Thomas Eri

Teacher and Librarian Partnerships in Literacy Education
Contradictions, Barriers and Opportunities

Dissertation for the Degree of PhD
Faculty of Educational Sciences
University of Oslo
2018
Executive summary

The topic of this thesis is teacher and librarian partnership in literacy education. The study explores contradictions, barriers and opportunities in such partnerships. The purpose of the study is to develop new knowledge about and theoretical perspectives on the types of contradictions, barriers and opportunities that might occur in teacher and librarian partnerships, as well as how these contradictions can be resolved. Teacher and librarian partnership is an under-researched topic within educational literacy research and within the educational sciences in general. The lack of research within the educational sciences on this partnership is a paradox, as substantial research from the library and information sciences shows that teacher and librarian collaboration has a positive impact on student reading engagement, achievement and motivation.

The study analyses multiple sources of data from two small-scale educational interventions involving teacher and librarian partnerships at the school level and at the inter-institutional level in Norway. The results from the analysis show that some of the conflicts and dilemmas that occur in the two interventions are manifestations of various types of contradictions within and across the activity systems of schools, libraries, and educational authorities. The study discusses how these contradictions are triggered by a primary systemic contradiction in literacy education between a sociocultural discourse and a dominant technocratic discourse.

According to the dialectical perspectives of cultural-historical activity theory and expansive learning, barriers caused by systemic contradictions have to be resolved to become opportunities for transformative change and development. The successful resolution of contradictions in local interventions of teacher and librarian partnerships relies on critical reflexive practitioners and autonomous institutional leaders. However, this study demonstrates how dominant technocratic discourses in education makes it difficult to resolve contradictions that occur in teacher and librarian partnerships solely through local efforts. The development of sustainable teacher and librarian partnerships depends on the priority given to such partnerships in educational policy and research, in curriculum development and in the professional training of both professions.
Acknowledgements

I am eternally grateful for the thorough, patient, and insightful supervision provided by Professor Joron Pihl, and the many interesting discussions we have had during the long journey towards completion of this PhD thesis – you always made me believe in the importance of the project and helped me stay intellectually sharp throughout the whole process. I am also grateful for the thought-provoking and useful comments by Professor Leif Lahn along the way, especially in relation to methodology. Thanks to all the informants who opened up their professional practices and shared their thoughts and opinions with me. Thanks to the Professors and fellow PhD candidates at the National Graduate School in Educational Research (NATED) for the academic and the not-so-academic activities that made the PhD journey both educationally stimulating and a lot of fun! I want to express my gratitude to Oslo Metropolitan University for funding this work. Thanks to my colleagues and friends at the Faculty of Education and International Studies for your willingness to collaborate, for our stimulating conversations, for all the good laughs, and for just putting up with me every day. Last, but not the least, my deepest gratitude goes to my parents, and to Sigrun for being the best mother to our beloved children, Julia and Jonas, and for allowing me to spend countless of hours, days, and even weeks, months and years to complete this work.
PART 1: EXTENDED ABSTRACT

1. Introduction ........................................................................................................................................ 1
   1.1. Objectives and research questions .......................................................................................... 1
   1.2. Outline of the thesis ................................................................................................................. 2

2. Cultural-Historical Context ............................................................................................................. 3
   2.1. The public library in education ................................................................................................. 3
   2.2. The school library in educational settings ................................................................................ 4

3. Review of Relevant Research ..................................................................................................... 7
   3.1. Review strategy ........................................................................................................................ 7
   3.2. Teacher and librarian partnerships .......................................................................................... 8
       3.2.1. Library as a space and place in educational settings ........................................................ 9
       3.2.2. Benefits of teacher and librarian partnerships .................................................................. 10
       3.2.3. Barriers to teachers and librarian partnerships .............................................................. 11
       3.2.4. The teacher and librarian collaboration model ............................................................... 14
       3.2.5. Summary of review and research gaps ........................................................................... 16

4. Theoretical Framework .............................................................................................................. 19
   4.1. Cultural-historical activity theory (CHAT) .............................................................................. 19
       4.1.1. Formative intervention and expansive learning ............................................................. 20
       4.1.2. CHAT and critical theory .................................................................................................. 22
       4.1.3. Dialectical and systemic contradictions .......................................................................... 23
       4.1.4. Technocracy and the primary contradiction in capitalist societies .................................. 25
       4.1.5. Discursive manifestations of contradictions .................................................................... 26

5. Methodology ..................................................................................................................................... 29
   5.1. The Research Process ............................................................................................................... 29
       5.1.1. Starting up ....................................................................................................................... 29
       5.1.2. Changing the research focus ........................................................................................... 30
       5.1.3. Changing the research focus again ................................................................................. 31
   5.2. Research design ......................................................................................................................... 32
       5.2.1. Case study ....................................................................................................................... 32
       5.2.2. Two embedded units of analysis ..................................................................................... 32
   5.3. Data collection ............................................................................................................................ 34
       5.3.1. Multiple sources of evidence .......................................................................................... 34
PART 2: THE ARTICLES

Article 1

Article 2

Article 3
PART 1: EXTENDED ABSTRACT

1. Introduction

1.1. Objectives and research questions

The topic of this thesis is teacher and librarian partnerships in literacy education. The study explores contradictions, barriers and opportunities in such partnerships. The purpose of the study is to develop new knowledge about and theoretical perspectives on the types of contradictions that might occur in teacher and librarian partnerships, as well as how these contradictions may be resolved in order to generate sustainable teacher and librarian partnerships within literacy education.

The main theoretical framework for the study is cultural-historical activity theory and the dialectical principle of systemic contradictions, in which barriers exist but these barriers also pose as potential opportunities for change and development (Engeström & Sannino, 2011).

I explore systemic contradictions that occur in two cases of educational interventions involving teacher and librarian partnerships. The first case is a study of contradictions at the inter-institutional level. The second case is a study of contradictions at the school level. The study is guided by the following main research question and three sub-questions:

Main research question: How do systemic contradictions work as barriers and opportunities for developing teacher and librarian partnerships in literacy education?

Sub-question 1: What types of systemic contradictions occur in interventions of teacher and librarian partnerships in literacy education?

Sub-question 2: How do teachers, librarians and institutional leaders respond to systemic contradictions?

Sub-question 3: How can systemic contradictions be resolved in order to develop and sustain teacher and librarian partnerships in literacy education?

The three articles in this study provide answers to the three sub-questions. I explain which specific sub-questions the different articles address in the summary of the articles (Chapter 6). The three articles, as a compound entity, provide the material for discussing the main research question (Chapter 7).
1.2. Outline of the thesis

This thesis has two main parts. Part 1 consists of the extended abstract containing eight chapters. Part 2 consists of the three articles. Chapter 2 in the extended abstract provides a short overview of the cultural-historical context of the role of public and school libraries in Norwegian primary and secondary education. The historicity of activity systems is important for the analysis of contradictions in this study. In Chapter 3, I review relevant research and conceptualisations of teacher and librarian partnerships. The review provides a conceptual framework for the study and identifies research gaps. Chapter 4 contains the theoretical framework of the study. The theoretical analysis of systemic contradictions in teacher and librarian partnerships is based on cultural-historical activity theory (CHAT) and on critical theories in education. In Chapter 5, I describe the empirical context, the challenges I encountered in the field, the changes to the research focus that I applied along the way and the decisions that led up to the final research design. I explain the data collection methods, discuss the data sources and give reasons for the selection of the data used in the articles. Furthermore, I explain how I constructed an analytical meeting point between theory and empirical data, as well as how I analysed dilemmas and conflicts occurring in the data as possible manifestations of contradictions. Lastly, in this methodology chapter, I discuss issues of causality, reliability, validity and ethical considerations. Chapter 6 contains a summary of the articles. In Chapter 7, I discuss contradictions, barriers and opportunities in consideration of the articles, the review, CHAT and the theory of contradictions and relevant critical perspectives. The discussion illuminates the empirical, methodological and theoretical contributions of this study, which I also summarise in Chapter 8. Thereafter, I offer some recommendations for educational policy, research and the development of teacher and librarian partnerships in the future.
2. Cultural-Historical Context

Before providing an overview of relevant research on teacher and librarian partnerships, I will give a brief summary of the cultural-historical context of the role of public and school libraries in Norwegian primary and secondary education. Historicity is important for an analysis of systemic contradictions because contradictions are historically accumulated within and across activity systems (Engeström, 2001).

