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## Practice-near school research in Sweden: tendencies and teachers' roles

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### ABSTRACT

The Education Act from 2010 states that education in Sweden ought to be based on scientific knowledge and proven experience. The aim of this study is to explore practice-near school research published by Swedish researchers in the wake of the Education Act with the focus on the participation of teachers in research. As a background, the international and national roots of practice-near school research in Sweden are described. The study is focused on research projects in compulsory and upper secondary school, school years 1–12. 92 articles in 19 journals were detected through a literature search and purposive sampling. Based on the articles, a framework of aspects with categories was developed and the reported studies were analysed accordingly. The findings indicate a multifaceted research field; studies based on a variety of theories and methods and with different roles for teachers. The different categories for teacher's participation in research and how teacher roles were described in the articles did not give a clear picture on what teachers' roles could imply for the teachers involved. The article concludes with a discussion of the recent policy initiatives of practice-near school research in Sweden.

### ARTICLE HISTORY

#### KEYWORDS

Collaborative research; education policy; knowledge interests; practice-near school research; teacher roles

### Introduction

In Sweden, as well as in other countries, efforts to make education research-based have been manifold (Aasen & Prøitz, 2004; Adolffson & Sundberg, 2018), focusing, not least, on the collaboration between researchers and practitioners. Thus, what we henceforth will call *practice-near school research*<sup>1</sup> has been on the agenda (Somekh & Zeichner, 2009), both in policy and the media. This is an international trend in educational policy to stimulate better links between research and practice, and to bring close-to-practice issues to the forefront in educational research (Wyse et al., 2018).

An important reason for the emphasis on practice-near school research in Sweden is the wording in the Education Act (SFS 2010:800), which declares that the education should be based on “scientific knowledge and proven experience”. The Swedish National Agency for Education, SNAE (2014), explains “scientific knowledge” as “theoretical rooting, elaboration and development, as well as an empirical basis” (p. 11), and

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“proven experience” as teacher knowledge that is tried and tested collegially, and documented. These understandings are widely used, even though disputed (Persson & Persson, 2017). Considering the rise in numbers of publications, it seems plausible that the wording in the Education Act (SFS 2010:800) has increased the interest for practice-near school research.<sup>2</sup> Since practice-near school research and collaboration between researchers and practitioners are endorsed in policy and politics, and since the field is ever-increasing, it is important to investigate what kind of research is the result.

In Sweden, the scientific base of the educational reforms of the 1950s and 1960s stressed the importance of a mutual exchange of information between researchers and policymakers (SOU 1980:2). This partly led to the instrumental belief that research results would be possible to transform into didactical imperatives without intermediary interpretations (Aasen & Prøitz, 2004), a view that was problematised by the research programmes launched by SNAE during the 1990s. The programmes were an important step in the transition from an instrumental attitude to research to a view based on understanding, in which the research would lead to actors’ participation in the research process and reflection of their activities. Additionally, the new discipline Educational Sciences was established in 2001, to strengthen the research base of teacher education and to make teachers scientifically literate (Aasen & Prøitz, 2004; Askling, 2006). This was followed by the launching of the Education Act (SFS 2010:800), and the founding of the Swedish Institute for Educational Research, [Skolforskningsinstitutet] SKOLFI in 2015, whose mission is to make research summaries relevant for the practice, and fund practice-near research projects. SKOLFI (2020) uses the concept *praktiknära* [practice-near] to emphasise the importance of proximity to teaching.<sup>3</sup> From 2010 onwards, the importance of practice-near research has been continually stressed, and several initiatives for encouraging practice-near research have been launched. On a policy level, the issue has been discussed in several official Government Official Reports following the Education Act (e.g. SOU 2016:38, SOU 2017:35; SOU 2018:17; SOU 2018:19), but also in the public arena, for example by the trade unions for teachers and headmasters (e.g. Flodin et al., 2011; Jaara Åstrand, 2017). In the specific Government Official Report (SOU 2018:19) on practice-near school research, *Forska tillsammans* [Do Research Together], practice-near research is described as research that concentrates on the needs of the practitioners, with the purpose to improve practice. The concept “practice-developing research” is suggested, to illustrate the focus on practice improvement. Other examples of efforts to make education research-based are research schools for teachers and the recent initiative in the ULF agreement, (Utveckling [Development], Lärande [Learning], Forskning [Research]), a pilot operation in 2017–2021 to bring about models of collaboration between the academy and school to bridge a perceived gap between theory and practice (ULF-avtal, 2020).<sup>4</sup>

How the wording of the Education Act (SFS 2010:800) from 2010 has been interpreted and used in Swedish schools is investigated by Bergmark and Hansson (2020). They show how SNAE endorses implementation of the Education Act, both as evidence-based, that is the transformation of research results of what works in teaching, and as evidence-informed, where the experiences of the teachers and the local context are important aspects of how research results can be used (cf. Levinsson, 2013). Our study has the aim to explore practice-near school research published by Swedish researchers in the wake of the Education Act with the focus on the participation of

teachers in research. The study is focused on research projects in compulsory and upper secondary school, school years 1–12, and aims at answering the following research questions: How can the practice-near research conducted in the light of the 2010 Education Act be described? How do teachers participate in the research? Thus, we develop new knowledge on teacher involvement in the research process in Swedish practice-near school research projects.

The article continues with historical background, theoretical approach, followed by methodology, analysis procedure and results and, finally, discussion.

