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Leading with care: four mentor metaphors in collaboration between teachers and researchers in action research (Translated from the Swedish and revised by the authors)

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ABSTRACT

Mentoring is a central aspect of action research processes and raises ethical issues concerning roles and responsibilities, particularly when teachers and researchers collaborate. The purpose of the study is to explore mentoring and the roles of mentors in action research from an ethical stance. The theoretical basis is the philosophy of care ethics developed by the American educational philosopher, Nel Noddings. Participants in the study included one researcher and three teachers with experience serving as mentors in action research. Data collection included written reflections and collegial conversations on mentoring. Thematic analysis and the domain interactional model were used in the analysis, where four mentor metaphors in action research emerged: the gardener, the shepherd, the teacher and the bridge-builder. All roles can be practiced at the same time; sensitivity determines when a mentor moves in and out of different roles. The study finds that care ethics can contribute to an increased understanding of mentoring as something situated and relational, where a symmetrical approach between mentor and mentee is emphasized. The goal of mentoring should not be to treat everyone equally, but instead to build relationships on the individual level in order to establish mutual trust based on individual needs. The study shows that the four mentor metaphors can serve as a useful tool for critical reflection on the complexity of the mentor role and accordingly, the renegotiation of stereotypical mentor roles in relation to the quality of teaching.

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Action research; collaboration; mentoring; teacher-researcher relationship; ethics of care; metaphors

Introduction

There is currently a great deal of interest in action research in schools, which emanates from teachers' questions and aims to develop the teaching practice through research and, by extension, to improve the quality of teaching and professionalism (Bergmark 2020b;

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2022; Hardy, Ronnerman, and Edwards-Groves 2018). Action research uses processes that are characterized by intervention, which are cyclical, iterative and involve teachers (van den Akker 1999). The goal of action research is to promote professional and personal development by sharing knowledge, experience and skills (Henthorn, Lowden, and McArdle 2022). This research approach aims to bring together action and reflection as well as theory and practice (Reason and Bradbury 2008). In such research, teachers are seen as professionals with the knowledge and competence to develop their practice together with researchers (Cochran-Smith and Lytle 1999; Johnson and Golombek 2002). The research is conducted *with* teachers rather than *on* teachers (Heron and Reason 2001; Ponte 2002). Teachers play an active role in the entire research process, formulating research questions, participating in data collection and analysis, and presenting results.

Mentoring is central to action research and raises ethical issues concerning roles and responsibilities, particularly when teachers and researchers collaborate (Bergmark 2020a; Olin et al. 2016). Both researchers and teachers can act as mentors (Rönnerman 2012); however, certain challenges arise in relation to mentoring in action research. For example, mentoring can be characterized by stereotypical images of what a researcher and a teacher should contribute and be responsible for in the action research process, which can lead to issues that impede the collaborative effort (Reimer et al. 1994; Olin et al. 2016). Both researchers and teachers may bring their own experience within research and teaching (theory and practice), which means that roles may not always correspond to traditional descriptions of what a researcher and a teacher are and do (Kemmis, McTaggart, and Nixon 2014). As a consequence, collaborations between researchers and teachers in action research challenges current power structures and consequently, roles and responsibilities, which means that the roles need to be problematized and perhaps reformulated (Bergmark 2020a).

The purpose of the study is to explore mentoring and mentor roles in action research from an ethical point of view. What are the characteristics of different mentor roles among teachers and researchers? What dilemmas can arise in mentoring situations in relation to the different roles, and how can these be addressed to promote development? What tools and strategies can mentors use to support the development of the research process?

Mentoring in action research

As previously mentioned, both researchers and teachers can be mentors in action research (Rönnerman 2012). It is possible to mentor individually or in a group (Henthorn, Lowden, and McArdle 2022). A researcher who mentors action research is often regarded as creating relationships and collaborating with teachers (Cochran-Smith and Lytle 1999; Cook-Sather 2007). Relationships are created between two professional groups, researchers and teachers, with both groups having specific knowledge and experience that can enrich the research process. Henthorn, Lowden, and McArdle (2022) argue that the mentor role includes 'building trust, listening actively, contributing to motivation, assisting with research process planning, inspiring, and providing opportunities for learning and connections with the literature and resources' (4).

Cornelissen and van den Berg (2013), who have investigated competencies that are favourable for mentors in action research projects, draw attention to tensions between collegial coaching in research projects and traditional mentoring. The

collegial coaching elements suggest that a mentor should be flexible, encouraging and have an open approach, while the mentoring relationship should be characterized by good communication and a symmetrical relationship. More traditional elements of mentoring in action research projects are that the mentor guides the participants' concrete actions, highlights examples of how and why action research can be conducted and plans the use of time. How mentors manage the balance between collegial coaching and traditional mentoring varies depending on who is being mentored and where in the process the participants are. There may also be tension between mentors' goals in traditional research contexts and action research. Cornelissen and van den Berg (2013) argue that mentors in action research place greater emphasis on the context, on strengthening the participants' ownership and on collaboration, which contributes to the development of both the teaching profession and practice.

In the mentoring relationship, disciplining processes may be present through unspoken expectations, preconceived notions and structural frameworks. It becomes a matter of disciplinary power that is exercised relationally through instruction and correction, but also through reward and encouragement. This disciplinary power can be expressed in the participants' wish to learn from each other, and to follow majority decisions and dominant collaboration norms, which can also lead to the stigmatization of colleagues (Langelotz 2014). Promoting a culture based on relational trust and mutual respect between mentor and mentee is, therefore, a prerequisite for action research (Edwards-Groves, Grootenboer, and Rönnerman 2016). The mentor's attitude, awareness and qualifications are important for what happens in the mentoring relationship and what learning becomes possible (Åberg 2009).

