, they succeed in fostering it.

Factors hindering successful planning interventions

When competence fails

Planning is a challenging task and requires skills that leaders must learn (Palmer et al., 2017). In the Sustainable Culture for Change project, many school leadership teams struggled with developing a quality improvement plan (Wahlgren & Aarkrog, 2019). Despite having obtained funding, most of the teams initially did not have a detailed plan for their school improvement projects. Instead, the funding applications offered descriptions of the challenges that the project sought to address and a series of activities to implement. The planning intervention focused on supporting leaders in transforming these into detailed project plans.

Most of the school leadership teams found this a challenging task. This was evident from their failure to observe agreed deadlines for sending draft plans and during interviews, with leaders stating that they were not familiar with this approach to project planning. Several leaders, despite being experienced in project planning, found it difficult to articulate the pedagogical foundations of their projects.

One leader expressed concerns about the level of competence required to complete the task. At this school, the team had limited prior experience with planning. When asked about experiences writing the plan, this leader answered: "It was awful. The others supported me, but it was only me writing it. I found out that it is a profession. It is a science. People have this as their job, and I am not educated for this. It was very difficult". The leaders had to *learn* how to write a plan.

Successful planning is dependent on having certain competencies; meanwhile, there were initially variations in competency levels among leaders. Some had extensive experience in planning projects, while others had little or no such experience. It was therefore necessary to develop these competencies either prior to or during the planning phase to ensure the success of the initiatives. If not, the lack of competencies can hinder the planning efforts.

Drawing from this experience, researchers or consultants working with project support must be aware of the level of planning competencies when stating requirements for project owners. They must actively address the competency development of the leaders to ensure fruitful planning processes and outcomes.

When there is a lack of trust

If researcher–practitioner collaboration such as that described in this article is to succeed, it is crucial to build trust between the two parties (Frerichs et al., 2017). Barnett et al. define trust as "the extent to which a person is confident in and willing to act on the basis of the words, actions, and decisions of another" (2010, p. 634). Thus, trust is a prerequisite for action. It can be challenging for leaders to engage in the task of planning in collaboration with researchers as the latter initially play the role of experts. However, if the researchers gain the leaders' trust, the leaders are more likely to perform tasks in line with the researchers' intentions and ask them for

guidance when needed. In the Sustainable Culture for Change project, trust was established in the initial stages of the planning interventions.

At each school, the collaboration was initially characterized by a combination of willingness and reservation. The leaders embraced the task, even if they did not necessarily understand what was required. One leader expressed his difficulty understanding the researchers at the start of the collaboration and described the dynamics that caused frustration: "Personally, I want to be like a good student. To be good enough for this. It is quite stressful when you want to do your best. But when I don't know what is expected from me, I can become stressed". However, this leader did not feel comfortable asking for further guidance and thus had difficulty creating the first draft of the school improvement plan. If trust had been established before collaborating on the planning intervention, the leader would have felt comfortable asking questions without fearing he might appear not 'good enough' in the researchers' eyes. Such lack of trust often led to the school leadership teams missing deadlines, failing to communicate in a timely manner, and producing plans that diverged drastically from what the research team had envisioned.

In summary, a lack of trust can hinder effective collaboration, which is essential in ensuring that the planning process is efficient and satisfactory for both school leadership teams and researchers. When designing planning interventions, care must be taken to establish trust.

When leaders have their own plan

At a few of the participating schools, the leaders were experienced at planning projects, rendering the research team's intervention partially redundant. At one school, where the leader had extensive project planning and management experience, the planning intervention led to the project being split into two plans: one continuing to pursue the school's existing project, and another to satisfy the researchers. The leader explained:

Very frankly spoken, we have had a project plan for what we would like to do in this project. We have written it very precisely (...). And... then at some point [you] came, and you tried to move us a little bit in a different direction (...) Sometimes we feel like we are running two projects (...).

This quote provides an interesting insight into the challenges that the project group experienced in reconciling their school improvement project with the planning approach required by the research team. The leader distinguishes between the plan that the school originally created for the grant application and the plan the school had to create in collaboration with the researchers. Although the latter was intended to build on and qualify the school's initial plan by integrating a shared vision, involving teachers, and outlining a formative evaluation strategy as part of the school improvement project, the school leadership team saw it as working on two parallel but separate projects.