### ***Brief historical background of practice-near research***

In this section, we give a brief background of practice-near research. Our intention is to illustrate that the practice-near research that is influenced by the Education Act (SFS 2010:800) has its historical roots in various kinds of practitioner research. Zeichner and Noffke (2001) describe different traditions as different forms of practitioner research. One is the tradition building on the action research associated with Lewin (1946) and Corey. Following Lewin (1946), action research is a joint effort by researchers and practitioners, in a spiral of different steps of planning, action, observation, and evaluation (McTaggart, 1994), to develop practice and the understanding of the practice, but also the place and context in which the research took place (Carr & Kemmis, 1986). These ideas were spread to educational sciences and met the tradition from John Dewey's ideas of the teacher as both producer and consumer of knowledge about his/her practice (Noffke, 1997). British action research projects during the 1960s and 1970s put the emphasis on the teacher as researcher (c.f. Elliot, 1990; Stenhouse, 1988). Similarly, in the U.S., the teacher researcher movement and the self-study tradition forwarded ideas of teachers (and teacher educators) who studied their teaching, often with qualitative methods. The teachers were considered to have a specific knowledge of the practice that a researcher did not (Cochran-Smith & Lytle, 1993). Another tradition is participatory action research, which originated in the third world but later spread, and, for instance, dealt with marginalised groups in the U.S. and focused on raising awareness and strengthening the oppressed (Zeichner & Noffke, 2001).

Sweden has a tradition of action research in research on social work, for instance studies of the emerging urban districts of The Million Programme (Roos, 2021). In research on education, action research emerged in the 1990s (Rönnerman & Salo, 2017). Rönnerman and Salo (2012) consider the historical and contextual Nordic heritage of a tension between “Bildung”, pedagogy, and citizenship in the welfare state as favourable for teachers to develop both personally and professionally in collaborative research. Around this time the concept “practice-near research” started to be used in educational policy. At the beginning of the new millennium, however, the Committee for Educational Sciences published two reports in which they used the concept “praxis-near research”, stressing the importance of not only developing practice, but also contributing to knowledge formation (Rönnerman, 2018). During the last decade, though, the concept practice-near research has had a renaissance, but its scope is narrowed to research for improving the practice.

## Theoretical approaches

Practice-near research can take various forms. In this section, we describe some categorisations that are widely used. Also, theories on the roles of practitioners and researchers in this kind of research are presented.

### Categorisation

All in all, action research is the most widely used concept internationally. Most advocates would probably claim that some of the features of action research are that it should be collaborative, participatory, emancipatory, and critical. It is recursive and includes a number of action research cycles (Wright, 2020). The concept is, however, used about as differing research undertakings as the critical social research in participatory action research and teacher research aiming at developing teaching methods (cf. Zeichner & Noffke, 2001). In the seminal *Becoming Critical*, Carr and Kemmis (1986) discuss emancipatory possibilities in action research, drawing from Habermas' (1971) theory of knowledge interests. In action research, they see knowledge interests as: technical, aiming at increasing the how of teaching; practical, to increase the actors' self-reflection; and critical, with an emancipatory interest in self-directed action. In research with a predominantly technical knowledge interest, the practice is used as a field for empirical experiments where the researcher can stage various studies of teaching methods. In practical action research, the researchers take part as participants in research and in cooperation with the teachers plan, undertake, and evaluate research (Kemmis, 2009). Practical research fails, however, in taking account of the sociohistorical context. Critical action research, which Carr and Kemmis (1986, Kemmis, 2009) claim is needed for democratic development of teaching and learning, is a collaborative process between practitioners and researchers whose joint efforts are adapted to, and challenge, local conditions and needs (for a critique of the tripartite structure, see Elliott, 2005, who claims action researchers do not necessarily have to become critical theorists). In a later article, Carr and Kemmis (2005) discuss the social changes and the difficulty of conducting critical action research projects in postmodern times when the concept of action research has been used for research efforts in which the emancipatory aspirations are out of sight in an era of evidence, measuring, and de-professionalisation of teachers.

Similarly, Noffke (1997, 2009) identifies three dimensions to describe variations of action research: the personal, when teachers in collaboration with researchers develop an understanding of their practice or emphasise the individual versus collaborative aspects of the work; the professional, when teachers develop a knowledge base for teaching or stress changes in conditions of teachers' professional environment; and the political, when prerequisites and conditions for teaching and the change of which are grounds to leverage social change. The political dimension is more or less prominent in the other dimensions but underscored by Noffke (2009) as important in the wake of the global reform movements and neoliberal policies of the last decade, where requests for collaborative research could be seen as part of an increasingly perceptible performativity culture (Ball, 2003, 2015).

### *Roles in collaborative research*

Positions, type of cooperation, and the aim of research have been discussed as important factors for what type of research that is realised. Of special concern for us are the roles of the researchers and practitioners in the projects. Mattsson (2004) describes how researchers and teachers oscillate between near and distant positions during research projects and take on different roles. Persson (2020) argues that both researchers and teachers should oscillate between closeness and distance. Collaboration is stressed in the research, a “demanding target” according to Bevins and Price (2014). They distinguish between coercive, client-supplier, and collaborative approaches. In a coercive approach, the parties involved have been instructed to participate, and have neither control nor resources to complete the task sufficiently. A client-supplier approach is either strong on the academic side – the academics use the school as a “laboratory” – or on the teacher side – the school is in charge of the project and uses the academic team for support for specific purposes. A collaborative approach is characterised by willingness to work together, awareness of each other’s working conditions and equality in power relations. This collaborative approach is similar to Eriksson’s (2018) view on successful collaborative practice-near research. Time for participation and the teachers taking part in the problem definition and planning of the project are essential aspects (Eriksson, 2018; see also Vescio, Ross, & Adams, 2008; Curry, 2012). Eriksson (2018) stresses the importance of having a mutual research object, and researchers’ and teachers’ collaborating in planning and developing the teaching material. According to Prøitz et al. (2020), it is crucial to engage the practitioners in different parts of the research process. The practitioners bring their “first space” into the collaboration, and the researchers their “second space”, with the possibility to create a “third space”, in which the practitioners and the researchers meet on equal terms and bring their different competencies. According to Gustavsen (2001), the discourse on theory, and the discourse on practice belong to different rationalities but may be linked in “the mediating discourse”, that is a meeting place where researchers and practitioners in a democratic manner exchange ideas and experiences (Mattsson, 2004).