2.1. The public library in education

In 1947, the first Norwegian Libraries Act required every municipality in Norway to have a public library service that offered the free use and borrowing of books. The latest version of the Norwegian Libraries Act, lastly revised in 2013, states that the public libraries’ objective is to promote knowledge, education and cultural activities. Public libraries are independent meeting places and arenas for public debate (The Public Libraries Act, 1985). However, the Act does not mention the public library’s relationship with schools and school libraries.

In Norway, local authorities have the autonomy to decide if and how resources should be spent on building a partnership between the public library and school libraries in the municipality. However, in 2013, the government removed a section in the Public Libraries Act that stated that public and school libraries should collaborate. It was done away with on the grounds that its removal would give the local authorities more flexibility in organising local public libraries’ activities, thereby optimising the use of resources. However, an evaluation of school library development in Norway reported that most municipalities do not prioritise school library development (Carlsten & Sjaastad, 2014). Thus, removing the requirement of public and school library collaboration from the Public Libraries Act has weakened how public and school libraries are implemented in educational settings. This politically-generated contradiction is related to the political division of the responsibility of school and public libraries in Norway. The Ministry of Education and Research is responsible for the development of school libraries, while the Ministry of Culture oversees the public library sector. The evaluation concluded that the political division of responsibility weakens the partnership potential between school libraries and public libraries. Furthermore, a change in the Education Act is needed to ‘treat the issue of how school libraries and public libraries should cooperate in order to develop school libraries as a pedagogical arena’ (Carlsten & Sjaastad, 2014, p. 10).
2.2. The school library in educational settings

Norwegian educational strategy documents emphasise that school libraries are important tools for the development of reading literacy, digital literacy, cultural literacy, critical literacy and creative activity (ABM-utvikling, 2006; Universitetet i Agder, 2013a; Utdanningsdirektoratet, 2007; Utdanningsforbundet, 2009). According to the ‘Regulations to the Norwegian Education Act’, all schools must have a school library unless access to a school library is secured through a partnership with other libraries (Regulations to the Norwegian Education Act, 2006). An evaluation of school libraries in Norway confirms that nearly all schools in Norway have a school library or have an agreement with the local public library. However, schools often have to close their libraries during school hours, and few primary schools have full-time librarians (Barstad, Audunson, Hjortsæter, & Østlie, 2007).

A school librarian has a bachelor’s degree or higher education level. A teacher-librarian holds full qualification as a teacher and some qualification in librarianship due to continued in-service training. Statistics from 2006 revealed that only 11% of the persons in charge of school libraries at primary and lower secondary levels in Norway have degrees in library science. Only one-third of the schools have a person in charge of the library whose education focused on library science or has at least half a year of in-service librarianship training (Barstad et al., 2007, p. 22). The school library staff in the primary and lower secondary levels reported that they wanted more collaboration with teachers and a more active role in the learning activities of the school. The evaluation by Barstad et al. (2007) concluded that one of the main challenges is to increase library resources and enhance library services in primary and lower secondary education.

In 2009, the Ministry of Education and Research launched a four-year development programme to strengthen school libraries as arenas for literacy and learning. Six per cent of the primary and lower secondary schools in Norway participated in the programme (173 out of 2,957 schools). An important goal of the programme was to reduce the gap in literacy achievement among pupils (Universitetet i Agder, 2013a). The programme provided support for schools’ integration of school libraries into learning activities and for the development of collaboration between teachers and library staff. A number of schools that participated in the programme developed various forms of teacher and librarian partnerships and integrated the school library in learning activities (Universitetet i Agder, 2011, 2012, 2013b). This localised development at the schools was considered successful. However, Carlsten & Sjaastad’s (2014) evaluation of the programme is critical towards the low priority given to school library development at the national level. A national strategy pertaining to how to equip a school library or how to establish models of teacher
and librarian collaboration and library use is lacking. The evaluation also recommended for the Education Act in Norway to undergo changes to specify that library staff have library specific training and that libraries are available during school hours.
3. Review of Relevant Research

This chapter contains a review of relevant research and conceptualisations of library use and teacher and librarian partnerships. I started working on this review in 2010. The aim of the review was to systematically develop a conceptual framework for the thesis and identify research gaps (Kennedy, 2007; Maxwell, 2006). In the discussion (Chapter 7), I have included recent publications on teacher and librarian partnerships and literature-based literacy education that are relevant for this study but not included in the review.

3.1. Review strategy

In this section, I will describe my review strategies, the scope of the review and the inclusion/exclusion criteria.

‘Teacher and librarian partnerships’ is a cross-disciplinary concept involving two professions and institutions and two research fields - respectively, the educational sciences and library and information sciences. Therefore, a review of teacher and librarian partnerships had to include key databases within both research fields. In accordance with the main research question, I was particularly interested in teacher and librarian partnerships in connection with literature-based literacy programmes. I established some specific inclusion criteria: The research papers had to be published in peer-reviewed international journals involving the development of, or the evaluation of, teacher and librarian partnerships combined with literature-based literacy programmes. However, these criteria turned out to be too limited because of the scarce research on teacher and librarian partnerships within literature-based literacy education. Therefore, to obtain a good overview about teacher and librarian partnerships, I had to include research on partnerships directed at other objects of activity, such as information literacy, guided inquiry and information and communication technologies (ICT). I have included articles that have documented the benefits of and/or barriers to teacher and librarian partnerships.

I began with searching the abstracts of peer-reviewed journals published between year 2000 and 2010 for the topics of ‘teacher and librarian partnerships’ and ‘literature-based literacy education’. The aim of the search was to review relevant articles that discussed teacher and librarian partnerships in literature-based literacy education. I used the EBSCOhost to search simultaneously within the main databases of educational sciences and library and information sciences. I applied a broad search strategy using several related concepts as search terms, such as ‘(teacher OR school) AND (school librarian OR public librarian OR library) AND (collaboration OR cooperation OR partnership)’. This method produced 9,194 ‘results’ (i.e. articles) on the topic of ‘teacher and
When I combined these two searches, I ended up with 281 ‘results’. Fifty-three of these articles were within the multi-disciplinary database Academic Search Premier, while 208 were within the library and information sciences databases Library & Information Science Source and Library, Information Science & Technology Abstracts. Only 20 of the articles were within the educational sciences database Educational Resource Information Center (ERIC). The unequal distribution of ‘results’ indicates that there is significantly more research on teacher and librarian partnerships within library and information sciences compared to the educational sciences. I was able to confirm this assumption when going through the 208 papers. Seven of the papers matched the inclusion criteria of discussing teacher and librarian partnerships in some form of a literature-based literacy programme in primary or secondary education. These papers are included in the review.

In addition to the databases in EBSCOhost, I searched in other large databases such as Web of Science and Google Scholar and the journal databases of main publishers like Taylor & Francis, Springer, Elsevier, and Sage. I also searched for government documents and evaluation reports on the topics published in Norway and other Scandinavian countries. I used several specific search terms such as ‘teacher and librarian collaboration’, ‘school and library partnership’, ‘free voluntary reading’ and ‘extensive reading’ and also combined them at times. Moreover, I included extended search terms such as ‘interprofessional collaboration’ and ‘literacy education’ to make sure that I did not overlook important contributions. To limit the searches, I used exclusion criteria like ‘NOT higher education’ and inclusion criteria like ‘primary school OR secondary school’.

When I found a relevant paper, I examined the references to identify more papers that were pertinent. This process of scoping continued until the same references began to appear in my searches and in the papers. This indicated that the most relevant key texts were identified and that I could start reading and categorising the texts and could thereafter compose the review.

### 3.2. Teacher and librarian partnerships

Teacher and librarian partnerships can consist of professional collaboration between teachers, school librarians and public librarians. Partnerships can also involve collaboration and agreements at the institutional level between schools and library administrators as well as at a national policy level through legal acts and strategic policy documents.