Mentor roles and metaphors

Different mentor roles have been described in previous research, and these are sometimes described in metaphorical terms. Handal (2007) describes two types of mentor roles expressed in two metaphors: *guru* and *critical friend*. The guru is a skilled professional, an expert who gives advice and corrects and praises the behaviours of the mentee. The mentor acts as a model for the mentee through her or his knowledge and experience, and the emphasis is on action. One risk with this type of mentoring role is that it can reproduce current practice while the mentee 'copies' the guru's actions without any deeper reflection. Instead, the critical friend is a mentor who uses critical reflection and theories to guide the mentee towards insights, which contributes to development. For the critical friend, it is important to create trust in the mentoring relationship. The focus here is thinking and reflection. However, there is also a risk with this mentor role; for example, the mentee may expect concrete advice and expert tips (which a guru provides). If the critical friend does not provide what is expected, confusion and mistrust may arise in the mentoring relationship.

This dichotomy has been criticized, as the strict division of the mentor's role can be seen as an expression of a stereotypical approach (Jernström 2007). Handal (2007) argues that he clearly distinguishes between the roles for analytical purposes and in practice, the two roles must instead be combined. The strategies and tools that a mentor uses in mentoring depend on the context, the mentors and the mentees.

Both research and our own experience show that the two metaphors, guru and critical friend, cannot sufficiently make visible and problematize mentoring and mentor roles in action research. Thus, there is a need to make visible further metaphors for mentoring in action research.

Theoretical framework

The theoretical basis of the study is American educational philosopher Nel Noddings' ethics of care. Her philosophy lends itself to discussions about mentoring in action research, since mentoring processes, just like ethics of care, are relational and situated. Ethics of care (Noddings 2002, 2012, 2013) has often explored relationships between teachers and students in school, but studies looking at the relationships between researchers and teachers are sparse. Despite this, there are examples where ethics of care has been used to problematize roles between adults who collaborate in research processes (Bergmark 2020a). In structurally equal relationships, for example, between two adults, the parties can act as caregivers and recipients of care (Noddings 2012). This is where we find support for the application of ethics of care to study mentoring and mentor roles in action research: the mentoring is carried out by adults, either as teacher mentors or research mentors, and the recipients of care include the teachers who participate in the research process – the mentees.

In ethics of care, ethics is perceived as something relational and situated. This can imply that people show interest in each other's thoughts and perspectives and adapt to the situation, which then can result in compromises. The relationship to, responsibility for and needs of the other motivate actions, not rules or virtues (Noddings 2012, 2013). Care is a mutual act – a relationship between a caregiver and a recipient of care, for example, between teachers and students. To provide care to the other, the caregiver must get to know the recipient. This involves looking for signals that the care has been received, which then completes the care action. Ethics of care does not automatically imply reciprocity, which means that people cannot expect mutual care. People are only responsible for own actions leading to acts of caring (Noddings 2013).

Method

Data collection and analysis

Participants in this study included a researcher (Ulrika) and three teachers (Ann-Charlotte, Anna-Karin and Sara), all with multiple experiences of leading different action research projects in municipal schools. All projects were finished before this study was conducted. Accordingly, two different perspectives on, and roles in, mentoring could be described and studied.

Data collection

The participants in the study met on four occasions to reflect on their mentoring experiences. They collectively decided what issues to focus on at the meetings, each of

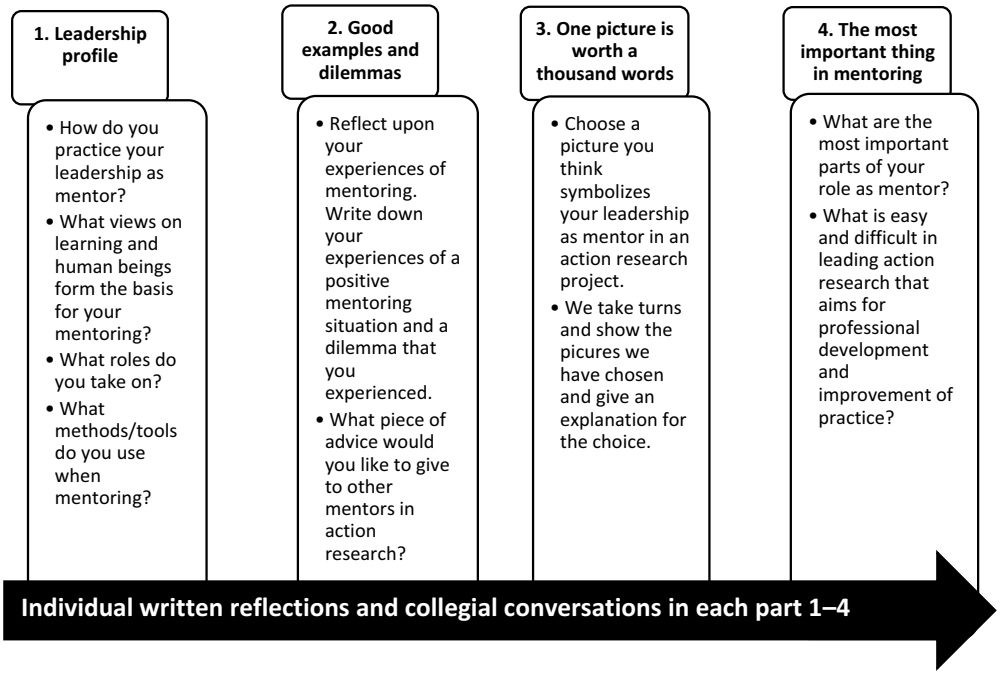

Figure 1. Data collection methods and issues.

which lasted about three hours. Methods for data collection consisted of written reflections and collegial conversations (see Figure 1).

Each part of the data collection (1–4) started with an individual written reflection on a theme as described in Figure 1 (approximately 1–2 A4 pages each). The authors shared their individual reflections and processed each theme in a collegial conversation, documented through notes, mind maps and audio recordings. The authors then transcribed the recordings verbatim.

Analysis method

We have chosen to use metaphors as an analytical tool in the research process. The strength of the metaphor is that it can communicate a message effectively and directly. The metaphor can make the text more understandable and worth reading. Bjursell (2017) describes four areas where metaphors are used to understand an object or an idea. First, a metaphor as an *artifact*: the metaphor is unreflectively used as a natural part of language and expresses a self-evident meaning (linguistic artifact). Second, metaphor as *inspiration*: the metaphor inspires, forms a creative element in the analysis and enables an increased understanding and challenges preconceived conclusions. Third, metaphor as *representation*: the metaphor constitutes an eye-opener for everyday metaphors expressed through, for example, interviews, observations or written reflections. Fourth, metaphor as *expression*: the metaphor helps compose scientific texts by emphasizing essential parts. Using metaphors can also create a certain style when communicating research results (Bjursell 2017). In this study, we use metaphors as inspiration and as expression.