To conclude, the research about collaboration between academics and teachers emphasises including the teachers in all the phases of the research process: planning, data collection, and analysis. Further, awareness of power relations and working conditions is called for, and, finally, an open environment in which there is space for risk-taking (Vescio et al., 2008).

### *Methodology*

The study has an exploratory approach, suitable for the complex and multifaceted research field relating to school education. To investigate the roles of the participating teachers, we detected studies reported after the launch of the Education Act, from 2011 to 2019.<sup>5</sup> The methods used in the data collection and analysis are explained below.

### *Data collection and material*

To identify relevant scientific articles published by Swedish researchers between 2011 and 2019, we initially conducted a broad search in Swepub (September, 2020) to get an

overview of which journals Swedish researchers in the field use for publishing. Searches were conducted in Swedish and English using a search string with the concepts identified in a prior study (Serder & Malmström, 2020) supported by the concepts used by SNAE, the Swedish Research Council and SKOLFI. We limited the search to compulsory and upper secondary school and filtered at scientific referee reviewed articles in educational science.<sup>6</sup> We detected 29 journals in educational science among which 19 clearly state an interest in school practice and more or less explicitly signal an interest in involving the school practice. For example, in aim and scope, *The International Journal for Lesson and Learning Studies* (2021) states “... dedicated to educational research that focuses directly on improving the quality of learning in classrooms and other formal learning environments through pedagogical experiments or action research”. *The International Journal of Science Education* (2021) publishes “scholarly papers that focus on the teaching and learning of science in school settings”. Further, the journal *Educare* (2020) states: “The journal constitutes a research forum for faculty, practitioners and policymakers. [...] All submissions are judged based on their relevance from a professional and educational perspective” whilst the journal *Nordidactica* (2020) [our translation] states: “Subject Didactic Studies of Teaching and Learning in Geography, History, Social Studies, Political Science and Religious Studies are particularly focused upon ...”.

Our work onwards was carried out as criterion-driven purposive sampling (Carpenter, 2017; Patton, 2002). The next step was to search for relevant studies between January 2011 and December 2019 in the selected journals. The international journals covered in ERIC and Web of Science were scanned for articles by researchers at Swedish universities describing studies that included some sort of interaction with the school practice, and the journals based in the Nordic countries were scanned through their digital archives, year by year. To begin with, we read the abstracts with keywords to identify articles describing the projects as *collaboration*, *practice-near*, *practice-based* or the like. In several abstracts, explicit concepts that we consider as belonging to the field are used. In other articles, field related concepts are not explicitly used in the abstract or as keywords, but the articles were selected since upon further reading they proved to meet our criteria of being practice-near (cf. Dixon-Woods et al., 2006). The articles that finally became part of our material are those that present projects that describe an interaction with school practice in some part of the research process. The data selection resulted in 92 articles distributed over 19 journals, see Table 1.

The selection of articles needs to be commented on. Since our selection of journals was based on the aims and scopes of the journals in the first search, we read abstracts and searched for concepts that signalled practice-near school research only in these selected journals, which means that studies reported in other journals may have been missed. The same goes for articles where the criterion has been implicit. Additionally, the fact that there are other fora than scientific journals to report on studies in education (Swedish Research Council, 2010) is important to have in mind.

Most articles by far were found in the journal *Forskning om undervisning och lärande* [Research on Teaching and Learning], *ForskUL*, a Swedish peer-reviewed journal, established in 2013. The explicit aim of the journal is to publish research “related to learning and teaching” and “where the results of research speak directly to teachers and

**Table 1.** Identified journals, number of articles and year of publication.<sup>7</sup>

Acta Didactica Norge (Norden)	2	2012, 2014
Assessment Matters	2	2012, 2019
Educare	1	2015
Educational Action Research	3	2012, 2016 (2)
Education Inquiry	3	2013, 2014, 2018
Designs for Learning	3	2018 (2), 2019 (1)
International Journal for Lesson and Learning Studies	6	2015 (3 – 1 double published Forskul), 2017, 2018, 2019
International Journal of Science Education	2	2017, 2018
ForskUL	51	2013 (7), 2014 (7), 2015 (6), 2016 (7), 2017 (9), 2018 (5), 2019 (9)
Nordic Journal of Digital Literacy	1	2013
Nordic Journal of Literacy Research	4	2019 (4)
Nordic Studies in Education	1	2017
Nordidactica	3	2019 (3)
Nordina	3	2015 (1), 2018 (1), 2019 (1)
Scandinavian Journal of Education Research	1	2016
Systemic Practice and Action Research	1	2016
Utbildning & demokrati	4	2011 (1), 2019 (3)
Utbildning och lärande	1	2019

the professional problems they have” (*ForskUL*, 2020 [our translation]). During the examined period, the journal published 62 articles, 51 of which are included in the data material. On its website, the journal is presented as a parallel to clinical medical research, and an alternative to “subject didactics research for developing practice”. By publishing research “*with and for teachers*”, the journal aims to “bridge the gap between research and practice” (*ForskUL*, 2020).<sup>8</sup> Hence, the journal is open and accessible to everyone.

Despite the concerns about the demarcations, we argue that for our purpose to explore published Swedish practice-near school research after the Education Act, with the main focus on the participation of teachers, we have collected data that is sufficient and relevant.