Although there is limited research on teacher and librarian partnerships within the educational sciences, there is an extensive body of research within library and information sciences if we include teacher and librarian partnerships within all educational grade levels, different subjects
and information literacy programmes. A rationale for promoting teacher and librarian partnerships rests on research and theoretical work that provide arguments for the benefits of libraries as learning spaces and as places for stimulating literacy and reading engagement. In this section, I first turn to some of these arguments in the literature. Then, I review research and conceptualisations of teacher and librarian partnerships that I find relevant to the topic and research questions of this study. I focus on what the existing body of knowledge can inform us about the benefits of, and the barriers to, teacher and librarian partnerships. I also address preconditions for successful teacher and librarian partnerships. Lastly, I summarise the review and briefly discuss the strengths, weaknesses and research gaps within the existing body of knowledge.

3.2.1. Library as a space and place in educational settings

According to Dressman (1997), the school library has the immanent quality of a ‘liminal space’ – i.e. a space in which pupils can pursue alternative agendas from instrumental time-on-task activities in the classroom. A liminal space potentially opens up new perspectives and transforms the learner as he or she spends time in it. A well-equipped and well-designed school library facilitates encounters with textual universes that can stimulate volitional and autonomous reading motivation. Moreover, a ‘good’ book engages the aesthetic experiences and the fantasy and feelings of a child.

Rafste (2005) studied students’ actions in a school library and in classrooms at two senior high schools in Norway. Inspired by Goffman (1959), Rafste noticed that a classroom can be characterised as a front region with strict rules, routinised actions and formal instruction-related activities. The actions and movements of students are controlled and transparent in front region spaces. In contrast, back regions are spaces with weak rules and informal leisure-related activities that are open for autonomous actions and movements. The school library is a porous room with the ability to be both a front region and a back region. Schools primarily need back regions because of the dominant position of front regions. Rafte’s back region metaphor and Dressman’s metaphor of the library as a liminal space emphasise the benefits of creating spaces for open-ended and autonomous literacy experiences. Libraries have the immanent quality of being such spaces.

Similar to Rafste, Audunson (2005) was inspired by Goffman and, in particular, Habermas (1991) when he argued for the necessity of low-intensive meeting places in increasingly multicultural and digital complex societies. He defined high-intensive meeting places as ‘those arenas where people invest their primary engagement, whereas low-intensive meeting-places are arenas where one is exposed to the values and interests of others’ (p. 429). Classrooms and workplaces are high-
intensive meeting places characterised by obligatory time-on-task and outcome-oriented activities involving competition and demands to perform and achieve according to institutionalised objectives. In contrast, the public library is an independent low-intensive meeting place that enables communicative action free from institutionalised objectives of performance. The public library provides a space for democratic discourse, citizenship and debate on social and political issues: ‘People can meet, communicate and be active together across generations and social and ethnic belongings’ (Audunson, 2005, p. 436).

The promotion of public libraries as low-intensive meeting places has gained popularity in the Norwegian policy on library use. The Public Libraries Act was revised in 2013; it currently includes the following two objectives for public libraries: ‘to promote the spread of information, education and other cultural activities through active dissemination’ and ‘to be an independent meeting place and arena for public discussions and debates’ (The Public Libraries Act, 1985). In comparison, section 1-1 of the Education Act includes the following objectives for education: ‘[to] provide insight into cultural diversity and show respect for the individual’s convictions’ and ‘to promote democracy, equality and scientific thinking’ (Education Act, 1998). Public libraries and public schools have a shared social, educational and democratic mandate manifested through the Public Libraries Act and the Education Act.

3.2.2. Benefits of teacher and librarian partnerships

International studies have shown that school librarians and school library use have a positive effect on reading skills, reading motivation and reading achievement (Small, Shanahan, & Stasak, 2010). A study based in Colorado explored correlations between student performance on a standardised test for the 4th and 7th grades and teacher and librarian collaboration at 200 schools (Lance, Rodney, & Hamilton-Pennell, 2000). The study found that test scores rise as library media specialists spend more time collaborating with teachers when planning information literacy lessons, identifying materials, teaching information literacy skills to students and providing in-service training to teachers. These results are consistent with those of Farmer (2006), who examined key indicators within school library programmes at 60 schools ranging from the elementary school level to the high school level. The results revealed that collaborative planning between teachers, administrators and professional library staff was the most significant factor (.853) in a school library programme to impact student academic success on state standardized achievement tests.

A library-based guided inquiry project in New Jersey involved ten school librarians working with seventeen classroom teachers from ten diverse public schools (Todd, 2006). Five hundred and
seventy-four students in grades six to twelve participated in the project. The data collected through surveys sought to measure changes in knowledge acquisition among the students, from merely gathering facts to developing a deeper level of knowledge due to a more critical engagement with information. The study found that when teams of librarians and teachers guided students through stages of inquiry, students engaged more analytically and reflectively when using information. Another inquiry project-based learning intervention in Hong Kong examined the effect of combined teacher and librarian collaboration and inquiry-based learning to support the reading abilities of primary school students (Chu, Tse, Loh, & Chow, 2011). The study used the Progress in International Reading Literacy Study (PIRLS) tests to evaluate the students’ reading abilities, which showed that the overall reading performance had improved as a result of the intervention.

In addition, a school and library partnership project in Sweden documented good results regarding extensive voluntary reading and work with fiction (Alleklev & Lindvall, 2000). A multicultural suburban primary school that historically scored very low on reading tests participated in the project. Collaboration between the school and the local public library made it possible to ‘flood’ the classrooms with multilingual and Swedish books that pupils found interesting and that contained narratives that pupils with different religious and cultural background could relate to, identify with and share. This resulted in the pupils scoring above average in Swedish reading and comprehension tests after the project was completed.

Moreover, an elementary school in the United States reported good results stemming from the participation in five-plus years of a literature-based literacy programme called One School One Book (Bates & Webster, 2009). The school’s students steadily improved their scores on standardised reading tests after implementing the reading programme. Each year for one month, 98% of the students and their families (approximately 700 families) read a preselected book aloud at home. The school collaborated closely with the public library. The librarians and teachers reported many positive by-products of the programme, including families starting to use the library more frequently and requesting books by the same author or books similar to the type that they read in the programme. Reading for the sake of pleasure was cultivated in the families, and a school-based activity spilled over into family literacy and library use.

### 3.2.3. Barriers to teachers and librarian partnerships

The studies reviewed above illustrate the benefits of teacher and librarian partnerships and library use for literacy. However, as I demonstrate in this section, several studies have shown that substantial barriers exist in terms of developing teacher and librarian partnerships, on the
institutional level, related to institutionalised rules of division of labour, and related to differences in professional knowledge cultures.

The aim of a statewide literature-based literacy programme in Australia was to encourage six- to nine-year old children to develop an interest in reading. The programme incorporated local public librarians as programme coordinators. The librarians contacted their local primary schools to become partners in the project. A study of the programme involved interviews with librarians, students, teachers and parents at ten of the school sites (Leitão, Barratt-Pugh, Anderson, Barblett, & Haig, 2015). The participating students reported that the visits to the public library were what they liked most about the programme. Additionally, many of the parents said the programme had a positive effect on their children’s reading habits, and the librarians reported an increase in new library membership as well as an increase in boys’ reading. However, the study concluded that the greater involvement of teachers in planning and implementing the programme appears to have been a missed opportunity that resulted in only a minority of students in each school registering for the programme. The programme could have had greater impact if stronger partnerships between libraries and schools were developed. Teachers reported that they lacked information about the programme, did not have time to implement the programme and did not see the benefits of working together with the local library. The authors of the study suggested that use of technology could offer new possibilities for collaboration. However, introducing technology in itself is not enough to change the rules and actions of professionals. Notably, Creighton (2010) found that school librarians in the United States did not take advantage of available web-based technologies that could help them schedule collaborative planning sessions with teachers and overcome the ‘time barrier’.

