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Expanding the notion of 'ownership' in participatory research involving teachers and researchers

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ABSTRACT

This article provides a conceptual discussion of 'ownership' in various forms of participatory research. The discussion is grounded in our experiences from three research projects in science education. We seek to understand how and why ownership may be distributed between teachers and researchers at different stages in the research process. Looking at our projects in retrospect, we see that ownership was differently distributed at the initial stages. Then ownership distribution followed a similar pathway, as teachers gained ownership of implementation, whereas researchers reclaimed ownership of analyzing and disseminating the work. Our discussion departs from the idea that ownership relates to both 'risks' and 'benefits' as well as to both 'rights' and 'obligations'. Thereby, we can make visible some of the circumstances that steer ownership towards the teachers or researchers. For example, we highlight that ownership distribution may be influenced by guidelines for research ethics and inequalities in terms of administrative support structures available to researchers and teachers. Based on our discussion, we suggest a number of questions to initiate and support a continuous dialogue between teachers and researchers who plan to engage in participatory research.

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Ownership; participatory research; teacher-researcher collaboration; obligations; rights; recognition; research ethics

Introduction

Participatory research methods rests on the assumption that all participants in research are treated as knowledgeable co-researchers rather than as objects of study. With the advancement of various forms of participatory research in the field of education, follows possibilities of improving the relevance and impact of the research outcomes. These possibilities emerge in parallel to challenges regarding teachers' and researchers' roles in research. The idea of gaining multisided practitioner perspectives through participatory research is brought forward as a way to elaborate and enhance the understanding of findings (Tracy 2010) and as a way to bridge the gap between practice and research (Broekkamp and van Hout-Wolters 2007; Luft and Wong 2014). Yet, as Hamza, Palm et al. (2018) have pointed out, researchers often assume that 'closing the gap' means that practice should change to move closer to research, whereas practice seldom informs research in a substantial way. If the gap between research and practice is to be bridged, McIntyre (2005) argues, there is a need for a critical dialogue between teachers and researchers about their various kinds of knowledge and

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how these can be synthesized and incorporated into one's own practice. Such transactions between practices do not mean that the different professions merge into one, but that they can change and develop mutual understanding as a way to bridge the gap from both sides (cf. 'hybridization' in Hamza, Palm et al. 2018).

Sensevy et al. (2013) have suggested that teacher-researcher collaborations should rest on a principle of symmetry, implying the participants' equal responsibilities throughout the entire research process. However, in practice, a principle of symmetry is farfetched since teacher-researcher relationships typically are loaded with inequalities in terms of who has the higher status, who holds the funding, who states the problem, who has local practical knowledge, who interprets the joint work, and who writes its story (Andrée, Danckwardt-Lilliestrom, and Wiblom 2020; Bae 2005; Gutiérrez and Penuel 2014).

Striving to deepen the discussion on the researchers' and teachers' roles in participatory research, the current article engages with the notion of 'ownership'. Our aim is to contribute a conceptual discussion that expands the notion of 'ownership' in teacher-researcher collaborations in educational research. The discussion is empirically grounded in our experiences from three projects in science education, managed by the authors respectively and carried out in different forms of participatory research with teachers. Specifically, we will elaborate on how and why ownership may be distributed between teachers and researchers at different stages of a research project. Our discussion boils down to a number of questions that may initiate and support a continuous dialogue between teachers and researchers regarding ownership in participatory research projects.