### Data Analysis

The 92 articles were processed through a procedure with both inductive and deductive elements. The first reading made us aware of differences in theoretical grounding and study design, research interest and context, together with the aspect of teacher participation. Inspired by Somekh and Zeichner (2009)<sup>9</sup>, we also noticed variations in funding and initiation. The aspects made up a framework of categories, displayed in [Table 2](#), driven by the result in the first reading. The second reading, in which we categorised each article in each aspect of the framework, is grounded in how the concepts are used in the articles. “Action research”, for instance, is in some articles stated as the theoretical background and in others as the study design.

The articles were processed to identify the aspects in the framework in the concluded categories. This resulted in quantification in the various categories in each aspect of the framework. To further explore the aspect of teacher participation, the articles categorised as “teachers conduct teaching planned by researchers”, “teachers plan teaching together with researchers”, and “teachers plan teaching together with researchers and take part in the analysis” were investigated in a third reading, specifically focusing on the sections on method and implementation, to explore how the teachers’ participation



**Table 2.** The established framework.

Aspect	Categories (in alphabetical order except for “not stated”, “others”)
<b>1. Theoretical grounding.</b> The stated theories used as background and motivation for the research project.	<ul style="list-style-type: none"> <li>● action research</li> <li>● ethnography</li> <li>● phenomenography and variation theory</li> <li>● social cultural theory and social constructionism</li> <li>● others (activity theory, assessment research, bio-centrism, cognitive theories, design-based research, gender theory, hermeneutic, interaction theory, media ecology, multimodality, narratology, pragmatics, reception theory, recognition theory, systemic functional linguistics, educational sociology)</li> </ul>
<b>2. Initiation.</b> Research initiative.	<ul style="list-style-type: none"> <li>● cooperation university, municipality and/or school</li> <li>● university (including postgraduate students)</li> <li>● teachers</li> <li>● not stated</li> </ul>
<b>3. Funding.</b>	<ul style="list-style-type: none"> <li>● cooperation university and municipality and/or school</li> <li>● dissertation project</li> <li>● grant</li> <li>● municipality and/or school</li> <li>● university</li> <li>● not stated</li> </ul>
<b>4. Study Design.</b>	<ul style="list-style-type: none"> <li>● action research</li> <li>● DBR and research circle</li> <li>● effect study, comparative study</li> <li>● intervention</li> <li>● learning study</li> <li>● observation</li> <li>● questionnaire, interview</li> <li>● text study</li> <li>● others (explorative design research, think aloud)</li> </ul>
<b>5. Context.</b> In which school year the research was conducted.	<ul style="list-style-type: none"> <li>● over all school years</li> <li>● school year 0–3</li> <li>● school year 4–6</li> <li>● school year 7–9</li> <li>● school year 10–12</li> </ul>
<b>6. Research interest.</b> The stated main interest for research.	<ul style="list-style-type: none"> <li>● curricula and policy documents</li> <li>● teaching method</li> <li>● teaching, pupil perspective</li> <li>● teaching, teacher perspective</li> <li>● theory</li> <li>● study material</li> <li>● understanding and perception, pupil perspective</li> <li>● understanding and perception, teacher perspective</li> </ul>
<b>7. Teachers’ participation.</b> In what tasks teachers have participated during the conducting of research. Also noted if teachers are co-authors.	<ul style="list-style-type: none"> <li>● study outside classroom practice</li> <li>● teachers are not involved in the study</li> <li>● teachers conduct their ordinary teaching</li> <li>● teachers conduct teaching planned by researchers</li> <li>● teachers plan teaching together with researchers</li> <li>● teachers plan teaching together with researchers and take part in the analysis</li> <li>● teachers take part in a research circle</li> </ul>

was elaborated. The categorisation has in some instances been difficult, since this aspect is not always described, and since projects could be placed in more than one category. Especially the distinction between the categories “teachers conduct teaching planned by researchers” and “teachers plan teaching together with researchers” has been complicated. In the first category, we have included projects in which teachers may have taken part in the planning but where the contents of the teaching, according to our interpretation, has been controlled by the researchers. In the second category, we have included projects in which the planning has been marked by closer collaboration on teaching content.

## Findings

The aspects on theoretical grounding, initiation and funding, study design, context, and research interest, give a background to the findings concerning teacher participation and will be briefly accounted for followed by a longer section on teachers’ participation.

### *Description of the research studies presented in the articles*

The theories used as ground for the studies are dominated by phenomenography/variation theory (31) and sociocultural theory/social constructivist theory (20). In seven articles, action research is described as a theoretical ground, whereas in four articles an explicit ethnographic theory constitutes the starting point. In the remaining articles the theories vary, and there is also a wide variation of theories connected to method and the specific study objects, for example theories on narrative and perception, systemic functional linguistics, pedagogical content knowledge, interaction theory, discourse analysis and sociological theories, as well as didactic theories, general and subject-specific. Some articles give a thorough theoretical background whereas others concentrate on methodology and methods used. In our categorisation, we have retained the concepts used in the articles.

Initiation is not always stated but can most often be presumed to be the researcher (university). In about a third of the projects a postgraduate student, often also a teacher or a former teacher, is involved. Explicit reports on research initiatives from school or teachers (eight) and as collaboration between university and municipality (four) are mostly found in the journal *ForskUL*. These projects are also described as co-funded between university, municipality and/or school (11). 19 projects are funded through grants, seven are dissertation projects and four are funded by municipalities and/or schools themselves. In about a fifth of the projects the funding is unclear.

In [Table 3](#), the results on study design and distribution over school years, have been put together. Since some studies have used more than one method in the design, the total number is higher than the number of articles (92).