In summary, leaders' level of experience affects the perceived usefulness of planning interventions. More experienced leaders may find planning guidance unnecessary, which can result in what are perceived as two separate projects, complicating the integration of the school's original plan with the intervention's planning strategies.

Discussion

Based on Fullan's three-stage model of dynamic change in school improvement—comprising directional vision, focused innovation, and consolidation (Fullan, 2016) - and Bells (2008) three key stages of educational change: planning, implementation, and continuous improvement, one might expect these stages to follow a linear progression in the planning process. However, our data suggest that these phases are far more interconnected and not easily distinguishable in the actual improvement processes within schools.

The planning process initiated by the quality improvement plan demonstrates a dynamic nature, characterized by multiple feedback loops (Petridou & Chatzipanagiotou, 2004). These iterative loops reflect the complexity of school improvement efforts, where planning, implementation, and evaluation frequently overlap and inform one another, rather than occurring in distinct, sequential stages.

Existing research indicates that leaders' ability to plan is essential for successful school improvement. School leaders must be committed to a vision and a set of clear goals when guiding improvement initiatives. Moreover, they need the necessary competencies to plan and implement organizational change effectively (Palmer et al., 2017). The importance of a clear strategy and mission has been identified as a critical factor for leaders when planning school improvement efforts (Durur, 2007).

In our study, we found that leaders possessed varying levels of planning ability across different schools. Generally, the leaders demonstrated stronger skills in taking action than in planning. This finding underscores the need for targeted interventions to strengthen leaders' planning capacities, for instance in balancing broad visions with realistic change efforts. Based on systematic experiences from this project, we conclude that introducing a quality improvement plan compels schools to rethink their planning processes, enhancing leaders' competencies and their ability to plan effectively.

Is there a remarkable difference between planning in a Central European context and planning in a Western European context? While our data cannot provide a definitive answer to this question, we can draw two important conclusions based on our findings. First, we found no systematic differences in planning practices among the four Central European countries included in the project. Instead, planning capacities varied between schools within each country, indicating that differences are more localized and not defined by national or regional contexts. Second, drawing on insights from a Danish context, we observe that the planning guidelines introduced in the project are consistent with practices found in Danish schools. There is no evidence to suggest that schools in Central Europe exhibit a distinctly 'Central European' approach to planning. What we can document, however, is a shared focus among schools on achieving and measuring goals rather than emphasizing learning as a goal in itself. This goal-oriented perspective is prevalent across the schools we studied. Against this backdrop, the introduction of a quality improvement plan has encouraged school leader teams to adopt a more process-oriented perspective, integrating development and progression into their planning frameworks.

Are the results specific to VET? The literature referenced above primarily focuses on research from VET institutions, where the importance of leadership and planning is well documented. However, we argue that while this importance is applicable across all educational contexts, it takes on a unique form within VET. This is due to the fact that vocational schools must

constantly adapt to the evolving demands for student qualifications, which in turn affects the curriculum and teaching methods. VET institutions are particularly vulnerable to rapid changes in the labour market and, therefore, require continuous leadership training in planning, implementing, and evaluating strategies (Callan et al., 2007). This is evident in our data, where schools emphasize the importance of collaboration with local businesses. We also see this in discussions about acquiring the latest machinery and its impact on teaching. Furthermore, schools highlight the need to remain attractive to students as a key consideration in their improvement efforts.

Our findings have certain methodological limitations. It is common for research and development projects to be somewhat intertwined with the work of the practitioners under study (Solvason et al., 2018). However, this creates a risk of bias, as we are collecting, analysing, and interpreting data regarding the outcomes of our own interventions and a collaboration in which we are one of the two parties involved. We are aware that the answers and comments from the school leaders may be influenced by the close collaboration between the research team and the leaders. To mitigate this, we asked the school leaders to provide examples of the planning process, as this approach is expected to yield more valid responses than simply asking whether they found the collaboration useful.

Another limitation stems from the fact that the schools may not necessarily be representative of schools in general within the four countries. They were selected because they had funding for school improvement projects in place and were prepared to improve their practices. Nevertheless, our experiences indicate that all schools changed their approach during the collaboration process. We cannot conclude that our intervention will always have a positive effect. However, the data suggest that even school leaders with less planning competency changed their perspective, showing that such intervention process has the potential to contribute to school improvement planning, regardless of initial planning capabilities of the leaders.