Ownership in educational research

Ownership is a recurrent term in educational research literature on teacher-researcher collaborations. The term has been connected to teachers' involvement and empowerment (Gutierez and Kim 2017; Jones and Stanley 2010), agency (Pantić 2017; Penuel 2014), voice (Kirk and MacDonald 2001), ethics and knowledge (Cochran-Smith and Lytle 2007), and power and control (Hamza, Piqueras et al. 2018; Richardson 1992). Although 'ownership' is rarely explicitly defined in the literature, it often appears as something that automatically goes to the researcher, who then may choose to share it with the teachers participating in the collaboration. Moreover, 'ownership' is generally portrayed as inherently desirable. Hence, it is presupposed that teachers ought to experience ownership in relation to the project they participate in. Why ownership is put forth as desirable, and at what stages of a project, varies with the form of participatory research in which the teacher-researcher collaboration is embedded. For example, in action research, which is commonly driven by ideals of deliberation, ownership may be associated with teacher empowerment and emancipation (Jones and Stanley 2010) whereas design-based research often emphasizes teachers' ownership of the implementation process and the models developed, both for commitment reasons and to ensure that the models match the needs of the teachers (Van der Akker 2014). In a study of formative interventions, aiming at expanding teacher agency, Penuel (2014) puts forward teacher ownership of the activities and materials created. In the study, teachers were interviewed every month about how they felt towards the project and their own roles. At the beginning there was no evidence that teachers felt a sense of ownership while in the end, when the project was scaling up, a number of teachers showed a strong sense of ownership and were even eager to take on the role as advocates for the project. Here, the discussion of ownership deals with teachers' development of confidence in their roles as designers of activities.

Although ownership is generally depicted as something to strive for, there are also examples where ownership is discussed as potentially negative for teachers. For example, Cochran-Smith and Lytle (2007) point out that with ownership in the stages of formulating and disseminating results, comes a risk of being exposed to critique. Such critique is generally considered to be a part of the researcher's job, whereas teachers may be unprepared to encounter that type of negative exposure. Furthermore, Hamza, Piqueras et al. (2018) point out that teachers carry a greater load of

the risks connected to ownership in the implementation phase, since the introduction of a new teaching model may lead to a higher workload and also to failure and reduced authority in the classroom. Correspondingly, MacDonald (2008) connects ownership to the risks involved when design-based research leads to changes in practice. MacDonald argues that teachers will not engage in change if they do not feel a strong sense of ownership of the design and goals of the research. Both MacDonald (2008) and Hamza, Piqueras et al. (2018) suggest that ownership needs to be balanced and continuously negotiated throughout a project. One suggestion, in terms of balance, is that researchers take on more of the ownership – and corresponding risks – in the stage of classroom implementation.

Teacher ownership is commonly emphasized in the stages of formulating the aim and designing and evaluating activities (e.g. Gutierez and Kim 2017; Penuel 2014). However, Cochran-Smith and Lytle (2007) discuss ownership in relation to the last stages of the research process; hence, the dissemination of results. They regard ownership as one of the dilemmas that rise in collaborations between universities and schools – a dilemma that challenges the cultures and assumptions surrounding knowledge construction. Here, a specific focus is on the concept of practitioners as knowers. Assuming that both researchers and teachers are knowers and parts of the analytical process, Cochran-Smith and Lytle (2007, 37) ask 'Who is entitled to write about whom and who owns the data'. They argue that making research results public is deeply intertwined with ethical considerations about authorship and ownership. Even if researchers present the proper acknowledgements and have permission and formal agreement to present both teachers' and researchers' perspectives it is still the researchers who receive recognition for it. Thus, ownership falls out as a discussion about who owns the question with regards to what sort of outcomes to emphasize, who receives recognition for various outcomes, who is entitled to others' praise, who owns the reception of any criticism – all of which are questions connected the formulation and dissemination of research results.

In summary, we have not found any extensive definitions of 'ownership' in the literature on participatory research in education. What we do see is that ownership in teacher-researcher collaborations is often displayed as desirable in the shapes of power, control, involvement, and agency. We have also seen examples where ownership is discussed in terms of risks. In our attempt to expand the notion of 'ownership', we acknowledge that the term may be defined as 'the state of being an owner' while an 'owner' in turn is 'one who has the rightful title to something' (Merriam Webster online n.d.). The word 'rightful' highlights a crucial issue of teacher-researcher collaborations, namely that we have to consider implicit and explicit rights to, for example, data (Horner and Minifie 2011) and material resources (Bergold and Thomas 2012) as well as to recognition (Cochran-Smith and Lytle 2007). And, perhaps more importantly, we have to consider who formulates and maintains these rights. Moreover, we note that, in general language, 'rights' are often paired with, the less positively connoted, 'obligations', whereas 'rights' often occur unpaired in literature on teacher-researcher collaborations. In our discussion, we assume that ownership is associated with risks as well as benefits, and rights as well as obligations, which may all be balanced, negotiated and shared. Finally, based on how ownership is portrayed in literature on participatory research in education, we assume that teachers' and researchers' ownership may have different meanings and implications at different stages of the research process. In this article, we focus on the following four stages of a research process: Stating problem and project aims, Implementation, Analysis, and Dissemination.