The study designs, as described in the articles, are dominated by observation and learning study followed by questionnaire and interview, and intervention. These designs align with the dominating background theories (socio-cultural theories and phenomenography/variation theory). Questionnaires and interviews dominate in later school years, whereas intervention studies are more frequent in early school years. Apart from that, the study designs appear to be evenly distributed.

**Table 3.** Study design and distribution over school years.

Categories of study design	Total	Year 0–3	Year 4–6	Year 7–9	Year 10–12	All years
action research, DBR and research circle	6	2	1		3	
effect study and comparative study	3	1		1	1	
intervention	13	7	2	4		
learning study	25	5	9	5	6	
observation, field study	28	5	7	9	6	1
questionnaire, interview	19	2	1	7	8	1
text study	10	1	1	2	5	1
others (explorative design research, think aloud)	2	1			1	
	106	21	21	22	28	3

Different research interests can be found in the projects and, not surprisingly, mostly aim at the pupils and the teachers who are, per definition, together with the researchers, the main actors in practice-near school research. The categories of “Teaching, teacher perspective” and “Teaching, pupil perspective” dominate (24 + 21 studies), and focus on pupils’ and teachers’ actions during the implementation of the teaching, as in the article by Karlsson and Wennergren (2014). The study explores how teachers can develop their teaching by using conversations and questions that build on pupils’ displayed understanding during lessons. The categories of “Understanding and perception, pupil perspective” and “Understanding and perceptions, teacher perspective” are also large (16 + 16 studies) and refer to studies where pupils’ and teachers’ understandings and perceptions have been examined, as in the study by Gustafsson, Jonsson, and Nilsson (2018), about whether and how teachers’ understanding of teaching is affected by participating in a research circle concerning the technology subject. Eight studies are categorised as “Teaching methods”, examining how a specific method is used and/or works in teaching, as in the study by Eriksson and Eriksson (2014) of pupils’ involvement in theoretical exploration of numbers and fractions. The remaining studies fall in the categories of “Theory” (3), “Study material” (1), and “Curricula and other policy documents” (3).

To summarise, we can conclude that the studies in the material show a vast variety of theories, study designs and research interests. They are dominated by research grounded in phenomenographic and social cultural theories, which collect data in the school practice in the form of learning studies, different types of observations and interviews. The research interest is dominated by “Teaching”, focusing on pupils and teachers, and pupils’ and teachers’ perceptions and understanding. Some projects are both initiated and financed in cooperation, as in the projects accounted for in the journal *ForskUL*, but overall, most of the research is university driven.

### Teachers’ participation

Reading the articles, we found that teacher roles varied and were elaborated with different depth. As explained in the data analysis section, this resulted in different categories in which the articles were sorted, the result shown in Table 4.

Teachers have been involved in some way in most studies. In the categories where teachers are not directly involved and where the study is conducted outside classroom practice, 25 studies in total, the study objects are theory, study material or curricula, or

**Table 4.** Teachers' participation in research projects.

Categories	Sum	Co-authors
Study outside classroom practice	15	
Teachers are not involved in the study	10	
Teachers conduct their ordinary teaching	16	
Teachers conduct teaching planned by researchers	23	<i>ForskUL:4</i>
Teachers plan teaching together with researchers	15	<i>ForskUL:3</i>
Teachers plan teaching together with researchers and teachers take part in analysis	12	<i>ForskUL:11</i>
Teachers take part in research circle	1	

study objects that have been investigated through observations or interviews outside the classroom. However, since the authors of the articles use concepts related to practice-near research and describe the studies as being close to practice, the articles are included in the material. In 18 of the 92 articles, teachers connected to the studies are stated as co-authors, all in *ForskUL*, the journal that is explicit about the ambition to publish research both with and for teachers. Below, we elaborate on the three largest categories with teachers involved.

**Teachers conduct teaching planned by researchers.** The largest category (23 articles) “Teachers conduct teaching planned by researchers”, is heterogeneous regarding study design and theoretical underpinnings. It is represented in all categories of research interest except “Understanding and perceptions, teacher perspective” and “Study material”. There are learning studies, sociocultural qualitative studies, and intervention studies. Many of the socioculturally informed studies are placed in this category, due to methods such as observation and interview. Six learning studies fall in this category, despite the interactive approach in learning studies.

The studies vary concerning how the teachers' participation is staged and thus “what's in it” for them. Palmér and Johansson (2018), have a design-based approach with “iterative design cycles through collaboration between researchers and practitioners” (p. 336). The teachers' lesson designs are modified to explore how entrepreneurial competencies affect the appearance of the mathematical competencies. The collaboration is stressed, but the design of the study is based on the researchers' aims, and has, thus, more of a client-supplier approach (Bevins & Price, 2014) even though the teachers develop new insights. Wennergren (2016) studies teachers' learning in a professional development programme conducted as action research and concludes that the researcher's role as expert gradually is taken over by the teachers as the ownership of the action research project is transferred when teachers' knowledge and security increase. Varga (2016), reports on an action research-based project initiated by the teachers who were accustomed to work closely together. In the four-year research project, the researchers educated the teachers in reading comprehension and research-based methods to develop literacy. The teachers tried and evaluated the teaching methods and could continuously make choices of what to focus on in terms of development. When it comes to emancipatory potential, the design-based research project on entrepreneurship might have some limitations. For the teachers, the study mainly draws towards a technical knowledge interest (cf. Carr & Kemmis, 1986), even though the teachers develop new understanding, but this is not further discussed. In comparison, the two other examples might lead to the teachers' professional

development as well as a possibility for them to influence their working conditions, and thus be emancipatory. The collaboration is characterised by trust, developed over time, in the researchers' and practitioners' different competencies, and is an example of the "third space" that Prøitz et al. (2020) call for.