Several studies have emphasised that teachers’ perception of collaborating with librarians is the main barrier for developing teacher and librarian partnerships. For instance, Mokhtar and Majid (2006) conducted a survey-based study with 76 teachers in Singapore primary and secondary schools. They discovered that the number of teachers collaborating with school librarians was very low due to three main factors: First, teachers depended on subject-based textbooks and had a limited awareness about supplementary materials. Second, teachers considered collaborating with librarians as very time-consuming. Third, teachers deemed the school librarian as being unqualified for the planning of learning activities. Meyers (2007) reported similar results from an intervention study of six high school libraries. First, teacher-librarians had difficulties articulating how the library contributed to student learning. Second, the teacher-librarians lacked long-term goals for the library programmes at the schools and felt powerless to change their situation. Third, teachers and administrators had a poor grasp of the potential roles of the teacher-librarians, and
miscommunication between teacher-librarians and teachers appeared regularly. Finally, teacher-librarians were serving as gatekeepers to the collection of resources rather than having a pedagogical role in student learning. Limberg and Alexandersson (2003) formed similar conclusions from a study of activities in Swedish school libraries. They argued that teachers’ ‘predominant meaning of the school library as “a warehouse for books” needs to be challenged to give more room to alternative meanings. For instance, teachers need to view the library as a space for free discourse and intellectual and creative activity’ (p. 14). Teachers’ views on collaborating with other professionals is a key challenge because school librarians are more actively attempting to collaborate with classroom teachers than vice versa (Small & Snyder, 2009).

Can interventions in teacher education influence future teachers’ attitudes towards teacher and librarian partnerships? I found some relevant studies that address this question. For instance, Moreillon (2016) investigated how a pre-service workshop could influence pre-service teachers’ perceptions of collaborating with librarians. The workshop exposed 165 pre-service student teachers to four areas of expertise in teacher librarianship, including co-teaching reading comprehension strategies. The student evaluation forms showed strong support for teacher and librarian collaboration. Eighty per cent ‘agreed’ that co-teaching reading comprehension strategies with their teacher-librarian could improve their teaching. According to Moreillon, if pre-service teachers experience the benefits of teacher and librarian partnerships during teacher education, they will more likely seek out collaborating with librarians throughout their teaching career. Oberg’s research with teachers in Canada supports Moreillon’s study by showing that teachers who were provided with information about library use and collaboration with librarians during their pre-service training were more likely to work with literature-based literacy programmes and to collaborate with librarians (Oberg, 1993). In Norway, no such programmes exist in pre-service teacher education.

The international research on barriers to teacher and librarian partnerships corresponds with research in a Scandinavian context. In Norway, an evaluation of a national state run literacy programme (Buland, Dahl, Finbak, & Havn, 2008) stated that prerequisites for teacher and librarian partnerships include having a clear strategy, support from the management in schools and integration within the general pedagogical activity of the school. Comprehensive research reviews from Norway and Sweden have demonstrated that schools utilise library resources to a limited extent. Moreover, the limited knowledge teachers have about collaboration with librarians and library use largely determines the educational role of librarians at a school (Barstad et al., 2007; Ingmarson, 2010), which also means that school and public libraries are largely invisible in pedagogical planning (Rafste, 2005).
Internationally, few cultural-historical analyses exist that can help us to understand the low status of teacher and librarian partnerships in education. One exception is Sensenig (2011), who employed a historical analysis to understand the absence of libraries in reading education policies in the United States. He presented two possible explanations: First, libraries have moved away from supporting children’s print literacy development as their primary institutional identity and have instead moved towards the library as a democratic meeting place and adult literacy. Second, educational research and policies have since the beginning of this century marginalised the role of libraries in education because of a greater emphasis on cognitive models of reading. Such cognitive models view reading progress as an individual process that teachers can modify through explicit interventions. Educational researchers and policymakers in the United States view reading interventions as a task primarily for schools and not for libraries.

3.2.4. The teacher and librarian collaboration model

Montiel-Overall and colleagues have contributed extensively to our knowledge about the preconditions for developing well-functioning teacher and librarian partnerships (Montiel-Overall, 2007, 2008, 2009; Montiel-Overall & Grimes, 2013; Montiel-Overall & Hernandez, 2012; Montiel-Overall & Jones, 2011). A widely used argument in these publications for teacher and librarian collaboration is that increasingly complex global issues and technological advances necessitate the increased involvement of librarians in teaching and learning activities. Informed by Loertscher’s model of collaboration between teachers and librarians (Loertscher, 2000), Montiel-Overall proposed a model for the development of teacher and librarian collaboration (Montiel-Overall, 2005, 2006). This model posits a typology of low to high forms of collaboration identified in four facets:

Table 3.1. Four facets of teacher and librarian collaboration (Montiel-Overall, 2008, p. 146)

<table>
<thead>
<tr>
<th>Facet A: Coordination</th>
<th>Facet B: Cooperation</th>
<th>Facet C: Integrated Instruction</th>
<th>Facet D: Integrated Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working together to arrange schedules, manage time efficiently and avoid overlap</td>
<td>Responsibilities are divided among participants to create a whole project</td>
<td>Jointly planned, implemented and evaluated instruction integrates library curriculum and content curriculum in a lesson or unit</td>
<td>Integrated instruction found in Facet C occurs across a school or school district</td>
</tr>
</tbody>
</table>

LOW HIGH
As illustrated in Table 3.1, Montiel-Overall regards collaborative practices between teachers and librarians as existing on a continuum from lower to higher forms of collaboration. At the left lower end, we find coordinating activities such as managing time and avoiding overlap. At the right higher end, we find jointly planned and implemented lessons with integrated library curriculum. Montiel-Overall’s definition of ‘high-end’ teacher and librarian collaboration is as follows:

(...) a trusting, working relationship between two or more equal participants involved in shared thinking, shared planning and shared creation of integrated instruction. Through a shared vision and shared objectives, student learning opportunities are created that integrate subject content and information literacy by co-planning, co-implementing, and co-evaluating students’ progress throughout the instructional process in order to improve student learning in all areas of the curriculum. (Montiel-Overall, 2008, p. 150)

As the quote above illustrates, Montiel-Overall emphasises that to improve students’ learning, school librarians need to be an integrated part of instruction and evaluation practices at a school. Montiel-Overall also identified five themes as prerequisites of high-end collaboration (Montiel-Overall, 2008). The first theme, school culture, highlights the importance of working in an environment open to differences and still supporting collaboration between teachers and librarians. Collaboration is not dependent on sharing the same worldview as long as the school culture is open, flexible and supportive of diverse perspectives. The second theme addresses various attributes of collaborators such as being flexible and accommodating and having teaching experience and leadership qualities. The teachers expressed that librarians’ expertise in providing literature and other resources to accompany lessons was invaluable. Other studies support the importance of librarians’ involvement and leadership ability for teacher and librarian collaboration (e.g. Ash-Argyle & Shoham, 2012; Oberg, 2009).

The third theme describes the importance of communication on a personal and professional level including a trusting relationship, reciprocity, taking responsibility and the willingness to share expertise and accept different worldviews. The fourth theme emphasises supportive management that assigns time and space for collaborative planning and facilitates collaborative processes with clear objectives. Several studies have highlighted the significance of supportive management and collaborative planning (e.g. Farmer, 2006; Hartzell, 2002). The fifth and last theme focuses on factors that create the motivation to collaborate. In these studies, teachers’ motivation to collaborate with librarians depended on their experiences with collaboration that contributed to
personal and professional development and improvements in students’ ability to find, evaluate and use information.

High-end collaboration between teachers and librarians requires overcoming barriers, such as inflexibility, the absence of a trusting environment and administrators’ lack of expectations, lack of interest and lack of knowledge regarding how to facilitate teacher and librarian collaboration. In her later studies, Montiel-Overall emphasised that high-end collaboration is also dependent on teachers’ experiencing of the benefits of collaborating with librarians – benefits such as increased student achievement and teacher professional development (Montiel-Overall & Grimes, 2013; Montiel-Overall & Hernandez, 2012; Montiel-Overall & Jones, 2011). These studies also indicated that if high-end collaboration occurs, it is more because of the school librarians’ strong voices and favourable personal characteristics than because of an institutionalised practice.

3.2.5. Summary of review and research gaps

Research on library use in education has presented the library as a space and place for learning with different affordances than the classroom. For example, the library has been described as a space that opens up for reading engagement, aesthetic experiences, creativity and free democratic discourse (e.g. Audunson, 2005; Dressman, 1997; Limberg & Alexandersson, 2003; Rafste, 2005). Furthermore, international studies have shown that teacher and librarian collaboration and library use in literacy education have a positive effect on reading achievement and students’ development of deeper knowledge and critical analysis skills (e.g. Bates & Webster, 2009; Chu, Tse, Loh, & Chow, 2011; Small et al., 2010; Todd, 2006).