Ownership in three research projects

As a ground for the following discussion, we will present three research projects in science education that we have carried out respectively. All three projects were conducted in Sweden in collaboration with teachers. We consider them as examples of participatory research, as they were 'geared towards planning and conducting the research process *with* those people whose life-world and meaningful

actions are under study' (Bergold and Thomas 2012, 192). Still, our projects provide productive contrasts to each other as they represent different forms of participatory research in terms of 'who, with what rights, at what point in time, and with regard to what theme, can participate in decisions' (Bergold and Thomas 2012, 200). Briefly, Project A intended for teachers to participate in decisions in the implementation stage. In Project B, one group of teachers participated in decisions regarding the problem formulation and goal of the project, as well as the making of a new teaching model. Then another group of teachers were invited to make decisions in the implementation stage. In Project C, the teacher-researcher collaborated with her teacher colleagues who were all meant to participate in decisions throughout the whole process.

In the following sections, we present how we, the researchers, in retrospect experienced that ownership was distributed between teachers and researchers in our three projects. When forming these accounts, we considered how risks and benefits as well as rights and obligations, associated with ownership, played out in four stages of the research process, that is, the stages of stating problems and project aims, implementing teaching models in practice, analysis, and dissemination of research outcomes. Next, we draw on these accounts in a general discussion of how and why ownership may be distributed between teachers and researchers in different forms of participatory research.

Project A: exploring a research-initiated teaching content with teachers

In Project A, Lotta Leden collaborated with six teachers to meet the suggestion from researchers that perspectives from 'nature of science' (NOS) should be included in science teaching (see e.g. Matthews 2012). As the project responded to a need identified from the point of NOS research, not by teachers, the researcher owned the problem stating and project aims. In an attempt to narrow the gap between research intentions and teaching practice, the researcher strived to give teachers ownership over the content by making time for teachers to engage in elaborate dialogue on the possible role and place for NOS in science teaching (Leden 2017). Further, following from a history of difficulties connected to including NOS perspectives in teaching (Lederman and Lederman 2014), the researcher held hopes that the perspectives of the teachers in this study would affect the research practice concerned with NOS in science teaching.

A large part of this longitudinal (three years) collaboration came to be about the discussions that surrounded design and implementation of teaching activities. The teachers were the ones that set boundaries as regards why and how to teach NOS in relation to their different groups of students. Although the teachers had the main role in this stage, the researcher was not left without ownership – she was a discussion partner, a co-worker managing practical details, and, not least, re-directing the teachers' attention to NOS as a learning goal. In this part, it was clear that the teachers experienced both downsides and upsides of ownership; downsides for those who felt an increased workload, insecurity or insufficiency and at some points were questioned by their students; and upsides for those who felt inspired, experienced that their status increased, and received positive feedback from the students' parents (Leden, Hansson, and Redfors 2017).

Most of the ownership was reclaimed by the researcher at the stage of analyzing the discussions. The researcher shared her interpretations with the teachers on a few occasions and asked them to reflect on the project outcomes. However, the dialogue that included teachers' suggestions and reflections could have been more far-reaching especially since the researcher's intention was to make teachers' voices heard. The dissemination of the results was owned by the researcher.