*Teachers plan teaching together with researchers.* The importance of participation of teachers is stressed, both in research (Eriksson, 2018; Prøitz et al., 2020) and policy (SOU 2018:19). In 15 of the articles, our interpretation is that the teachers have taken a more active part in planning the teaching. How this collaborative planning has been realised varies. In two of the articles (Bengtsson, Weiland, & Anderhag, 2017; Sundler, Dudas, & Anderhag, 2017), the teachers have planned the teaching together with a head teacher, in Sweden referred to as *first teacher* [förstelärare]. In both, the first teacher is the first author of the article, which is co-authored with two researchers. Consequently, in these two cases, it is the first teacher who has collaborated with a) the teachers, and b) the researchers. In some articles, it is difficult to detect how the researcher(s) and the teachers have worked together, as in the article by Nersäter (2019), in which it is stated that "the researcher cooperated closely with the teachers", but how the collaboration was conducted is not elaborated on. Similarly, in Johansson's (2019) study, a collaboration between researchers and teachers as a research group is put forward, but examples are not given. In the studies above, the teachers contribute to the planning and conducting of teaching, but if, and how, they benefit from the result following the researchers' analysis of the material is not discussed.

Collaboration is more explicit in Persson, Lundegård, and Wickman (2011), an action research project where a postgraduate student works with teachers in developing teaching about sustainability. They collaborate in planning and conducting the teaching, and the postgraduate student, who is the author, describes the importance of influence and mutual respect between researcher, teachers, and pupils, pointing to different contributions in the project, just as Eriksson (2018) urges for in collaborative research projects. In the intervention study by Björkholm (2018), the teacher and researcher have planned the lessons together and discussed them afterwards, but the analysis has been conducted by the researcher alone. The learning studies in Brante and Brunosson (2014) and Kullberg, Mårtensson, and Runesson (2016) have had different foci. In the first, the focus is on the teachers' understanding of how pupils learn, and the researcher and teachers worked together in analysing a pre-test and planning the intervention. In the second, which focuses on teachers' construction of learning objects, the collaboration between researchers and teachers is harder to detect. The researchers analyse the teachers' discussions and lessons according to the aim of the research.

In Bergdahl, Knutsson, and Fors (2018) however, the questions of teacher involvement and collaboration between teachers and researchers are more obvious and roles are clearly stated, probably due to the explorative design of the collaboration, with the aim to "explore whether teachers and researchers could design learning activities in collaboration that facilitate student engagement" (p. 101). In the design process, the teachers and the researchers shared their understanding and experiences. A Future Workshop was held, in which the teachers' ideas of what supports and hinders engagement guided the collaborative planning of the interventions and a "transfer of ownership" took place (p. 106). Similarly, in the action research project reported in

Gade (2012), the collaboration over time leads to a “trustworthiness” also in the dialogue between the teachers and the researcher (p. 567). Hence, the project is an example of the collaborative approach (Bevins & Price, 2014). In Carr and Kemmis’ (1986) terms, the research process in these examples is practical; the teachers’ reflections and understandings are highlighted. There is also a critical potential. Even though the teachers do not take part in the analysis and writing, they get to develop aspects in their practice, and might get a new understanding of it and its conditions. This could also be the case in the other projects, but it is not clearly put forward.

*Teachers plan teaching together with researchers and take part in analysis.* In eight articles in *ForskUL* and in one in *International Journal of Science Education* the teachers also take part in analysing the empirical material (additionally, in *Forskul* they are co-authors). Six articles have a clear “we” through the research process, even in the analysis phase, but if, or how, this “we” have worked through the study is not always thoroughly explained. In Broman, Frohagen, and Wemmenhag (2013) and Erixson, Frostfeldt Gustavsson, Kerekes, and Lundberg (2013), the studies were carried out by groups of teachers where one was a postgraduate student. Nyberg (2018) and Magnusson and Maunula (2013) are other examples of the researchers also conducting the teaching. In the latter, two teachers launched the project with their classes together with colleagues and as researchers they collected and analysed the empirical material, and, additionally, they wrote the article. They describe a sequence of four “research lessons” in classes in year 2–4, but the number of informants is not explicit, and neither how the work was divided. Thorsten, Wickman, Tunek, and Scheibel-Sahlin (2019) describe a learning study with the aim to increase upper secondary school pupils’ understanding of argumentative texts, and to describe what aspects need to be made explicit in the teaching. The four authors – one researcher and three social science teachers – plan and analyse together. The same situation applies in Björk, Nikula, Stensland, and Stridfält (2019), a socioculturally inspired study of theoretical thinking in maths. The authors, “the research group”, are a postgraduate student and three maths teachers. The group has collaborated in planning, conducting, and analysing as well as writing. In Fridolfsson, Clarke Bolin, Jonsson, and Reimark (2019), one of the authors having a postgraduate degree, they worked together as teachers to develop their teaching concerning gender issues. In these studies, the participants seem to have been involved in all parts of the research process, but the division of labour is not made explicit.

A somewhat different approach is set in the study by Holmqvist and Olander (2017). A school developing project is analysed with the focus on the teachers’ work in a learning study which aimed to develop the pupils’ knowledge of scientific theories. In the project, the teachers design, conduct and analyse the outcome of their teaching. The authors explain how the collaborative approach (cf., Bevins & Price, 2014) developed the teachers’ theoretically based knowledge and their ability to design their teaching.

An article in which the division of labour is obvious is an action research project aiming at describing the relation between mathematics, and building and construction (Bellander, Blaesild, & Björklund Boistrup, 2017). The project was based on a pre-study by two teachers, who contacted a researcher to collaboratively create a research project. The authors categorise the project as participatory action research, a strand of action

research that is social, both in seeing the activity as a social practice where the context is taken into consideration, and in the reflections on power relations between the participants, including the pupils. The respective roles in the project are carefully accounted for and the project could be categorised as critical, in Carr and Kemmis' terms, or political in Noffke's. There is an emancipatory potential, both considering the teachers and pupils, and, not least, the researcher, involved.