Access to well-stocked libraries and collaboration between teachers and librarians are important for the success of literature-based programmes and library use in literacy education (Alleklev & Lindvall, 2000; Jones, 2000; Leitão, Barratt-Pugh, Anderson, Barblett, & Haig, 2015). Literature-based literacy programmes aim to stimulate reading engagement and literacy through students’ voluntary reading of fiction and non-fiction books in schools, at home and in libraries, as well as through activities such as book sharing, writing, dramatisation, artwork and digital book blogs and wikis. Studies show that literature-based programmes have positive effect on reading engagement, student achievement and motivation (e.g. Francis, Lance, & Lietzau, 2010; Hedemark, 2012; Small, Shanahan, & Stasak, 2010; Small & Snyder, 2009). A pedagogical argument for literature-based literacy programmes in school is that people engage in literacy practices that are meaningful to them (Barton, Hamilton, & Ivanic, 2000; Street, 1984).

Several studies have demonstrated that there are substantial barriers to developing teacher and librarian partnerships (e.g. Leitão et al., 2015; Limberg & Alexandersson, 2003; Meyers, 2007;
Mokhtar & Majid, 2006). Teachers report that they do not have time, and they do not see the benefits of collaborating with librarians. Many teachers view librarians primarily as gatekeepers to a collection of resources rather than as partners in planning for learning activities. Teachers and school administrators have a poor grasp of the potential roles of librarians in education. Librarians are often more actively attempting to collaborate but often feel powerless when trying to improve collaborative practices with teachers. Some studies have shown that there are numerous prerequisites for well-functioning teacher and librarian partnerships (e.g. Buland, Dahl, Finbak, & Havn, 2008; Montiel-Overall, 2008). For example, teachers and librarians must be willing and motivated to collaborate. In addition, management must support and promote collaboration. Further, schools must have a clear strategy and a culture for inter-professional collaboration, and library use has to be integrated with the general pedagogical activities of the school.

The review demonstrates that the existing body of knowledge on teacher and librarian partnerships in literacy education to a lesser extent emphasises differences in professional knowledge cultures and the significance of mediating artefacts in collaborative learning processes. Many of the studies described the organisational conditions in which practitioners work; however, they did not focus on the specific actions that make inter-professional collaboration and partnership possible within these conditions. In addition, researchers have not properly analysed the dialectical relationship between the interacting activity systems of library and school, the neighbouring activity systems and their influence on the central activities of teacher and librarian partnerships. Therefore, at least within the educational sciences, there is limited knowledge about the historical, systemic and organisational conditions that constitute contradictions, barriers and opportunities regarding the development of teacher and librarian partnerships in literacy education.
4. Theoretical Framework

The empirical analysis of teacher and librarian partnerships is based on previous research about teacher and librarian collaboration and partnerships (see section 3.2). The theoretical analysis of contradictions in teacher and librarian partnerships is based on cultural-historical activity theory (CHAT) and critical educational perspectives. In this chapter, I first describe the theoretical principles of CHAT that are relevant to this study. Then, I elaborate on dialectical and systemic contradictions as the main analytical concepts and in relation to critical educational perspectives. Lastly, I explain how I have explored systemic contradictions in this study by identifying and analysing how they manifest as conflicts and dilemmas in discourses and actions.

4.1. Cultural-historical activity theory (CHAT)

CHAT is a theoretical and methodological framework with an ambition to overcome the split between studies of institutions in their historical and cultural context on the one hand (structure), and subjects and situations on the other hand (agency). The unit of analysis in the third generation of CHAT is an activity system or two or more interacting activity systems (Engeström, 2001, 2015). According to Roth and Lee (2007), ‘All activity systems are part of a network of activity systems that in its totality constitutes human society’ (p. 200). This study focuses on the interacting activity systems of schools and their communities, libraries, teacher education and local education authorities.

In this study, I needed a theory that could inform changes in the subject-object relations observed in the data sources. In CHAT, a key principle when studying interaction within and across activity systems is how artefacts (both conceptual and material) mediate how actors think, act and interact with each other and with objects in their environment. Artefacts are produced for a reason; they are then put into use and modified over history. Thus, artefacts are simultaneously ideal and material (Ilyenkov, 2009). A historical and cultural analysis of how artefacts mediate human actions in teacher and librarian partnerships is important to understand the formation of discourses and knowledge cultures within and across these different activity systems. Such a holistic and systemic perspective demands simultaneous analyses of microgenetic change (moment-to-moment interactions), ontogenetic change (personal development) and sociogenetic change (the development of activity systems). A precondition for such a complementary analysis is to be aware of the different time-scales of development (Lemke, 2000). Microgenetic change can be observed in discourse and/or practice, such as when someone starts to outline the objects in new ways. However, accounts of ontogenetic and sociogenetic change necessitate the data of developmental cycles in discourses and/or practices that occur gradually over months or even...
years. For example, sociogenetic change can be observed as a chain of interconnected microgenetic actions that leads up to a resolution of contradictions that in turn opens up for expansive learning and the modelling and implementation of new and more advanced forms of activity in the system. According to CHAT, this is possible because there is a dialectical relationship between the main activity and its motive; the actions and their goals as subcomponents of the activity; and the operations and the material conditions that determines how the actions and the activity take form (Leontiev, 1978). However, this study shows how difficult it is to resolve contradictions that occur in teacher and librarian partnerships, especially in relation to sociogenetic change, in which a new and more advanced form of activity is sustained in the system. Sociogenetic changes leading up to sustainable teacher and librarian partnerships in schools and libraries depend not only on a series of microgenetic changes within local activity systems but also on the priority given to such partnerships in educational policies and research.

Activity systems are always changing and are characterised according to their multi-voiced viewpoints, traditions, motives and interests. Therefore, in order to grasp change and development over time within and across activity systems, CHAT calls attention to the development of objects, or potentially shared objects of activity (Kaptelinin & Miettinen, 2005). As Leontiev (1978) explained, ‘The main thing that distinguishes one activity from another (…) is the difference of their objects. It is exactly the object of an activity that gives it a determined direction’ (p. 78). It is the subject-object relation that is of interest in CHAT. First, an object appears as independent of a subject. Second, the object is internalised in subjects as a result of the subjects’ engagement with the object. How professionals understand an object is highly influenced by the rules, norms and cultural-historical practices within the activity systems of their profession. In this study, it was crucial to pay attention to how the teachers’, librarians’ and institutional leaders’ professional engagement with literacy is affected by dominant literacy discourses within their respective activity systems. It is highly relevant in inter-professional collaborations to anticipate different professional conceptions of their common objects. In this study, the potentially shared object of activity in the two interventions of teacher and librarian partnerships is a literature-based literacy programme. The interventions’ object(ive)/motive was to enhance literacy engagement in primary school.

4.1.1. Formative intervention and expansive learning

CHAT is a theory of activity and a change methodology that is commonly used in studies of inter-professional and inter-institutional collaborations (e.g. Daniels, Edwards, Engeström, Gallagher, & Ludvigsen, 2010; Edwards, 2017; Edwards, Daniels, Gallagher, Leadbetter, & Warmington, 2009). The application of CHAT through formative interventions (Engeström, 2011; Laitinen, Sannino, &
Engeström, 2016) can assist researchers, practitioners and institutional leaders in resolving contradictions that interfere with desired outcomes. For a more thorough explanation of formative interventions, see article 1.

In CHAT, the collective learning process resulting in the resolution of contradictions is referred to as expansive learning (Engeström & Sannino 2010). Expansive learning is ‘the processes by which a work organization resolves its internal contradictions in order to construct qualitatively new ways of working’ (Engeström, 2007a, p. 23). Expansive learning requires for participants to analyse the object of activity in the collaborative practice being studied as well as the different institutional motives at play in the practice (Engeström, 1987/2015; Leontiev, 1978). This study shows how unresolved contradictions become barriers for expansive learning in interventions of teacher and librarian partnerships.

The formation of a third space is a precondition for expansive learning to occur across activity systems (Gutiérrez, 2008). A third space represents a zone of proximal development in which interprofessional actors can negotiate a potentially shared object of activity across their respective activity systems. A third space opens up possibilities to work with contradictions and expand the object of each activity system. Such an expansion can result in the reorganisation of the activity itself (Engeström & Sannino, 2010). Another precondition for expansive learning is transformative agency in which actors are committed in ‘concrete actions aimed at changing the activity, and taking consequential actions to change the activity’ (Engeström, 1987/2015, p. xxiii). This study indicates that a dominant discourse in literacy education is a barrier for transformative agency in teacher and librarian partnerships.