The use of metaphors has facilitated the creative process in the analysis and helped bring the research results to life. Bjursell (2016, 2017) argues that presenting research results through metaphors is a way to illustrate and contextualize content effectively and pedagogically. Metaphors can also make ambiguities and complexities visible. Bjursell (2016) emphasizes that critical reflection in combination with systematics is central when using metaphors in research, something we have applied throughout the analysis process. In the analysis, we have oscillated between different steps, but in Figure 4, we describe the process linearly. Our research questions have formed the basis for the analysis process.

The analysis process began with an individual thematic analysis (Bryman 2018) of the data material (1–4) based on written reflection questions: What characterizes good mentoring, what dilemmas can arise, and what thoughts and new reflections are raised based on the texts on leadership profiles? At this point, we performed an initial analysis of our experiences regarding mentoring and mentor roles. During the collegial conversation, we created a mind map of themes based on the individual analysis (see Figure 2).

Based on this mind map, we compiled mentoring advice (see Figure 3).

These two steps in the thematic analysis resulted in central themes around mentoring and mentor roles. The process then turned into a metaphor analysis according to the three steps Cornelissen (2005) calls the domain interaction model (see Figure 4). The first step (1) concerns developing a summary structure by identifying different terms and

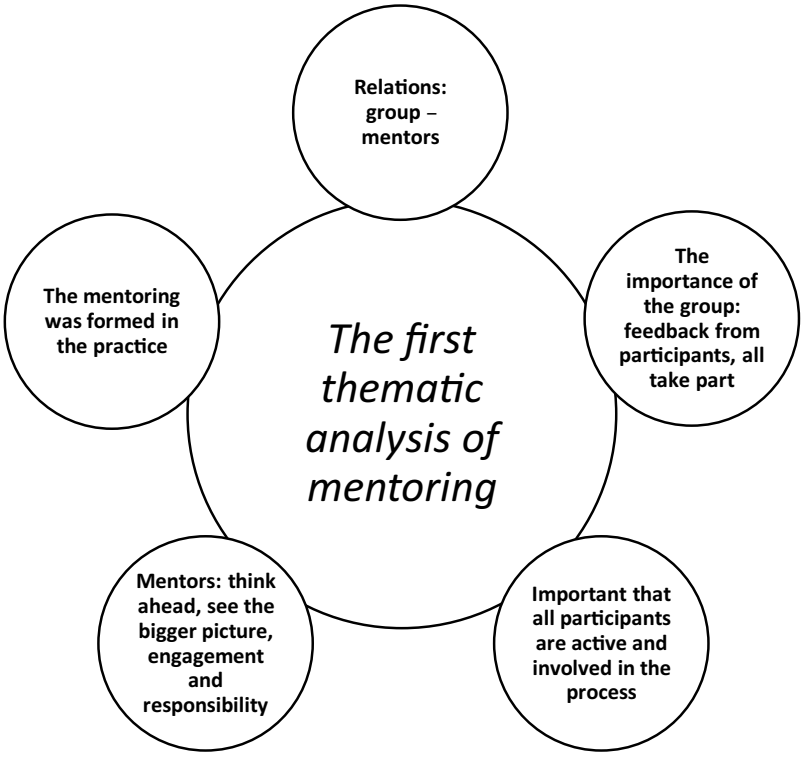

Figure 2. The analysis process: thematic analysis and the domain interaction model.

Advice	
	Anchor the aim of the action research: reflection and discussion about the background to the aim as well as expectations and concerns about the process
	Talk about roles in the action research: expectations and responsibility
	Define time and possibility to prioritise the action research conditions
	Be a dialogue partner and develop models for the collegial conversations
	Dare to be a mentor: be someone who walks along the participants in action research, be one step ahead, use a meta perspective in mentoring
	Build trust in the process: flexibility, dare to experiment, explore and refine
	Develop sound communication

Figure 3. The first thematic analysis of mentoring.

Thematic analysis

Individual analysis based on written reflections and shared analysis in collegial conversations – **mindmap** and compilation of **advice**.	What signifies good mentoring and what dilemmas can arise? What thoughts and reflections are evoked based on our text about the leadership profiles?

Domain interactional model

Development of a structure *(1) Development of a generic structure*	
Developing a summary structure based on the thematic analysis.	Inventing and identifying different metaphors.

Formulation of metaphors *(2) Development and elaboration of the blend*	
The metaphors are developed and formed in a creative process.	Condensation: Nine metaphors become four. Exploring the interaction between the two areas of knowledge, i. e. mentoring and metaphors.

Grounding in theory *(3) Emergent meaning*	
The deeper understanding of the metaphors of mentoring and mentor roles is interpreted with the help of theory.	Nel Noddings' ethics of care contributes to increased understanding of mentoring as something situated and relational. The texts about the metaphors are formulated based on the data material and Noddings' texts.

Figure 4. Summary of advice.

concepts used to describe a specific metaphor. In the present study, the concepts of function, characteristics, tools, strategies and roles have helped us construct the meaning of various metaphors related to mentoring.

The second (2) step is about developing and preparing the mix that arises from the two areas of knowledge, i.e. mentoring and metaphors. At this stage, we conducted a meta-reflection on various metaphors, which was conducive to the consolidation process whereby nine metaphors were reduced to four: the gardener, the shepherd, the teacher and the bridge builder. When formulating the four metaphors, we verified interpretations by going back to the empirical material and testing the metaphors. Thus, the metaphor descriptions constitute a written representation of mentoring experiences. In the last and third (3) step of the domain interaction, the emerging meaning of the metaphors was placed in a theoretical context. To verify this in-depth understanding of mentoring and mentor roles, we related the insights to Noddings' (2012, 2013) ethics of care, where the relational and the situated perspective formed the common denominator.