Conclusion

This article set out to explore how externally initiated planning interventions impact planning practices and school improvement processes among leaders at vocational education and training schools, drawing on empirical material from the Sustainable Culture for Change project.

In the research literature, *planning change* is shown to be a central task when leading school improvement processes in VET. We contribute to the field by presenting a way to support leaders in their planning processes and develop the necessary competencies.

Previous research highlights the importance of planning in relation to school improvement. However, few studies have investigated the planning process itself. In this article, we presented a strategy aimed at improving the planning process and competencies for school leaders in VET.

We have demonstrated how leaders' planning competencies can be effectively developed through collaboration with researchers, providing them not only with a strong incentive to plan but also with essential support through dialogue and guidance. Furthermore, our findings indicate that collaboration between researchers and school leadership teams can strengthen and enhance school improvement projects, fostering greater teacher engagement—particularly in schools where there are less established traditions for involving teachers in such processes.

We have highlighted three challenges that can hinder the success of planning interventions. First, a lack of ability among leaders to effectively write a plan. Second, a lack of trust, which obstructs effective collaboration. Third, experienced project planners may view such interventions as unnecessary. Consequently, future planning interventions should focus on improving leaders planning competencies, prioritize building trust and consider the prior experience with planning within the school leadership team.

Our results are consistent with the findings of studies in our literature review and offer an analysis of planning interventions at seven schools across four countries. Although the study is specific to VET, we believe these findings are applicable to quality improvement projects across educational institutions of all kinds.

Acknowledgements

We thank the participating school leadership teams for their collaboration, which was essential to the completion of this study and highlights the importance of practitioner partnerships in educational research.

Financing

The Villum Foundation

Note on contributors

Katrine Puge, the first author of the article, is a PhD student specializing in school improvement and evaluation. Her research focuses on ways to achieve sustainable school improvement in Vocational Education and Training and on researcher-practitioner collaborations.

Line Lindhardt, the second author of the article, has a master's in Education Science and works as a project member in a research project focusing on sustainable school improvement in Vocational Education and Training.

Bjarne Wahlgren, the third author of the article, is professor in adult learning. His research concerns didactical issues focusing on evaluation, assessment of prior learning, drop-out, and learning environment. He works with the relation between research and practice, between researchers and practitioners.

References

Alkin, M. C. (2013). *Evaluation roots: a wider perspective of theorists' views and influences* (2. ed.). SAGE Publications.

Alvesson, M. (2015). Organisationskultur och ledning. Liber.

- Barnett, M., Anderson, J., Houle, M., Higginbotham, T., & Gatling, A. (2010). The Process of Trust Building Between University Researchers and Urban School Personnel. *Urban education* (*Beverly Hills, Calif.*), 45(5), 630-660. https://doi.org/10.1177/0042085910377297
- Bell, D. (2008). *Organisational planning and performance integration in a TAFE context*. https://ncver.edu.au/ data/assets/file/0023/6359/nd07150_3.pdf
- Bouwmans, M., Runhaar, P., Wesselink, R., & Mulder, M. (2019). Towards Distributed Leadership in Vocational Education and Training Schools: The Interplay between Formal Leaders and Team Members. *EDUCATIONAL MANAGEMENT ADMINISTRATION & LEADERSHIP*, 47(4), 555-571. https://doi.org/https://doi.org/10.1177/1741143217745877
- Bowen, G. L., Rose, R. A., & Ware, W. B. (2006). The Reliability and Validity of the School Success Profile Learning Organization Measure. *Evaluation and program planning*, *29*(1), 97-104. https://doi.org/10.1016/j.evalprogplan.2005.08.005 (Evaluation and Program Planning)
- Callan, V., Mitchell, J., Clayton, B., & Smith, L. (2007). *Approaches for Sustaining and Building Management and Leadership Capability in VET Providers* (192117045X).
- Carney, J., Chu, M., Green, J., Nutting, W., Donnelly, S., Clancy, A., Buly, M. R., & Carroll, D. (2019). Creating Synergies for Change. *Teachers College Record*, *121*(12), 1-52. https://doi.org/10.1177/016146811912101204
- Clayton, B., Fisher, T., Harris, R., Bateman, A., & Brown, M. (2008). *A Study in Difference:* Structures and Cultures in Australian Registered Training Organisations. Full Report.
- Day, C., & Leithwood, K. (2007). Successful Principal Leadership in Times of Change An International Perspective (1st 2007 ed.). Springer Netherlands. https://doi.org/10.1007/1-4020-5516-1
- de Jonge, W. A., Lockhorst, D., de Kleijn, R. A. M., Noordegraaf, M., & van Tartwijk, J. W. F. (2020). Leadership practices in collaborative innovation: A study among Dutch school principals. *EDUCATIONAL MANAGEMENT ADMINISTRATION & LEADERSHIP*. https://doi.org/10.1177/1741143220962098
- Durur, M. O. (2007). Transformative organisational change: a case study of restructuring attempts in the Technical and Further Education (TAFE) sector of New South Wales https://rune.une.edu.au/server/api/core/bitstreams/6c57c27c-ccd7-4ae0-ac60-c10abf0b0236/content
- Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative inquiry*, 12(2), 219-245. https://doi.org/10.1177/1077800405284363
- Frerichs, L., Kim, M., Dave, G., Cheney, A., Hassmiller Lich, K., Jones, J., Young, T. L., Cene, C. W., Varma, D. S., Schaal, J., Black, A., Striley, C. W., Vassar, S., Sullivan, G., Cottler, L. B., Brown, A., Burke, J. G., & Corbie-Smith, G. (2017). Stakeholder Perspectives on Creating and Maintaining Trust in Community—Academic Research Partnerships. *Health Education & Behavior*, 44(1), 182-191. https://doi.org/10.1177/1090198116648291
- Fullan, M. (2016). *The NEW meaning of educational change* (Fifth edition. ed.). Teachers College Press.
- Fullan, M. (2020). Leading in a Culture of Change (2 ed.). John Wiley & Sons, Incorporated.
- Gillon, A. C. (2018). *The Nature of Contemporary Organization Development*. Taylor and Francis. https://doi.org/10.4324/9781351106818