Formative interventions and expansive learning builds on the epistemological principles of double stimulation (Sannino, 2015; Vygotsky, 1978, p. 74) and ascending from the abstract to the concrete (Ilyenkov, 1982). The first stimulus in double stimulation occurs when practitioners need to address or prevent a problematic situation. The second stimulus transpires when the practitioners, often with the assistance of an intervention researcher, employ an external artefact to cope with the problematic situation. Vygotsky illustrated the first stimulus with an example of a girl who needs to remember something important. The second stimulus is when she ties a knot in a handkerchief to help her remember (Vygotsky, 1978, p. 51). Ascending from the abstract to the concrete is a dialectical process in which a theoretical abstraction, a germ cell, potentially leads to real transformations and change. Sannino and Engeström demonstrated this by referring to Vygotsky’s example of the initial abstract drawings of a steam engine as a germ cell that later generated a substantial variety of concrete steam machines (Vygotsky, 1997 as cited in Sannino &
Engeström, 2017). A second stimulus might be a short-term practical solution, but sometimes it also contains a first version of a germ cell carrying *possibility knowledge* of new and transformative forms of activity (Engeström, 2007b). In article 2, I describe a ‘partnership contract’ as a germ cell carrying *possibility knowledge* about new forms of teacher and librarian partnerships (see article 2, p. 252).

4.1.2. CHAT and critical theory

CHAT and critical theory have a strong focus on human emancipation and social justice in common. Critical theory in educational research is important because it recognises that curricula and pedagogy are political issues and thereby asks questions such as ‘who defines worthwhile knowledge’, ‘what ideological interests this serves’ and ‘how is power produced and reproduced through education’ (Cohen, Manion, & Morrison, 2000, pp. 27-34). Such questions link empirical research to ‘actual social realities’ (Alvesson & Sköldberg, 2009, p. 144). Moreover, Engeström and Sannino (2010) argued that the theory of expansive learning, which is built on fundamental ideas of CHAT, opens up for multidimensional analyses of learning and transformative change in a troubled world:

> The ultimate test of any learning theory is how it helps us to generate learning that penetrates and grasps pressing issues that humankind is facing today and tomorrow. The theory of expansive learning currently expands its analysis both up and down, outward and inward. Moving up and outward, it tackles learning in fields or networks of interconnected activity systems with their partially shared and often contested objects. Moving down and inward, it tackles issues of subjectivity, experiencing, personal sense, emotion, embodiment, identity, and moral commitment. (p. 21)

The citation above clarifies the inherent ambition in CHAT and studies of expansive learning to employ the analysis down and inward as well as up and outward through connecting issues of subjective experiencing and identity with contested objects within and across activity systems.

Some CHAT-based researchers who study *educational activity systems* have attempted to meet this ambition by combining CHAT with sociological theories of education to allow for descriptions of power and control of the social order at the practices of communication and discourse (Daniels, 2004, 2006, 2007; Edwards & Daniels, 2012). In this study, I attempt to do something similar. In the articles and in the discussion part of this extended abstract, I combine CHAT with critical theories in education and literacy research.
4.1.3. Dialectical and systemic contradictions

CHAT interprets contradictions from the perspective of dialectical philosophy (Engeström, 1987/2015; Ilyenkov, 1977, 1982, 2009). According to Ilyenkov (2009), ‘Contradiction as the concrete unity of mutually exclusive opposites is the real nucleus of dialectics, its central category’ (p. 185). Viewing contradictions from a dialectical perspective has crucial implications for how to understand change and development. Contradictions are barriers but also a source of change due to the associated resolution and the generation of a new and more complex form of development:

A contradiction (...) is not resolved by way of refining the concept that reflects the given form of development, but by further investigating reality, by discovering another, new, higher form of development in which the initial contradiction finds its real, actual, empirically established resolution. (Ilyenkov, 2009, p. 198)

Dialectical contradictions should not be confused with formal logical principles of contradictions. According to formal logic, the two statements ‘the sun is shining’ and ‘the sun is not shining’ cannot be true at the same time and place. Dialectical philosophy does not reject this but argues that formal logical contradictions have limited usefulness when trying to understand real change and real systems in motion (Wilde, 1991). While formal logical contradictions assume a fixed time, dialectical contradictions assume that reality is contradictory in itself and consists of opposing forces in a world constantly moving through time (Marquit, 1982).

According to Winter (1989), both the social world and individual consciousness are structured as a series of contradictions. His view on change and the relationship between contradictions, agency and structure is very much in line with my own understanding. He framed the argument as follows:

Individuals are the product of their social world, but this social world is structured as a series of contradictions, and is thus in a continuous process of change; its influence upon individuals is thus both conflicting and varying, and can thus never be either unambiguous or final. Consequently, individual consciousness is also structured as a set of contradictions, and individuals thus possess a degree of autonomy as to how they will respond to the conflicting and varying pressures from their social context. In other words,
they retain a creative space for their own interpretation and decision-making. When they act, therefore, they do not simply reproduce their environment; they change it. (p. 51)

Similar to Winter’s explanation above, CHAT is built around the idea that the resolution of contradictions is a main source of change and development. Furthermore, as explained in section 4.1.1., formative interventions can facilitate expansive learning processes that lead to the resolution of contradictions and to more advanced forms of activity. Engeström (2015, pp. 66-73) distinguished between four levels of contradictions that occur in processes of expansive learning:

A primary contradiction is often identified when addressing problems and questioning past and present practices. A primary contradiction occurs between the use value and the exchange value within one or more of the aspects of an activity system. For instance, when teachers are under pressure to sort and rank students on a short-term basis rather than facilitate lifelong learning processes, a contradiction occurs within the aspects of division of labour, within the object and within the pedagogical artefacts of the activity system of a school.

A secondary contradiction can occur when there are attempts to model a new solution to a problem or a need within an activity system. An example of such a contradiction transpires when new pedagogical instruments require extensive collaboration between teachers and librarians but the old division of labour or rules do not allow for extensive collaboration.

A tertiary contradiction arises when a new model of practice or new procedures developed outside of the activity system is implemented into the dominant activity of the system. For instance, when a prototype of formative assessment practice developed in Australia is implemented in Norwegian schools through wide-scale interventions.

A quaternary contradiction often occurs when a neighbouring activity system influences one or more aspects of an activity system. For example, teacher education influences how teachers think about pedagogical practices, educational authorities influence the rules that teachers have to abide by in their pedagogical practices and learning tool corporations influence the pedagogical artefacts available in teachers’ pedagogical practices. For descriptions of how these four levels of contradictions inform this study, see the articles and section 5.4.5.

Based on the theoretical perspectives described above, I define dialectical and systemic contradictions as follows: Dialectical contradictions are systemic because they exist on multiple levels within and across activity systems simultaneously. Systemic contradictions manifest in the consciousness and cognition of people in discourse and actions as well as in the structures of institutionalised activity. Systemic contradictions affect individuals and communities as well as
society and its institutions as a whole. Such contradictions are part of the historically developed cultural filter and mediational means that structure and mediate our perceptions, emotions and reasoning.

4.1.4. Technocracy and the primary contradiction in capitalist societies

An overarching ontological and epistemological question has to be dealt with in this study: How do systemic contradictions come into existence, and what can we know about them? I approach this question by using dialectics and critical theories in education, which then constitute the main theoretical perspectives in the discussion chapter (see section 7.1.). In the following paragraphs, I explain the core of these perspectives.

In a dialectical materialist perspective, the primary contradiction of any commodity is the contradiction between its use value for people and its exchange value within a capitalist system. A commodity, artefact or object comes into existence because it represents a use value for someone. At the same time, a commodity represents a certain exchange value within a competitive market economy. This primary contradiction between the use value and the exchange value of commodities in capitalist systems affects education. Education is a phenomenon that is primarily characterised by its use value to citizens. However, a neoliberal educational policy increasingly treats education as any other commodity within global capitalism, subjecting education to competition and accountability requirements similar to the requirements of the marketplace (e.g. Apple, 2011; Giroux, 2011).