Using metaphors to describe complex phenomena has given rise to discussions within research (Alvesson and Spicer 2012). Metaphors are not always possible to translate into an exact and objective language, and there is a risk that they will obscure the meaning instead of providing greater clarity. Alvesson and Spicer (2012) illustrate the challenge of setting aside an enticing metaphor and choosing a less elegant but accurate and well-thought-out description instead. In the analysis of metaphors, there is a risk of emphasizing similarities instead of contradictions and collisions, which can lead researchers to ignore the complexity of the studied phenomenon. The reason we have decided to use metaphors in this study despite the pitfalls described above is the distinct way in which they, through a well-known context, can illustrate and bring to life different functions, skills, opportunities and challenges in mentoring.

The present study is based on our shared memories of mentoring experiences. One can argue that we cannot reproduce utterances verbatim from the various mentoring situations. However, we believe that the metaphors we develop are not exact memories, but ex-post constructions based on our experiences, which help us describe and understand mentoring and mentor roles. We rely on the work of Kourken (2011), who argues that what we remember is both a construction and a reconstruction. Memory is not a literal memory trail but reflects the content of lived experiences. Based on this, we argue that we can use our memories when creating metaphors.

Ethical considerations

In the research community, many have strong opinions against performing research in social environments where the researcher is strongly committed or professionally active, as this can present a series of problems and challenges. Researching one's own practice in action research can, for example, affect confidentiality, as participants cannot remain anonymous (Närvänen 1999). However, this was not a problem in the present study as the authors, who were also participants in the study, agreed to make their identities visible. Another challenge when researching one's own practice is that the participants may become too involved in their practice, thus complicating potential changes in perspectives (Helps 2017). We have considered this challenge and have therefore used theoretical reasoning to distance ourselves

from our own experiences. With the support of Hansson (2014) and Lundqvist (2010), we believe that pre-understanding and contextual experience are vital instruments for shedding light on research problems from within. By including pre-understanding throughout the research process: when formulating research questions and taking a stand on methodological issues, choosing data and analysis methods, and consciously making these positions visible, it becomes ethically defensible to research one's own practice. Helps (2017) argues that the benefits of performing research in one's own practice outweigh the challenges. She further describes that the transparency of ethical processes becomes an important factor when the researcher applies a research perspective to her practice. We therefore argue that ethical dilemmas can be adequately addressed by being consciously explicit and openly presenting our position in the text.

Findings

Our experiences are presented in the findings using metaphors, made visible through examples from individual written reflections and collegial conversations. On a general level, it can be said that both the research mentor and the teacher mentor had different roles when mentoring: 'As a researcher in action research, I have taken on different roles: researcher, teacher, school developer, inspirer, encourager, challenger, networker' (written reflection, Ulrika) and 'As a project manager, I have been a meeting leader, fixer, secretary, coordinator, mouthpiece, pusher, planner, analyst, conversation partner' (written reflection, Anna-Karin). Below is a description of the four metaphors identified in the data material.

The gardener

Being a mentor in an action research project can be compared to being a gardener, whose primary purpose is to promote the mentees' growth and development. Such a mentor focuses on creating good conditions for growth and learning, but at the same time, takes care of the process by providing nutrition based on the needs of the mentees. The mentor can promote growth by acting as a conversation partner and sounding board for the participants. 'To be the type of conversation leader who listens to thoughts and, when needed, drives the conversation forward is complicated and requires training' (written reflection, Ann-Charlotte). Leading discussions is a fundamental aspect of the mentor role. The mentor as a gardener can give advice and encouragement and challenge the mentee to reflect on the progression of the process. Essential qualities of the mentor as a gardener are the ability to be caring, trusting and adaptable: '[. . .] to water when required and to clean when needed [. . .] [to be] sensitive and flexible and there must be trust that this little plant will be something in a year, to let time have its way' (collegial conversation, Ulrika).

A gardener also has the task of preparing and creating good soil for growing. In action research, it is about preparing good conditions for participation, for example, time for teachers and mentors to meet. In this way, teachers have the necessary space to conduct development work, further postponing other development work.

> In my role as leader, I try, to a certain extent, to protect the time of other teachers – that is, I take on things like speaking for the group, taking stock of what thoughts and ideas are in the group, and bringing it together into something we can work on further (written reflection, Anna-Karin).

For something to grow, nutrition is necessary, for example, sun, water and fertilizer. A mentor can provide nutrition by sharing knowledge about how to carry through a research process in school. Grooming and pruning are other parts of a gardener's job. In action research, this can mean that the mentor asks critical questions and examines the process. The mentor may have to point out the paths the participants cannot follow, even though they might find them appealing.

A problem with the gardener as a metaphor is that a participant in an action research project can hardly be compared to a plant, passively waiting for the gardener's care. On the contrary, a plant can be considered active since it harbours inner strength. Transferred to action research, it may turn out that participants have an inherent power, which the mentor can help them use. 'Everyone has development potential. Everyone has something to learn, and everyone can contribute with one's experiences. We can learn from each other. We have various abilities and we have reached different stages in development' (written reflection, Anna-Karin).

Reflection on the gardener based on care ethics

The research mentor and the teacher mentor promote growth in somewhat different ways. The research mentor is located further away from the participants. The distance makes it easier for researchers to obtain an objective overview of the growth. It also aids in the decision of what needs to be pruned or nourished, for example, through reading research or using scientific tools for reflection. For the teacher mentor, it is about constant movement within the growing environment, facilitating the growth and, if necessary, providing nourishment or grooming. On the other hand, it is difficult for both mentors to protect plants from external influences and circumstances beyond their control.

The gardener can be related to Noddings' (2012, 2013) care ethics. In order to have a garden with a diversity of plants, care acts must be based on the needs of the recipients of care. The gardener must therefore find out what conditions different plants need to grow and then adapt his or her actions to the specific situation instead of the rules. 'To care is to act not by fixed rule but by affection and regard. It seems likely, then, that the actions of the one-caring will be varied rather than rule-bound' (Noddings 2013, 24). That means that the mentor should get to know the caregivers, in this case, the participants in the action research project. Being a mentor who 'knows best' what the care recipient requires can prove difficult from a care ethics perspective. Since the mentor analyses the care recipients' needs based on their knowledge and competence, care and pruning are also rooted in caring for the mentee.