The categories of teachers' roles, sprung from descriptions in the articles, give support to the image in the overall description of a heterogeneous field with many variations. In addition, the categories themselves proved to show variations, and were sometimes hard to detect, since detailed accounts of the roles of the participants are not often spelled out. The following discussion session deals with these issues.

## Discussion

The aim of the current study has been to explore practice-near school research in the wake of the Education Act from 2010 in published Swedish research, with the focus on the participation of teachers in research. The investigation of research presented in 92 articles has led to a description of a field that is anything but clear-cut and unequivocal. Still, what the articles have in common is that the studies reported are practice-near school research, in different ways.

Most of the studies are initiated and led by researchers and show a vast variety of theories, study design and research interests. The characteristic studies are staged and carried out in rather a short time. The main research interests focus on the teaching and how teaching is understood and perceived, by teachers and pupils. The imprecise image of the field can be explained partly by it depending on political decisions and authorities' regulations, which have been numerous from the Education Act (SFS 2010:800) and onwards. Another aspect is its roots in several academic disciplines and research traditions. The call for research-based education is realised in our material in that the research projects are carried out in the school environment. What kind of research the authorities request is, however, ambiguous, partly due to the different definitions and interpretations of the wordings of "scientific ground and proven experience" in the Education Act (SFS 2010:800). This ambiguity is visible in a tension in research, between projects aimed at understanding practice, for example in Persson et al. (2011), an exploration of pupils' thoughts on sustainability issues, or getting robust results, as in the effect study on physical activity and pupils' concentration ability in mathematics (Bailan & Green, 2019).

The variation is also obvious when it comes to the practitioners' participation and how it is elaborated on and accounted for in the articles, which in turn made the categorisation difficult. There is an apparent interest in school practice, but what this means for the types of "collaboration" varies. Although the need for collaboration is stressed by the Swedish authorities (SOU 2017:35; SOU 2018:19), what is meant by collaboration could be discussed. Different concepts for collaboration and how collaboration is described can to some extent explain the vague picture that emerges. The investigation of which roles the teachers were engaged in during the research projects showed "Teachers conduct teaching planned by researchers" (23 studies) as the largest category followed by "Teachers plan teaching together with researchers" (15) and

“Teachers plan teaching together with researchers and take part in analysis” (9). In our close reading of the articles in these categories, we realised that the categorisation did not give the whole picture of what the teachers’ role could imply for the teachers involved. Even though collaboration is articulated, the study design in most cases is based on the researchers’ interests. Even in the category where teachers took part in all stages of research – planning, conducting teaching, and analysis – most articles were not explicit in how the collaboration was carried out, which made it difficult to understand how the collaboration was staged. In all the three categories, most articles do not show or discuss the collaboration at any depth, even though there are exceptions, such as Varga (2016), Bergdahl et al. (2018), and Bellander et al. (2017). These articles report thoroughly on how time, reflection, different roles in research, and exchange of ideas are central parts of the projects. The study designs in these articles seem important, especially design-based research and participatory action research, in which the division of labour is explicit and reflected upon, which, probably, is important for emancipation to occur.

Our results show that practice-near school research does not automatically give teachers possibilities to engage fully in the research. Important aspects seemed to be the length of time of the projects and the possibility for teachers to reflect on and discuss the teaching they produced, regardless of the initiative. In the studies where the teachers’ reflections and understandings are visible, as “practical research” drawing on Carr and Kemmis (1986) and Kemmis (2009), there are in some cases also critical and emancipatory potentials leading to a new understanding of the teachers’ working conditions. In others, an interpretation of a form of “supplier-client” approach from the academic side (Bevins & Price, 2014), or technical research in Carr and Kemmis (1986) terms, is close at hand. It is, however, important to emphasise that, based on this study, it is not possible to determine how the outcomes of the projects have affected the educational practice.

It is essential to ask whether teachers necessarily must participate in all the research phases. According to Prøitz et al. (2020), the practitioners bring what the authors call their “first space” into the collaboration, whereas the researchers bring the “second space”. It is vital that a “third space” is created, in which the practitioners and the researchers meet on equal terms. This means that practitioners and researchers bring their different competencies into the third space. We like to stress that to make this third space possible and useful, issues on organisation, funding and teachers’ work conditions are necessary to be dealt with. In our material, there are relatively few examples of studies that can be assumed to create a third space. As Gustavsen (2001) makes clear, the relationship between theory and practice is complex and needs to be mediated. In the articles we have analysed, however, there are few traces of the mediating discourse. This does not necessarily mean that there is a simplistic view of the different rationalities of theory and practice, but we would claim that more thorough reasoning about the collaborators’ roles would strengthen trustworthiness in the studies.

Notwithstanding our aim to find articles published by Swedish researchers, the dominance by the journal *ForskUL* needs to be discussed. The journals’ clarity in presentation and aim at practical approaches and teacher involvement is probably the main reason. It is also likely that *ForskUL* has become the journal to which



researchers turn to publish their results even for groups outside the academy since it is accessible to anyone. The articles with teachers as co-authors were published in *ForskUL*, and, in some articles, the teachers also took part in the analyses. The low occurrence of explicitly reported collaboration in articles in other journals is probably a result of this not being required for publishing. The dominance by *ForskUL* is also a reason for the relatively large share of the study design presented as learning studies (a quarter of the studies), since the journal forwards lesson studies and learning studies as teaching developing research (action research, design experiment and design research are also mentioned) (ForskUL, 2020). The popularity of learning study could perhaps be explained by the explicit design, and the fact that a study can be conducted in only a few lessons which makes time less of an object than in more longitudinal studies, of which there are but a few in our material. A question for further study is what long-term effects the different kinds of studies have.