- Goh, S. C., Cousins, J. B., & Elliott, C. (2006). Organizational learning capacity, evaluative inquiry and readiness for change in schools: Views and perceptions of educators. *Journal of Educational Change*, 7(4), 289-318. https://doi.org/10.1007/s10833-005-5033-y
- Hargreaves, A., & Fink, D. (2006). Sustainable leadership. Jossey-Bass.
- Hill, R. (2009). Learning about Learning: Action Learning in Times of Organisational Change. Action Learning: Research and Practice, 6(3), 329-334. https://doi.org/https://doi.org/10.1080/14767330903301831
- Hitt, D. H., & Meyers, C. V. (2018). Beyond turnaround: a synthesis of relevant frameworks for leaders of sustained improvement in previously low-performing schools. *School Leadership & Management*, 38(1), 4-31. https://doi.org/10.1080/13632434.2017.1374943
- Kalkan, Ü., Altinay Aksal, F., Altinay Gazi, Z., Atasoy, R., & Dagli, G. (2020). The Relationship between School Administrators' Leadership Styles, School Culture, and Organizational Image. *SAGE Open*, *10*(1). https://doi.org/https://doi.org/10.1177/2158244020902081
- Kenney, M., Jordan, K., & Curnow, M. (2019). Five steps to achieve sustainable culture and behaviour change. Peopletoo. https://peopletoo.co.uk/five-steps-to-achieve-true-culture-change-and-behaviour-change/
- Koh, G. A., & Askell-Williams, H. (2021). Sustainable school-improvement in complex adaptive systems: A scoping review. *Review of education (Oxford)*, *9*(1), 281-314. https://doi.org/10.1002/rev3.3246
- Kools, M., & Stoll, L. (2016). What Makes a School a Learning Organisation? OECD Publishing.
 Kuriloff, P. J., Andrus, S. H., & Ravitch, S. M. (2011). Messy Ethics: Conducting Moral Participatory
 Action Research in the Crucible of University-School Relations. Mind, brain and education,
 5(2), 49-62. https://doi.org/10.1111/j.1751-228X.2011.01110.x
- Longmuir, F. (2019). Resistant leadership: countering dominant paradigms in school improvement. *Journal of Educational Administration and History*, *51*(3), 256-272. https://doi.org/10.1080/00220620.2019.1583172
- Mitchell, J. (2002). The never-ending quest: effective strategy-making and change management for high-performing VET organisations; findings from an evaluation of pilot projects from the Reframing the Future sub-program on Strategic Management and Change Management, 2001-20.
 - $\frac{https://citeseerx.ist.psu.edu/document?repid=rep1\&type=pdf\&doi=3e6d830bd28369d575}{867afdd4c01af46d7952f8}$
- Mitchell, J. (2004). The skilling of VET change agents: findings from an evaluation of 11 change agents who were supported by Reframing the Future and funded through the Australian National Training Authority in 2003. https://www.voced.edu.au/content/ngv%3A34799
- Mulcahy, D. (2003). Leadership and management in vocational education and training: staying focussed on strategy. https://ncver.edu.au/data/assets/file/0021/5565/nr0004 1.pdf
- Palmer, I., Dunford, R., & Buchanan, D. A. (2017). *Managing organizational change : a multiple perspectives approach* (3. edition. ed.). McGraw-Hill Education.
- Peel, K. L. (2020). A Beginner's Guide to Applied Educational Research Using Thematic Analysis. *Practical assessment, research & evaluation, 25.*
- Petridou, E., & Chatzipanagiotou, P. (2004). The Planning Process in Managing Organisations of Continuing Education: The Case of Greek Vocational Training Institutions. *International*