Project B: developing and testing a teaching model with teachers

In Project B, Sofie Areljung collaborated with 15 preschool teachers to develop a model for inquiry-oriented science teaching in preschool (Areljung 2016). Prior to formally starting the collaboration, Areljung met with innovation offices connected to the university, to prepare for a possible

commercialization of the planned-for model. They suggested that she write an agreement, stating the intellectual property with which she entered into the collaboration. Although she learnt about the benefits of writing an agreement, she judged that such formal measures did not resonate with a partnership with a non-commercial stakeholder (public preschool) and might harm the trust-base of her relation to the educators. Instead, she and the teachers verbally agreed that they would freely share the project outcomes with other preschools.

Initially, five teachers (working in a pedagogical development centre) and the researcher formulated the problem and project goals, based on their respective experiences from practice and research. Next, they jointly formed a draft pedagogical idea. Since they wanted to probe their idea's practical relevance early on in the process, they asked ten in-service teachers to test and develop the idea in practice. Even though these teachers had not been involved in formulating the pedagogical idea, they had ownership of how to test and develop it, which implied that they gained, and the researcher lost, ownership in the implementation stage (Areljung 2019).

In the stage of analysis, Areljung reclaimed ownership and then disseminated stories from the project in the academic world. Meanwhile, the teachers presented their work in the preschool's own blog, in professional development events, and in interviews in journals for preschool professionals. The teachers and researcher were invited to co-present their work at several occasions, but since the researcher had promised not to reveal that the preschools and the individual teachers were connected to her research, she was hindered to do so.

Project C: researching teaching practice with teacher colleagues

In Project C, Jonna Wiblom functioned as a teacher-researcher collaborating with two science teacher colleagues at a public upper secondary school where they all worked at the time (Wiblom, Rundgren, and Andrée 2019). Wiblom's position allowed her to teach science part time at the school and work part time at the university with her PhD thesis, of which the research collaboration with her colleagues was part. The research project followed a design-based procedure, intending to open up spaces for the teacher-researcher and her two teacher colleagues to mutually form the research objectives and to design, implement and analyse a teaching sequence in two cycles. As part of her PhD, Wiblom was responsible for theoretical input as well as for disseminating the results in research articles and conference presentations. In this project, Wiblom and her two colleagues balanced the goals and needs of different practices, the school and the university, which shaped how ownership played out during the research process.

First, they formed the overarching research objective to develop students' capability to critically examine science on the Internet. This objective was co-owned, as it was based on shared experiences of how challenging it could be to integrate digital technology in science teaching. In both cycles, the teaching sequence was implemented as part of the two school-based teachers' regular biology classes. The teachers led the lessons and the teacher-researcher was an active observer, responding to students' questions during lessons. Because of their established relationships to the students and the overall responsibility for students' learning, the school-based science teachers had a stronger say during the stages of implementation, for instance regarding how to formulate task instructions and how to assess students' achievements. Hence, even though the classroom implementations were co-owned, some of the ownership moved from the teacher-researcher to the two teachers at this stage.

Although the research project stemmed out of an actual need to improve the local practice, Wiblom found that her goals diverged more and more from those of her teacher colleagues. As she took part in PhD courses at the university, she gradually developed a theoretical understanding of the research objective that was not fully available to her colleagues. Her colleagues took part in the analysis in-between the intervention cycles, but their voices were not fully reflected in the

analysis or conclusions and the teacher-researcher was the owner of the theoretical framing and disseminating the results (see Wiblom, Rundgren, and Andrée 2019).

Understanding pathways of ownership distribution

Looking in retrospect, we are struck by the way the ownership distribution evolved into similar pathways at the last stages of all three projects (see Table 1). Ownership was differently distributed in the initial stages of the projects, which corresponds to the fact that they represented different forms of participatory research. Then ownership shifted towards teachers in the implementation stages of each project. At the end of our projects, seemingly regardless of our different intentions, we researchers reclaimed the ownership to analyse and report the work in our own words, both in research and practice arenas. This development did not, as we see it, correspond to the principle of participatory research to treat teachers as co-researchers with the same rights as the professional researchers (Bergold and Thomas 2012, 7). Rather, this development resembles Kirk and MacDonald's (2001) description of what happened in a curriculum project, where teachers' voices were authoritative in the local implementation phase, but then re-centred to the actors who owned the production of the formal discourse – despite a rhetoric that promoted teachers' far-reaching influence over the whole process. There are of course several plausible reasons as to why projects develop in that way, such as the teachers' lack of time (Pantić 2017) and the need for researchers to transform results to fit academic standards in order to be published and accountable towards the funder and the academe (Gutiérrez and Penuel 2014). Below, we seek to understand pathways of ownership distribution by considering the risks and benefits as well as the rights and obligations associated with ownership at different stages of the research process.