The shepherd

Being a mentor in an action research project can also be compared to being a shepherd, whose main task is to keep the herd together while leading the expedition. The shepherd decides where to go and how to get there. Meanwhile, the shepherd ensures that the

sheep are safe and sound. Similarly, the mentor in action research plans how the group can reach a jointly designated goal without dispersing along the way. In action research, the participants construct the path while walking. Despite an initial itinerary, readiness for change is ever-present. The changing nature of action research demands time and opportunities to meet for joint reflection, which the mentor should plan for before the project starts.

The shepherd knows how to orientate in the terrain. If the path is difficult to access, the shepherd removes obstacles and calms anxious participants. 'The shepherd may have to be quite straightforward: this will go well; we do not yet know the way, but I will guide you' (collegial conversation, Ulrika). The research mentor's scientific competence makes this part of the mentor's role less challenging. The teacher mentor may lack academic skills and will therefore need to prepare more thoroughly and work closely with the research mentor.

Another shepherding task transferable to action research mentoring is keeping the group together. Even if the route is marked out, some participants may go ahead, eager to arrive at the destination. Some are used to moving fast, while others progress more slowly. The mentor's task is to reduce the distance between the different participants.

> Similarly, I imagine that a shepherd must be there for both those at the front of the flock and those who slip behind. I have found it hard to keep the group together at certain times when it has become stretched out (written reflection, Sara).

Through digital platforms, the participants can stay in touch with each other, communicate and locate other group members. Keeping the party together enables collective experiences and joint learning. 'Gathering the thoughts raised in the group, being a reflective questioner, asking forward-looking questions, transforming words into action, being distinct and giving advice when needed is vital for bringing the process forward' (collegial conversation, Ann-Charlotte).

All participants bring different skills and knowledge from which the group can benefit. To keep the group from breaking apart, the mentor can move between participants, alternately pushing and pulling. The mentor can help those who have fallen behind by cheering and showing confidence in their competence or by demonstrating how to overcome obstacles. The participants who run ahead are less of a problem, as they can quickly return to the group for joint reflection. Participants who explore different paths than the rest of the group constitute a specific dilemma, as they can lose focus on the shared goal. Conflicts can arise if they refuse to return or encourage others to follow. The classic shepherd would merely bring back the lost sheep, but in a process based on active participation and cooperation, such an authoritarian leadership style is a dubious option. Instead, a climate with open discussion may enable a continued journey with a goal the participants accept. 'The leader must perform a balancing act between encouraging participation and telling how to proceed' (collegial conversation, Anna-Karin).

Comparing mentors in action research projects with shepherds is problematic, since this metaphor can evoke the image of the participants as passive sheep. That is not the intention here and is far from reality. Those who voluntarily participate in action research projects are active individuals eager to develop within their profession.

Reflection on the shepherd based on care ethics

The research mentor and the teacher mentor have slightly different tasks in the role of shepherd. The research mentor plans the route and knows how to orientate in the academic landscape. The teacher mentor walks with the group, keeping it together, thus being the first to notice participants who lag behind or run ahead. If an emergency occurs, the teacher mentor may be alone with the group and needs to be able to handle problems on the spot, but preferably, the two mentors will solve serious conflicts together. The tasks of the shepherd include keeping the group together, which can be difficult when conflicts arise because of different wishes. Here Noddings argues that it may be justified to leave some conflicts be: 'Sometimes, the conflict cannot be resolved and must simply be lived' (2013, 55). Occasionally, challenges in mentoring can arise due to different personalities in the teaching group. Noddings (2013) states that '[. . .] the teacher cannot be "crazy about" every child [. . .] but the teacher can try to provide an environment in which affection and support are enhanced' (61). In such contexts, it is essential to maintain professional leadership.

The teacher

Being a mentor in an action research project can also be likened to being a teacher: 'It's almost as if the researcher becomes a teacher, I get asked for my knowledge of research and then I almost become a teacher, that I teach, "this is what you can do when you have to analyse"' (collegial conversation, Ulrika). A teacher's task is to plan for teaching and learning based on the curriculum. The person who leads an action research project has no governing document but needs a stated task, something the participants or the principal can assign to the teacher mentor that grants them the authority to lead the group. 'It's about getting a mandate both from colleagues and from the principal but also from the researcher' (collegial conversation, Anna-Karin). Based on the governing documents, the teacher makes decisions regarding teaching materials and methods for achieving the goals. As a teacher, the research mentor's tasks include choosing scientific articles and appropriate literature based on set goals and informing the participants about methodology and theories, as well as showing how a scientific approach can permeate the process. The mentor as a teacher can foster participation and make the participants' learning visible by presenting different conversation models, reflection tools and documentation methods. A mentor can inspire by sharing their own experiences of research processes:

> In all projects, the different roles and not always knowing where an action research process could lead have been experienced as a frustrating phase. My role here has been to pep up and say that it is normal and that that will be resolved by itself over time. Then, it is my role to communicate what they have already accomplished and find a structure for the future, for them to feel confident in the process and me as a mentor. (written reflection, Ulrika)

A teacher can use feedback and formative assessment to help students deepen their learning. It can be compared to the mentor's ability to see and assess where in the process the participants are and what support they need to develop. The mentor needs to create relationships with the participants and nurture them, so that learning through action research becomes a joint project that engages the participants. Relational abilities are described as follows: 'The importance of seeing everyone involved and being able to be

empathetic. To be present. It can also be to encourage. This is an approach I want to practice. To see those who are there to confirm them' (collegial conversation, Ulrika).

A mentor in action research neither assesses colleagues' efforts nor sets grades, which means that the teacher as a metaphor can be problematic. Another problem with the metaphor is that the mentees are also teachers:

> I do not have the feeling that I have actually mentored my colleagues, but that we have worked together, and I have kept the baton. We have solved difficulties together. If I have succeeded with my mentoring, it is probably mostly because I have contributed to a mood in the group where we work together in a symmetrical relationship and so actually moved on together (written reflection, Sara).