Competition and accountability requirements in education demand the technocratic instruments of rationalisation, top-down governance, positivist epistemology and social engineering (Danforth, 2016). The idea of technocracy is that expert-driven technical solutions will guarantee predictability and efficiency in dealing with political and institutional problems (Bell, 1999; Fischer, 1990). In Europe, technocracy has taken new forms of collaboration across nations (Habermas, 2015). This is evident in the European Union’s strategy of standardising educational systems in European countries through the European Qualification Framework (The European Parliament and Council, 2008).

Some individuals have been critical of the standardisation of educational systems across borders – specifically, that it is primarily designed to meet demands expressed by capital and international competition (e.g. Apple, 2011; Bourdieu & Passeron, 1990; Giroux, 2011; Moos, 2017). Standardised testing ranks and sorts students according to their performance and is considered within a neoliberal discourse to qualify individuals as well as nations for competition in a global economy (Davies & Bansel, 2007). However, there are good reasons for practitioners, institutional
leaders and researchers in education to be critical towards a predominantly standardised and outcome-based educational system. Ranking and sorting students through standardised instruments has limited use value for the realisation of the social and democratic mandate of schooling, which is the qualification of all pupils' active participation in society. This contradiction between the qualification to a competitive world of work on one side and the qualification for democratic participation on the other is not new. For example, Freire (1972) addressed this contradiction with a comparison of banking education concepts and problem-posing education, and, more recently, Biesta (2010) warned that educational systems are in danger of becoming out of balance due to an overemphasis on competitive market qualification that neglects issues of democracy and social justice.

4.1.5. Discursive manifestations of contradictions

The analysis of systemic contradictions in this study draws attention to asymmetric power relations in social realities. A way to explore the movement and distribution of power and control from within that reality is to study the discursive manifestations of contradictions in concrete organisational change efforts (Engeström & Sannino, 2011) and to trace the cultural-historical development of those contradictions (Ilyenkov, 1977; Wilde, 1989). To acknowledge the existence of dialectical contradictions is to ‘recognise the general possibility that we are often encountering symptoms rather than underlying causes and that we need to unmask what is truly happening underneath a welter of often mystifying surface appearances’ (Harvey, 2014, p. 5). Thus, on the surface level, the underlying causes of contradictions are often hidden from us. A contradiction might reside in an object, though not in our ideas about it. This explains why human ideas about a certain object might demonstrate an unawareness of the inherent contradictions that exist in it.

An important point is that we cannot directly observe systemic contradictions. What can be observed, however, are tensions in terms of conflicts and dilemmas that arise in action, interaction and discourse and which can be manifestations of historically accumulated contradictions (Engeström & Sannino, 2011). For example, a teacher might experience a conflict when using formative assessment to motivate students while having to rank students according to grades, which might have a negative effect on students’ motivation. This conflict occurs because of a contradiction between the goals of equity in education versus the technocratic demands of ranking and sorting student achievements.

Engeström and Sannino (2011) noted inconsistencies regarding how the term ‘contradiction’ is used in research on organisational change. They suggested that ambiguity about the term leads to ‘a risk that contradiction becomes another fashionable catchword with little theoretical content
and analytical power’ (Engeström & Sannino, 2011, p. 368). Throughout my work on this study, I have been concerned with not classifying conflicts or dilemmas that deal with individual experiences of inconsistencies between time, resources and tasks as systemic contradictions. Rather, I have sought to present them as typical tensions reflecting competing priorities. To avoid ambiguous interpretations of contradictions, I have analysed if the dilemmas and conflicts identified in my data are linked to historically developed structures within or across activity systems, or if they merely occur as symptoms of moment-to-moment emotional or psychological disturbances or disagreements between practitioners.
5. Methodology

In this chapter on methodology, I first describe how my research focus changed along with two surprising critical conflicts that occurred during my fieldwork. I will explain the empirical context, the challenges I encountered in the field and the decisions that led to the final research design.

5.1. The Research Process

5.1.1. Starting up

My main supervisor invited me to conduct a PhD thesis within an intervention project in which she was the lead researcher: ‘Multiplicity, Empowerment, Citizenship’ (2007-2011) (referred to here as the Multiplicity Project). The aim of the intervention in the Multiplicity Project was to stimulate reading engagement and literacy at two primary schools (Tonne & Pihl, 2012). To achieve this goal, the researchers in the project proposed literature-based literacy education and collaboration between teachers and librarians at the schools (see article 2, p. 243, for a more detailed description of the Multiplicity Project).

I started to collect data in 2009, two years into the Multiplicity Project. The purposive sampling of informants was already set at the project schools through the Multiplicity Project. I began observing a literature-based literacy programme at one of the schools (referred to here as Eastside Primary School). Three third-grade classes at the school, their contact teachers, the head teacher and the teacher-librarian were involved in the Multiplicity Project. A public librarian collaborated with the teachers and the teacher-librarian. She worked at a public library branch located just 300 metres from the school. At that time, I formulated the following research question to guide the unstructured and non-participant observations: ‘What are the benefits of and obstacles to teacher and librarian collaboration in schools?’ This question was inspired by Montiel-Overall and colleagues’ extensive research on teacher and librarian collaboration in U.S. schools (Montiel-Overall, 2008, 2009).

Between May 2009 and March 2010, I made nine full-day visits to the school to observe literature-based activities with the school librarian at the school library and with the teachers in the classrooms. I also spent time observing the classes when they visited the public library branch and the main public library downtown. At the public libraries, the librarian presented books and conducted lessons on information literacy. The teachers, the school librarians and the public librarians were responsible for planning and conducting the literature-based activities based on their own ideas, with some suggestions from the intervention researchers. In addition to the unstructured observation notes, I had informal conversations with the librarians and with the
teachers during my field visits. I conducted formal interviews with the public librarian and the teacher-librarian about how they viewed library use in literature-based literacy lessons and their collaboration with teachers. The observations and the interview data represented rich descriptions of what the teachers and the librarian were doing. However, when going through the data, I learned that the material was not sufficient to document the benefits of teacher and librarian collaboration at Eastside Primary School beyond the participants’ experiences and perceptions. I then decided to change my research focus.

5.1.2. Changing the research focus

From when I started the PhD project in 2009, I read every research report I could find on teacher and librarian partnerships. I noticed that few of the reports focused on the development of teacher and librarian collaboration over time. Thus, I changed my research focus from ‘the benefits of and obstacles to teacher and librarian collaboration in schools’ to ‘the development of teacher and librarian collaboration’. I figured that this change in scope would be a contribution to the field, and it also seemed beneficial to the Multiplicity Project, which aimed at developing sustainable teacher and librarian partnerships at Eastside Primary School. I formulated a new main research question: ‘How can collaboration between teachers, school librarians and public librarians be developed through research interventions?’ This was in March 2010.

Because I now wanted to explore the development of teacher and librarian collaboration through research interventions, I started to view the project group meetings and the project leader meetings of the Multiplicity project as my primary data sources. All participants in the Multiplicity Project, including six teachers, two school librarians and two public librarians, took part in the project group meetings. In these meetings, the teachers and the librarians presented and discussed literature-based lessons and shared ideas. The project leader meetings consisted of institutional leaders at the project schools and the public library, the lead researcher and the dean of one of the two teacher education institutions that took part in the project. The project leader meetings focused on strategies for developing and sustaining teacher and librarian partnerships at the project schools as well as on the possibilities for expanding the interventions to more schools in the district. During March 2010, I observed two project group meetings and three project leader meetings. I was a participant observer because I sometimes took part in the discussions at the meetings.
5.1.3. Changing the research focus again

Between 2007 and 2011, the Multiplicity Project held twenty-one project leader meetings. A critical conflict between the local education authority and the Multiplicity Project occurred in February 2010 during the fifteenth meeting. This conflict took the project leaders by surprise. The lead researcher had invited two local education authority officials to join this meeting. The purpose was to discuss the expansion of teacher and librarian collaboration to more schools in the district. However, it became very clear in the meeting that the local education authority officials had a different literacy education strategy. They had decided before the meeting that the Multiplicity Project was not required in the school district and that it was undesirable to expand the project to more schools. After this meeting, with permission from the project leader group, I decided to audio-record subsequent meetings. I wanted to thoroughly explore how the project leaders dealt with the conflict and to analyse the effect on the sustainability and onward development of teacher and librarian partnerships in the project schools.