Benefits and risks associated with ownership

In projects like ours, where teaching interventions are implemented in classroom practice, ownership issues include the level of fixedness of interventions; whether they ought to follow a strict, researcher-defined pattern or if teachers are invited to adapt or co-design the interventions to fit the specific needs and conditions of school practice (Penuel 2014). For us, it turned out to be beneficial to share or let go of the ownership at the stage of implementation. In project B, the researcher had very little ownership in this stage. This meant that the rudimentary pedagogical model was contextualized, evaluated, and developed in a much more multifaceted and relevant way than would have been the case if the intervention had been constrained by the researcher. Similar patterns occurred in project A and C, where the teachers' ownership of the implementation phase was crucial for the richness and relevance of the project outcomes. However, as Hamza, Piqueras et al. (2018) point out, the teachers ran a professional risk when they implemented the new ideas in their practice, as such changes may negatively affect their workload, their relations to colleagues,

Table 1. Caption: How ownership was distributed between teachers and researchers in four stages of the research process in Project A, B and C.

	Project A Exploring a research-initiated teaching content with teachers	**Project B** Developing and testing a teaching model with teachers	**Project C** Researching teaching practice with teacher colleagues
Stating problem and project aims	Researcher	Co-owned	Co-owned
Implementation	Teachers	Teachers	Co-owned
Analysis	Researcher	Researcher	During cycles of intervention: Co-owned Final analysis: Researcher
Dissemination	Researcher	Researcher and teachers in separate fora	Researcher

as well as the outcomes and relations in the classroom. Some of these risks were evident in project A, where teachers put forward an increased workload and various aspects of classroom management as challenges of the project (Leden, Hansson, and Redfors 2017). Some of these teachers also experienced benefits such as higher status and positive feedback from the students' parents. Also in project C, the teachers carried the main risks associated with ownership in the stage of implementation. Even though both the teachers and the teacher-researcher worked at the school at the time of implementation, the actual implementation took place in the two teachers' regular science teaching. This meant that they risked their position in relation to the students whose work they, and not the teacher-researcher, were going to assess and grade. The experiences from project A and C raise questions about how to ensure that participants know 'the nature and potential consequences of the research' (Tracy 2010, 847), but also how the researcher could maintain some of the ownership and corresponding risks in the stage of implementation without depriving teachers of the benefits connected to ownership.

As mentioned in the introduction, Sensevy et al. (2013) argue that teacher-researcher collaborations should rest on a principle of symmetry. Still, they acknowledge that there are practical and epistemological differences between the participants and that every participant 'plays "her game"', meaning that she 'proposes to the collective her first-hand point of view, what she "sees" and what she "knows" from her position, a point of view which is irreducible to any other one' (Sensevy et al. 2013, 1033). Their point aligns with the circumstances in all our projects. However, in project A and B, the researchers reclaimed ownership in the stage of analysis, and consequently, the analysis did not benefit from the teachers' 'first hand point of view' (cf. Sensevy et al. 2013). In project C, the analysis was co-owned during cycles of implementation. Here, the teacher-researcher, but not her colleagues, had gradually developed a theoretical understanding of the research objective through doctoral studies. For practical reasons, the teacher-researcher could not fully share her theoretical understanding of the research objective with her colleagues, who worked full time with teaching. Since the analysis during cycles of implementation was co-owned, the teacher-researcher experienced the risk that the design decisions were less theory-infused than she had intended, as theory was downplayed by the needs and traditions of teaching practice. During the final analysis, the teacher-researcher benefited from the interpretative prerogative. However, just as in project A and B, her analysis did not benefit from the 'first hand point of view' of her teacher colleagues (cf. Sensevy et al. 2013).