It may be difficult to stand up among colleagues as a leader, and it is possible that a teacher mentor will have less experience than his or her colleagues on the subject of the investigation. However, the research mentor's analytical ability helps to make larger patterns visible in illustrating and drawing conclusions from the work together with the participants. Just as within the school, the results of a joint work must be reported to others. The mentor can create opportunities for the participants to talk about their learning with other people outside the project.

Reflection on the teacher based on ethics of care

Both the research mentor and the teacher mentor act as teachers, but there is a risk that the group will enter into a more passive student role in the encounter with the research mentor and will expect him or her to be the one who drives development forward. In this role, it becomes evident that the research mentor comes with expert competence regarding scientific work, and thus, teaching situations frequently arise. Choosing teaching materials and teaching methods largely falls on the research mentor, even if it is done in collaboration. The teacher mentor will be present in the classroom, ensure that there is a good working climate, handle ongoing issues and motivate the group to continue working. The mentors work together to ensure that the participants carry out the tasks that the group has agreed on. Being a teacher to teachers presents other unique dilemmas; for both mentors, it can be problematic to place demands on participants who have chosen to participate in an action research project but, for various reasons, have not fulfilled joint agreements.

The teacher as a mentor constantly moves between the learning object, the people who are to acquire knowledge and the relevant context in which the learning takes place. Although the learning object is important, the focus in Noddings' care ethics is primarily on the person participating in a dialogue. 'People in true dialogue within a caring relation do not turn their attention wholly to intellectual objects, although, of course, they may do so for brief intervals. Rather, they attend nonselectively to each other' (Noddings 2002, 17). According to Noddings (2002, 19), dialogue means an opportunity to understand other people: 'Dialogue is the means through which we learn what the other wants and needs, and it is also the means by which we monitor the effects of our acts. We ask, "What are you going through?" before we act, as we act, and after we act. It is our way of being in relation.' Communication in the form of dialogue is a way for the mentor to create and maintain relationships in the group.

The bridge builder

Bridge construction is something that both the research mentor and the teacher mentor are involved in. Perhaps, the research mentor is more of an architect, but the work requires that both mentors are equally active in the construction process.

> I see myself as a bridge in many respects. As a process leader in an action research process, I have formed a bridge between the teacher group and school management, between teachers and researchers, between the various participating teachers, and between our project and other projects (written reflection, Sara).

There are many dimensions in the bridge metaphor, but when the bridge stretches between the abutments of school and university, both mentors contribute knowledge, experience and contacts within each activity, which is crucial for durable structures. The bridge builder's specific challenge lies in the difficulty of continuously building while people are waiting to walk, or are already walking, on the bridge.

A bridge builder should unite people, take them past obstacles and make it possible for them to see reality from the perspective of others. 'Relations are critical to me at work, and I like to talk about my weaknesses, hoping that this will contribute to a non-prestigious atmosphere in the group. I generally enjoy talking about what I do, whether successful or not' (written reflection, Sara).

A problem with the bridge builder as a metaphor is that the exact calculations that form the basis for physical bridges can never completely be transferred to the bridge building that takes place in an action research process. Here, the building blocks are soft and constantly changing, structures are created through conversation and the exchange of experiences, and the tools can be constructed momentarily. Despite these problems, there is a strength in the bridge builder as a metaphor for mentoring in an action research process, where one of the mentor's most important tasks is to build structures that make it possible to overcome obstacles that separate people and prevent them from achieving their goals.

Reflection on the bridge builder based on ethics of care

The importance of uniting people is also emphasized in Noddings' ethics of care: 'an invitation to see things from an alternative perspective' (2013, 32) and '[t]he one-caring assumes a dual perspective and can see things from both her pole and that of the cared-for' (63). The mentors in action research projects are active bridge builders, at the same time as they continuously move between the bridge abutments. The participants in the project also walk on the bridge, and in action research processes, walking can be symbolized by the movement between theory and practice, between university and school. The bridge, which unites people, leads to many encounters where individuals constantly alternate between being caregivers and care receivers, which creates opportunities to overcome any differences in approach and practice. 'But throughout the dialogue, participants are aware of each other; they take turns as a carer and cared for, and no matter how great their ideological differences may be, they reach across the ideological gap to connect' (Noddings 2002, 17).

Discussion

The study presented in this paper aimed to explore mentoring and mentor roles in action research from an ethical stance. Regarding the research question: 'what characterizes different mentor roles as teachers and researchers', the study has identified four metaphors: the gardener, the shepherd, the teacher and the bridge builder, which describe the roles a mentor can practice in action research. Thus, the results in this study go beyond the metaphors guru and critical friend, which have been identified in previous research (Handal 2007). The four metaphors create a more in-depth understanding of mentoring and mentor roles as complex constructs that cannot be captured by metaphors that describe polar endpoints: guru on the one hand and critical friend on the other. The four roles illustrate a palette of mentor roles between which mentors move rather than two dichotomies. Essentially, the various mentor roles are transferable to both the research mentor and the teacher mentor, even though there are differences in how they are expressed, as described above in the results section. It is possible to practice the roles simultaneously in an action research process, and sensitivity determines when a mentor moves in and out of different roles. Mentors take on all of these roles to some extent, but which one dominates varies between different people and different phases in the process. Mentoring in action research is both situated and relational. Thus, it can be related to Noddings' ethics of care, which states that caregivers base their caring actions on the recipient's needs (Noddings 2012, 2013).

The mentors' mobility between different roles can further be related to how the mentors in Cornelissen and van den Berg's (2013) study handle the tension between collegial coaching and more traditional mentoring. The contradiction between trust and respect in action research (Edwards-Groves, Grootenboer, and Rönnerman 2016) and the situation's disciplining processes (Langelotz 2014) requires mentors to be able to move between different positions in the relational field. By using these four metaphors to illustrate how mentors take on different roles, we address the complexity that characterizes mentoring in action research. Collaboration between teachers and researchers in research can challenge stereotypical notions of roles (Kemmis, McTaggart, and Nixon 2014). Henthorn, Lowden, and McArdle (2022) claim that the mentoring role can evolve and deepen when mentors collaborate and share insights, which leads to knowledge that is more profound than a single mentor can give. In our case, teachers and researchers mentored together, which enriched the process by providing different perspectives and experiences. We believe that using metaphors can contribute to a reconsideration of mentor roles and loosen the boundary between the perceptions of teacher mentors and research mentors. As action research increases in schools, where teachers with masters or doctoral degrees lead projects, mentor roles will be challenged and changed over time. In addition, action research often involves closer collaboration with researchers, which contributes to changing mentor roles. The consequence is that the roles tend to converge because teacher mentors and research mentors can have both scientific and teaching knowledge (see, for example, Kemmis, McTaggart, and Nixon 2014).