- Journal of Educational Management, 18(4), 215-223. https://doi.org/https://doi.org/10.1108/09513540410538804
- Poole, M. S., Van de Ven, A. H., & Holmes, M. E. (2004). Theories of Organizational Change and Innovation Processes. In. Oxford University Press, Incorporated. https://doi.org/https://doi.org/10.1093/oso/9780195135008.003.0013
- Saunders, R. (2014). Effectiveness of research-based teacher professional development: a mixed method study of a four-year systemic change initiative. *Australian Journal of Teacher Education*, 39(4), 166-184. https://doi.org/https://doi.org/10.14221/ajte.2014v39n4.10
- SCFC. (2023). Sustainable Culture for Change AU. https://projects.au.dk/sustainable-culture-for-change/
- Schein, E. H. (2010). Organizational Culture and Leadership (4. Aufl. ed., Vol. 2). Jossey-Bass.
- Seashore Louis, K., & Lee, M. (2016). Teachers' capacity for organizational learning: the effects of school culture and context. *School effectiveness and school improvement*, *27*(4), 534-556. https://doi.org/10.1080/09243453.2016.1189437
- Solvason, C., Cliffe, J., & Snowden, M. (2018). Researching in school creating a meaningful school/university alliance: a reflection. *Educational Action Research*, *26*(4), 589-602. https://doi.org/10.1080/09650792.2017.1388828
- Stufflebeam, D. L., & Coryn, C. L. S. (2014). *Evaluation theory, models, and applications* (2nd ed., Vol. 50). Wiley.
- Velux. (2018). INTRODUCTION TO THE VELUX FOUNDATIONS' EUROPEAN VET DEVELOPMENT
 INITIATIVE 2018-28
 <a href="https://veluxfoundations.dk/sites/default/files/introduction-to-the-velux foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-velux-foundations-eu-ve
- Wahlgren, B., & Aarkrog, V. (2019). Developing a culture for change in VET. In (Vol. II, pp. 438-444). Trends in Vocational Education and Training Research: Proceedings of the European Conference on Educational Research (ECER): Vocational Education and Training Network (VETNET).
- Wereszczak, R. (2006). A change management model for improving the introduction and delivery of training packages: a pilot study in a Transport Training Centre. The Flinders University of South Australia.
- Widmann, A., Mulder, R. H., & Konig, C. (2019). Team learning behaviours as predictors of innovative work behaviour a longitudinal study. *INNOVATION-ORGANIZATION & MANAGEMENT*, 21(2), 298-316. https://doi.org/10.1080/14479338.2018.1530567
- Wierenga, S., Kamsteeg, F., Simons, P., & Veenswijk, M. (2015). Teachers making sense of result-oriented teams: A cognitive anthropological approach to educational change. *Journal of Educational Change*, *16*(1), 53-78. https://doi.org/10.1007/s10833-014-9240-2
- Zala-Mezö, E., Bormann, I., Strauss, N.-C., & Müller-Kuhn, D. (2020). Distributed Leadership Practice in Swiss "Eco-Schools" and Its Influence on School Improvement. *Leadership and Policy in Schools*, *19*(4), 673-695.
 - https://doi.org/https://doi.org/10.1080/15700763.2019.1631855