Rights and obligations associated with ownership

If we consider that the rights and obligations associated with ownership are set and maintained by some stakeholder, we can make visible some of the factors that directed ownership towards the researcher in our cases. Here, we discuss two sides of this coin, namely, the administrative support available to researchers who engage in collaboration with external partners, and the rights and obligations outlined in guidelines for research ethics.

First, our experiences cast light on the inequalities in terms of the support structures available to researchers and teachers when it comes to ownership of the outcomes of a collaboration. This was most evident in project B, where the researcher received free-of-charge advice from innovation offices connected to the university. She was informed her about ways to protect the 'intellectual *property*' with which she entered into the collaboration with the preschool. From that perspective, the researcher was seen as a rightful owner of a particular property that could be guarded in a formal agreement. We realize that, in order to match the legal support available to the industry or other research institutions, universities need strong support structures and 'specialized legal counsel' (Horner and Minifie 2011, 340) that guards the researcher's ownership of, for example, data, research outcomes and intellectual property. However, in our cases, where the external partner was a school or preschool, the imbalance in available support structures is evident.

Whereas we researchers had access to administrative support, there was no corresponding support working in favour of the teachers, guarding their rights and obligations to ownership at different stages of the project.

Second, our experiences accentuate how ownership distribution may depend on guidelines for research ethics. Our national guidelines promote the researchers' rights to research integrity, recognition, and research outcomes as well as their obligation to protect the individuals who take part in research (The Swedish Research Council 2017). Therefore, with the intent to protect the teachers and students, we had all, prior to starting our respective projects, promised the teachers not to reveal the connection between their identities and the research. But, as we realized the ethical guidelines in practice, we were soon faced with the difficulty of combining teacher and student anonymity with teacher ownership in the stage of dissemination. Our initial promises hindered us from co-presenting results or mentioning the teachers by name.

As mentioned in the introduction, the literature on participatory research in education mainly addresses 'ownership' in the stages of problem formulation and implementation, not in the stage of dissemination. Still, there are examples showing that resources and ownership can be distributed to teachers to make way for teachers and researchers to co-present the research outcomes (e.g. Gade and Blomqvist 2018; Lambirth and Cabral 2017). Somekh (1994) describes a way to balance the power between teachers and researchers by formulating a document that ensure equality between the partners. For instance, the document stated that the participating teachers would share the outcomes of their investigations 'wherever possible' and that 'all reports produced by teachers, will be published under their names in order to give full credit to them for their work' (Somekh 1994, 360). Moreover, Gade (2015) provides a tantalizing reference to how anonymisation practices changed during her long-term research partnership with teachers. She writes that 'In recognition of early days in our association where, in keeping with researcher ethics, I also anonymise Lotta as Lea and her class teacher Cecelia as Sofia. Lotta's students however remain anonymised at all times' (Gade 2015, 608). Here, Gade implies that she has shifted from providing pseudonyms to using the teachers' real names in research publications. However, Gade does not say anything more about the grounds for, or the potential consequences of, shifting to using the teachers' real names.

In retrospect, we see that the question of ownership distribution at the stage of dissemination is intertwined with the fundamental question of whether teachers are considered to be agents or objects of research. According to Bergold and Thomas (2012, 7), participatory research methods assume that teachers are not objects of research, but 'co-researchers and *knowing subjects* with the same rights as the professional researchers'. In our view, the rights and obligations stated in guidelines for research ethics may convey a binary conception of the researcher and the participant as agents-objects of inquiry. As the superior party of such a binary, the agent is obliged to protect the object, for example through anonymisation. So, while anonymity aspirations are set out to protect participants, our experiences highlight that they may also reduce the teacher's ownership of new knowledge produced in collaboration. However, if we look at other countries' guidelines for research ethics we find examples that support a more equal distribution of ownership in research collaborations with teachers. One such example is the guidelines provided by the British Educational Research Association (BERA), which make explicit that when research has involved collaboration between researchers and teachers 'then anyone who has made a substantive contribution should be credited as a co-author' (BERA 2018, 34). Furthermore, they recognize that if individual participants 'want to specifically and willingly waive their right to confidentiality and anonymity: researchers should recognise participants' rights to be identified in any publication of their original works or other inputs if they so wish' (BERA 2018, 22). In our view, the BERA guidelines explicitly recognize research participants as agents rather than objects of inquiry. It makes us think about what would have been different if we had carried out our projects guided by these guidelines, instead of the ones we did follow. Such a thought exercise draws attention to how different rights and obligations, for example, in the shape of ethical guidelines, govern ownership distribution particularly in the stage of dissemination. Still, we recognize that predetermined guidelines can never fully encompass