Concerning the second research question; 'what dilemmas can arise in mentoring and how can these be addressed', the study has identified different expectations for each mentor role, which can create challenges in the mentoring relationship. The situated and relational perspectives that characterize mentoring in action research can lead to

dilemmas for a mentor. Here, Nel Noddings' ethics of care contributes perspectives for dealing with various challenges and problems. All groups are different, and the need for varying care actions can be challenging for a mentor. There is also a risk that the mentor, eager to meet the needs of others in care situations, becomes too selfless and undermines herself as a mentor. A dilemma that may arise is that the mentee's perceived need for care differs from the requirements perceived by the mentor. If the mentoring is based on the mentor's perception, there is a risk that the mentee does not perceive the care provided (Noddings 2002, 2013). If the mentee does not feel that the mentor meets the needs, he or she may experience shortcomings in the mentoring relationship. Based on the ethics of care, the mentor may have to show consideration by making difficult decisions or saying things that can lead to conflict. To prevent this from hindering the development process, it is crucial to communicate. The mentor must constantly balance between challenging and supporting the mentee. Another difficulty that mentors encounter is related to time. Building relationships and showing care requires time according to the ethics of care, and research processes are often limited in time. It can sometimes be the case that mentors, who act out of care for a participant, must weigh long-term and short-term needs against each other. What is best for the participant in the long term may differ from what benefits the project in the short term. Additional challenges for a mentor can be protecting the process and the participants from external influences and, at the same time, collaborating and creating contact surfaces. Another challenge lies in reining in enthusiastic participants who set out on the wrong path without them losing their job satisfaction and curiosity. In a relationship characterized by symmetry, it can be problematic to make demands in one moment and in the next moment encourage participation and ownership. Keeping a heterogeneous group together when walking a path under construction is a challenge when performing action research. It requires the mentor to adapt to different situations and individuals and have good relational skills.

Relating to the third research question: 'what tools and strategies can a mentor use to support the development of the research process', the present study sheds light on different strategies for dealing with dilemmas that arise. It is essential to assess where in the process the mentees are and thus their need for support. Even if the participants in an action research project form a group, the mentor must meet the participants as individuals. A mentor's strategy can be to listen and show a genuine interest in understanding the process from the mentee's standpoint. Dialogue and communication make it possible to understand the perspectives of others, and flexibility is necessary to be able to lead a process where the participants construct the path while walking on it. The mentor should be prepared to re-evaluate the situation and reconsider decisions. He or she can use additional tools, such as research and scientific methods; reflection tools, such as collegial conversations and logbooks; and digital tools to facilitate communication.

Based on the results of this study, we argue that our metaphors highlight the complexity of mentor roles, thus contributing to the reflection base and reformulation of stereotypical mentor roles. The metaphors we use here can also highlight dilemmas that mentors face in action research and offer strategies for dealing with them.

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References

Alvesson, Mats, and André Spicer, eds. 2012. Ledarskapsmetaforer: att förstå ledarskap i verkligheten *[Leadership metaphors: to understand leadership in practice]*. Lund, Sweden: Studentlitteratur.

Bergmark, Ulrika. 2020a. "Rethinking Researcher–Teacher Roles and Relationships in Educational Action Research Through the Use of Nel Noddings' Ethics of care"." *Educational Action Research* 28 (3): 331–344. https://doi.org/10.1080/09650792.2019.1567367.

Bergmark, Ulrika. 2020b. "Teachers' Professional Learning When Building a Research-Based Education: Context-Specific, Collaborative and Teacher-Driven Professional Development." *Professional Development in Education* 49 (2): 210–224. https://doi.org/10.1080/19415257.2020.1827011.

Bergmark, Ulrika. 2022. "The Role of Action Research in teachers' Efforts to Develop Research-Based Education in Sweden: Intentions, Outcomes, and Prerequisite Conditions." *Educational Action Research* 30 (3): 427–444. https://doi.org/10.1080/09650792.2020.1847155.

Bergmark, Ulrika, Ann-Charlotte Dahlbäck, Anna-Karin Hagström, and Sara Viklund. 2022. "Att leda med omsorg: fyra handledningsmetaforer i aktionsforskning"." *Pedagogisk forskning i Sverige* 27 (2): 28–53. https://doi.org/10.15626/pfs27.02.02.

Bjursell, Cecilia. 2016. "When Theories Become Practice - a Metaphorical Analysis of Adult-Education School-leaders' Talk." *European Journal for Research on the Education & Learning of Adults* 7 (2): 191–205. https://doi.org/10.3384/rela.2000-7426.rela9084.

Bjursell, Cecilia. 2017. "Metaphors in Communication of Scholarly Work." In *Handbook of Qualitative Research Techniques and Analysis in Entrepreneurship*, edited by Helle Neergaard and Claire Leitch, 170–184. Cheltenham, United Kingdom: Edward Elgar Publishing. https://doi.org/10.4337/9781849809870.00017.

Bryman, Alan. 2018. Samhällsvetenskapliga metoder *[Methods of social science]*. 3rd ed. Stockholm, Sweden: Liber.

Cochran-Smith, Marilyn, and Susan Lytle. 1999. "The Teacher Research Movement: A Decade Later." *Educational Researcher* 28 (7): 15–25. https://doi.org/10.3102/0013189X028007015.

Cook-Sather, Alison. 2007. "Translating Researchers: Re-Imagining the Work of Investigating students' Experiences in School." In *International Handbook of Student Experience in Elementary and Secondary School*, edited by Dennis Thiessen and Alison Cook-Sather, 829–871. Dordrecht, The Netherlands: Springer Netherlands. https://doi.org/10.1007/1-4020-3367-2_33.