To conclude, the imprecise image of Swedish practice-near school research is by itself not a problem as it signals the possibilities and inclusiveness for research from different perspectives. Yet, it is important to be clear about aims and definitions in the research and the different knowledge interests for practice and research (Carr & Kemmis, 1986, 2005). For the teachers, what is most at stake is either trying out new teaching methods – a technical interest – or getting to know themselves better as teachers – a practical interest – or changing the conditions of the work – a critical interest. The researchers might have other incentives, the most obvious being the will to contribute with new knowledge to the scientific community, and another that the recent drives for practice-near research give new possibilities to finance research. The varying knowledge interests of the actors are important to reflect upon in practice-near research, since they influence scientific claims, aims, study design, and, not least, roles. A question of concern is what kind of research is possible for active teachers to take part in, and which knowledge interests are desired by the authorities, and, by extension, society. The fact that the critical interest (studies where the teachers take an active part throughout the whole research process with emancipatory aims) and the political dimension (dealing with contextual conditions for teaching (Noffke, 1997, 2009)) are so sparsely represented in our material is in line with the observations Carr and Kemmis (2005) make about our time being marked by evidence and measuring. In such a situation, improvement of practice is foregrounded, and emancipatory efforts tend to be marginalised.

### *Implications for future practice-near school research*

Carr and Kemmis (2005) go so far as to claim that critical action research should be the educational research *par excellence*. Noffke (1997, 2009) asserts that all action research is, to some extent, political, since there is a democratic aspect in action research. What if the strand of the social agenda in research, a line of thought that goes back to Lewin (1946), is lacking in the Swedish practice-near school research field? What goes missing? Adolfsson and Sundberg (2018) summarise the ambition of the last 25 years to make school research-based in Sweden as a gradual shift from “indirect to more direct initiatives” (p. 57 [our translation]), from collaboration to develop both knowledge and

practice to a primary attention on practice. In our opinion, there is a narrow view of what practice-near school research could be in the Official Government Report (SOU, 2018:19), *Forska tillsammans* [Do Research Together], where “practice-developing research” is the preferred term, and in the call for applications of research funding from SKOLFI: “Methods and techniques in the planning, implementation, and evaluation of teaching, which contribute to the development and learning of children and students” (SKOLFI, 2020 [our translation]). These ideals could be compared with the “Bildung” and citizenship perspectives of action research in the Nordic region that Rönnerman and Salo (2012) recognise. We see a risk that a narrowing down of the concept practice-near school research will, first and foremost, endorse what Carr and Kemmis (1986) call technical research.

It is hard to predict what course the future projects will take, but to build a research field with equality in interest and power for researchers and teachers, we believe that a recognition of the contemporary picture delivered in this study will be essential, and that questions of researcher and teacher roles need to be addressed.

## Notes

1. The concept is a literal translation of the Swedish concept *praktiknära skolforskning*. It is used by the Swedish Institute for Educational Research, SKOLFI (2020), in the Government Directive (U 2017:03) and the Government Official Report (SOU 2018:19). However, the seemingly preferred terms in research in educational sciences published internationally are practice-based or practice-informed research, which are used synonymously (cf. evidence-based and evidence-informed where there is a pronounced difference). There are many other concepts used in research and policy texts (Serder & Malmström, 2020), for example *praxis-based research, practice-based research, practice-developing research, school research, school-based research, school development, collaborative research, teacher research, practitioner research, but also action research, design-based research, learning study*, and others.
2. A broad search in Swepub a data base covering research published at Swedish universities, with search words in Swedish [(praxisnära OR praktik\* OR skolnära OR skolutv\* OR samverkans\* OR lärarforsk\*) AND (skola OR utbildning OR undervisning OR lärande)] results in 160 hits in 2011, 252 hits in 2015, and 253 hits in 2018. Search words translated: [(praxis-based OR practice\* OR school\* OR collaborate OR collaboration OR teacher) AND (school OR education OR teaching OR learning)].
3. As synonymous concepts, SKOLFI emphasises practice research, practice-based research, clinical research and development, improvement, change research or teaching-improvement research (SKOLFI, 2020).
4. Studies in the ULF agreement are not included in the data material since they are not published within the set time-frame.
5. This means that teachers’ development work and presentations of what is called proven experience are not included, unless scientifically published.
6. Search in Swedish: [(praxisnära OR praktik\* OR skolnära OR skolutv\* OR samverkans\* OR lärarforsk\* OR lärar\*) AND (skola OR utbildning OR undervisning OR lärande OR aktions\*) AND grundskol\* OR gymnasium\*), in English: [(praxis-based OR practice\* OR school\* OR collaborate OR collaboration OR teacher\*) AND (school OR education OR teaching OR learning\* OR action\*) AND (compulsory OR upper secondary)].
7. Five journals were selected based on aims and scope but when scanning abstracts no articles met our criteria: *Education and Information Technologies, Pedagogisk forskning i Sverige, Science and Education, Nordisk tidskrift för allmän didaktik, Norsk pedagogisk tidsskrift*.

8. Our translations, emphasis in the original.
9. Somekh and Zeichner (2009) investigate actions research studies and show how different discourses of action research emerge: government-funded reform programmes aimed at controlling teaching, reform programs on the initiative of the academy and locally initiated long-term projects; all the efforts are interpreted as contributing to the development of action research and as ways of handling the tension between knowledge development and action for change. Their framework groups studies according to purpose, contextual conditions, views of teachers and teachers' learning, incentives to participate, funding of the project, the form of inquiry, relation to other research and ways of representing research.

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