all the complex issues that may emerge in a teacher-researcher collaboration. For the sake of shared ownership, we concur with other researchers that there is need to invite teachers to be agents in research and to adopt a contextualized approach to research ethics, aligned with the 'everyday ethics' of teacher practice that include instant professional judgements as well as school rules and management expectations (Andrée, Danckwardt-Lilliestrom, and Wiblom 2020; Bryan and Burstow 2018; Mockler 2014). However, as Jones and Stanley (2010) point out, we realize that such a change would require that higher-education institutions re-examine the nature of their relationships with public stakeholders as well as the political context in which such relations are embedded.

Concluding remarks

This article is an attempt to bring questions of ownership to the fore, particularly for researchers who plan to engage in collaboration with teachers. The article is written from our, the researchers', perspectives and we do not, and cannot, claim to provide a comprehensive view of ownership in teacher-researcher collaboration. Nevertheless, we hope to have contributed an expanded notion of ownership in terms of:

- challenging the idea of 'ownership' as a given good; particularly highlighting that ownership may also come with risks and obligations; and that ownership may transform from being a benefit or a right to being a burden as it moves between participants
- highlighting that ownership may be affected by implicit and explicit rights and obligations; these rights and obligations vary depending on time and place and provide different levels of support for distributed ownership
- highlighting that, even if evenly distributed in the first stages of a project, ownership tends to be reclaimed by the researcher at the last stages of the project
- highlighting that, in many stages of the research process, the researcher has ownership 'by default', which implies that sharing ownership requires a continuous work of counteracting the 'normal state'

We offer this article as an imperative to researchers to, uncomfortable as it may be, begin to work out new forms of research that disrupt the researcher's 'ownership by default' and recognize that ownership comes with both risks and benefits and both rights and obligations. Our suggestion for teacher-researcher collaboration is to plan for the project's end already at the beginning, for example by allocating project time for joint analysis and by deciding how to handle the issue of participants' anonymity in relation to the dissemination of project results. To guide a discussion, between the teachers and researchers participating in the project, about ownership, we propose the following questions:

Challenging the researcher's 'ownership by default':

- What can be owned at this stage of the project?
- Who has ownership?
- Who ought to have ownership?
- Who wants/does not want ownership?
- How can ownership be transferred between participants and what would the consequences then be?

Highlighting and negotiating risks and benefits associated with ownership:

- What are the risks and benefits associated with ownership at this stage of the project?
- (How) can ownership be shared to better balance the risks and benefits between participants?

Highlighting and negotiating rights and obligations associated with ownership:

- What are the rights and obligations associated with ownership at this stage of the project?
- How do school rules, management expectations and guidelines for research ethics affect ownership at this stage of the process?

Our intention is that these questions will accentuate and, if found necessary, support a redistribution of ownership between teachers and researchers at all stages of a project. In the long term, we hope that these questions may contribute to a reconceptualisation of teacher-researcher relations beyond 'agent-object' binaries, towards a true partnership idea where both sides experience responsibility for themselves, the other party, and the students or children involved in the research.

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Contradictory as it may be, given the topic of the current article, the teachers remain anonymous while we appear as the uncontested spokespersons for our collaborations. Still, the teachers are far from invisible to us and therefore we want to give them as well as the children and students in the three projects our wholehearted recognition. Without their engagement and competence, the three projects would not have been.

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