Cornelissen, Joep P. 2005. "Beyond Compare: Metaphor in Organization Theory." *Academy of Management Review* 30 (4): 751–764. https://doi.org/10.5465/amr.2005.18378876.

Cornelissen, Frank, and Ellen van den Berg. 2013. "Characteristics of the Research Supervision of Postgraduate teachers' Action Research." *Educational Studies* 40 (3): 237–252. https://doi.org/10.1080/03055698.2013.870881.

Edwards-Groves, Christine, Peter Grootenboer, and Karin Rönnerman. 2016. "Facilitating a Culture of Relational Trust in School-Based Action Research: Recognising the Role of Middle Leaders." *Educational Action Research* 24 (3): 369–386. https://doi.org/10.1080/09650792.2015.1131175.

Handal, Gunnar. 2007. "Handledaren – guru eller kritisk vän?" In Handledning i pedagogiskt arbete *[Mentoing in pedagogical work]*, edited by Tomas Kroksmark and Karin Åberg, 19–31. Lund, Sweden: Studentlitteratur.

Hansson, Kristina. 2014. "Skola och medier: aktiviteter och styrning i en kommuns utvecklingssträvanden" [Education and media : Activities and governance in a municipality's development efforts]." PhD diss., Umeå University.

Hardy, I., K. Rönnerman, and C. Edwards-Groves. 2018. "Transforming Professional Learning: Educational Action Research in Practice." *European Educational Research Journal* 17 (3): 421–441. doi:10.1177/14749041176904.

Helps, Sarah. 2017. "The Ethics of Researching One's Own Practice." *Journal of Family Therapy* 39 (3): 348–365. https://doi.org/10.1111/1467-6427.12166.

Henthorn, Robert, Kevin Lowden, and Karen McArdle. 2022. "'It Gives Meaning and Purpose to What You do': Mentors' Interpretations of Practitioner Action Research in Education." *Educational Action Research* 1–17. https://doi.org/10.1080/09650792.2022.2106260.

Heron, John, and Reason. Peter. 2001. "The Practice of Co-Operative Inquiry: Research 'With' Rather Than 'On' People." In Handbook of Action research: Participative Inquiry & Practice, edited by Peter Reason and Hilary Bradbury, 179–188. Los Angeles: Sage.

Jernström, Elisabet. 2007. "I handledarens fotspår." In Handledning i pedagogiskt arbete *[Mentoring in pedagogical work]*, edited by Tomas Kroksmark and Karin Åberg, 143–164. Lund,Sweden: Studentlitteratur.

Johnson, Karen, and Paula Golombek. 2002. *Teachers' Narrative Inquiry as Professional Development*. Cambridge, United Kingdom: Cambridge University Press.

Kemmis, Stephen, Robin McTaggart, and Rhonda Nixon. 2014. *The Action Research Planner: Doing Critical Participatory Action Research*. Dordrecht, Singapore: Springer Singapore. https://doi.org/10.1007/978-981-4560-67-2.

Kourken, Michaelian. 2011. "Generative Memory." *Philosophical Psychology* 24 (3): 323–342. https://doi.org/10.1080/09515089.2011.559623.

Langelotz, Lill. 2014. "Vad gör en skicklig lärare? En studie om kollegial handledning som utvecklingspraktik." [What 'make(s)' a good teacher? A study of peer group mentoring as a practice of professional development]." PhD diss., University of Gothenburg.

Lundqvist, Catarina. 2010. "Möjligheternas horisont: etnicitet, utbildning och arbete i ungas berättelser om karriärer." [Horizons of opportunity: Ethnicity, education and work in young people's narratives about careers]." PhD diss., University of Linköping.

Närvänen, Anna-Liisa. 1999. *När Kvalitativa Studier Blir Text. [When Qualitative Studies Become Text]*. Lund, Sweden: Studentlitteratur.

Noddings, Nel. 2002. *Educating Moral People. A Caring Alternative to Character Education*. New York: Teachers College Press.

Noddings, Nel. 2012. *Philosophy of Education*. Boulder, CO: Westview Press.

Noddings, Nel. 2013. *Caring. A Relational Approach to Ethics and Moral Education*. Berkeley, California: University of California Press.

Olin, Anette, Gunilla Karlberg-Granlund, and Eli Moksnes Furu. 2016. "Facilitating Democratic Professional Development: Exploring the Double Role of Being an Academic Action Researcher." *Educational Action Research* 24 (3): 424–441. https://doi.org/10.1080/09650792.2016.1197141.

Ponte, Petra. 2002. "How Teachers Become Action Researchers and How Teacher Educators Become Their Facilitators." *Educational Action Research* 10 (3): 399–422. https://doi.org/10.1080/09650790200200193.

Reason, Peter, and Hilary Bradbury. 2008. *The SAGE Handbook of Action Research. Participative Inquiry and Practice*. Los Angeles: SAGE Publications Ltd. https://doi.org/10.4135/9781848607934.

Reimer, Meyer, Bruce, B. Kathryn, and Bertram Bruce. 1994. "Building Teacher-Researcher Collaboration: Dilemmas and Strategies." *Educational Action Research* 2 (2): 211–221. https://doi.org/10.1080/0965079940020206.

Rönnerman, Karin, edited by 2012. Aktionsforskning i praktiken – förskola och skola på vetenskaplig grund *[Action research in practice – preschool and school on scientific ground]*. Lund, Sweden: Studentlitteratur.

van den Akker, Jan. 1999. "Principles and Methods of Development Research." In *Design Approaches and Tools in Education and Training*, edited by Jan van den Akker, Robert Maribe Branch, Kent Gustafson, Nienke Nieveen, and Tjeerd Plomp, 1–14. Dordrecht, The Netherlands: Springer. https://doi.org/10.1007/978-94-011-4255-7_1.

Åberg, Karin. 2009. "Anledning till handledning. Skolledares perspektiv på grupphandledning." [Reasons for supervision. School leader's perspective on supervised group talk]". PhD diss., Jönköping University.