Around the same time as when the conflict with the local education authority arose, the teacher-librarian at Eastside told me that she and five bilingual teachers planned to develop an extracurricular multilingual book café at the school library. I became especially interested in exploring this intervention further as it was a perfect object for my research interest. It was also a different type of intervention than the Multiplicity Project. The Multiplicity Project was researcher-initiated while the book café was teacher and librarian-initiated at the school. Thus, the intervention was outside of the Multiplicity Project. It is nevertheless reasonable to assume that the Multiplicity Project inspired the development of the book café, as the teacher-librarian was one of the most active participants in the project.

I observed the first book café at the Eastside school library in March 2010 and started to audio-record the teacher team meetings in June of the same year. The study of the book café became especially interesting when the teacher team experienced a critical conflict at the second book café in November 2010. Compared to the first book café, in which 60% of the invited parents attended, the attendance of parents at the second book café was only 25%. The critical conflict escalated when, in April 2011, the team had to cancel the third book café due to the very low response from parents. This conflict at the book café and the conflict in the Multiplicity Project opened up an opportunity for me to study two interventions of teacher and librarian partnerships struggling to develop literature-based literacy programmes: one conflict at the inter-institutional level between two schools, two teacher education faculties and a public library versus the local educational authorities; and another conflict at the school level between teachers and a teacher-librarian versus parents.

31
At the time of May 2011, I had attended a PhD course about CHAT methodology, which seemed like a suitable theoretical framework for exploring the conflicts. I was especially interested in the CHAT proposition that we need to explore conflicts and dilemmas as potentially discursive manifestations of contradictions to understand how they affect practice and how they can be resolved. I reformulated the main research question into the one that guides this PhD study: ‘How do systemic contradictions work as barriers and opportunities for developing teacher and librarian partnerships in literacy education?’

5.2. Research design

5.2.1. Case study
The research design of this PhD thesis is a qualitative case study. A case study is a preferred strategy of inquiry when the focus is on a complex contemporary phenomenon, within a real-life context, in which the researcher has little control over events or the participants’ behaviour (Denzin & Lincoln, 2011; Yin, 2009). The purpose of the study is to contribute to knowledge about contradictions, barriers and opportunities for developing teacher and librarian partnerships in literacy education. I pursue that objective by exploring systemic contradictions that occur in two interventions of teacher and librarian partnerships in literacy education.

The primary data consist of non-participant and unstructured observations of a book café at the school library and of project group meetings and teacher team meetings. In addition, I conducted a detailed interaction analysis of the audio-recorded dialogues from these meetings. I use secondary data such as meeting minutes, interviews, surveys, lesson plans and documents to inform the interpretation of the primary data.

The use of theory is essential in all phases of a qualitative case study: in defining the case, in guiding the case study design, in the analysis of data and in theory development (Bryman, 2008, p. 57; Yin, 2009). A qualitative case study design combines well with the use of CHAT as a theoretical and methodological framework. The unit of analysis in CHAT is always a case or cases of an object-oriented joint activity within and across the real-life context of one or more activity system(s) (Roth & Lee, 2007). In article 1, I argue that researchers need to analyse systemic contradictions to understand the historicity and complexity of barriers occurring in educational interventions. This theoretical proposition drives my analysis of data in articles 2 and 3.

5.2.2. Two embedded units of analysis
I explore systemic contradictions in a case containing two interventions of teacher and librarian partnerships in literacy education. Thus, the case study contains two embedded units of analysis.
The case is instrumental (Stake, 1995) because the case itself is secondary to the purpose of the study, which is to explore contradictions, barriers and opportunities associated with developing teacher and librarian partnerships in literacy education.

**Fig. 5.1.** A single case study with two embedded units of analysis (Adapted from Yin, 2009, p. 46)

In article 2, the unit of analysis is the project leader meetings of the Multiplicity Project. The project was researcher initiated, in collaboration with institutional leaders from two primary schools and a main public library. I analyse a critical conflict between the local education authority and the Multiplicity Project. The critical conflict arises from differing discourses of literacy education held by the local education authority and by the Multiplicity Project. The object of the analysis is contradictions occurring at the administrative and inter-institutional levels of teacher and librarian partnerships and in relation to educational authorities.

In article 3, the unit of analysis is the pedagogical activity of a teacher team that initiated an extra-curricular book café at the school library of a primary school. The teacher team consisted of five bilingual teachers and a teacher-librarian. I analyse a critical conflict that arose from parents’ declining participation in the book café. The object of the analysis is contradictions occurring at the school level of teacher and librarian partnerships and in relation to parents.

In both articles, I explore how systemic contradictions work as barriers and opportunities in interventions of teacher and librarian partnerships in literature-based literacy programmes. There are clear advantages to studying interventions when the research objective is to understand contradictions, barriers and opportunities to school development. Exploring interventions over time allows for an analysis of how different types of contradictions occur and trigger each other in
the phases of planning, implementing and consolidating school innovations (Sannino & Nocon, 2008).

5.3. Data collection
As mentioned earlier, the teachers and librarians at Eastside Primary School who participated in the Multiplicity Project constituted the sampling of informants when I started my fieldwork there. The sampling was both purposive and theoretically defined in accordance with my research topic (Silverman, 2005, pp. 129-133). As my research focus changed (see section 5.1), my sample also needed to include institutional leaders of schools and libraries.

In the following section, I will explain the methods for data collection, and the data sources, and will provide reasons for the selection of data used in the articles. I will also describe how and why I have used multiple sources of background data and secondary data in this thesis.

5.3.1. Multiple sources of evidence
As Yin (2009) wrote, ‘A major strength of case study data collection is the opportunity to use many different sources of evidence’ (p. 114). However, such a postulation is not without controversy. Silverman (2005) warned of the illusion that adopting multiple methods will automatically reveal ‘the whole picture’ about a phenomenon. Instead, the research is in danger of ending up with ‘under-analysed data and an imprecise or theoretically indigestible research problem’ (p. 122). I agree with Yin that using multiple sources of evidence is suitable in case studies. However, it is worth paying attention to the ground rules emphasised by Silverman: First, the triangulation of multiple sources of data should always begin from a theoretical proposition. Second, a researcher should choose data sources with the intent to provide meaning from within the theoretical proposition (Fielding & Fielding, 1986 as cited in Silverman, 2005).

As mentioned repeatedly, the analysis of data in this study follows the theoretical and methodological propositions of CHAT with an emphasis on contradictions. In a CHAT analysis, the interrelations and distinctions between the societal, social and psychological levels are of interest to the researcher. I contend that such a multilevel and systemic analysis in this study requires multiple sources of data. On the societal level, I needed data on the wider social structuring, the motives and the historical and cultural origin of existing practices and communities within and between the activity systems. On the social level, I needed data on the sometimes contested and sometimes shared goals and actions of subjects and groups within and between the activity systems and in relation to their objects of activity. On the psychological level, I needed data on the perceptions, experiencing, routinised operations and professional identity of the participating
subjects. A theoretical proposition of CHAT is that the researcher can obtain information on all these three levels through a multilevel analysis of discourses and discursive practices (Engeström, 1999a; Engeström & Sannino, 2011). However, such a comprehensive analysis cannot view discourses in isolation. Therefore, I have used a range of multiple sources to inform the analysis of the discursive interactions.

By primary sources of data, I refer to data sources that have been rigorously analysed and interpreted and that I have used and referred to in the articles. By self-collected background data, I refer to data sources that I have collected, but that I have used only to inform the interpretation of the primary data. By secondary sources of data, I refer to data that has been conducted/written/made either by other researchers within the Multiplicity Project or by participants working at the school or the libraries. I have used some of the secondary sources as primary data in article 3. However, most of the secondary sources have worked as support for the analysis and interpretation of the primary data. Table 5.1. provides an overview of the multiple data sources I collected. I collected data between the period of May 2009 and May 2011.

<table>
<thead>
<tr>
<th>DATA SOURCE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic publications on intervention methodology</td>
<td>Nine publications on educational design research</td>
</tr>
<tr>
<td></td>
<td>Ten publications on developmental work research</td>
</tr>
<tr>
<td>Audio-recorded meetings</td>
<td>Five project leader meetings (9h 28m of dialogue)</td>
</tr>
<tr>
<td></td>
<td>Four teacher team meetings (4h 23m of dialogue)</td>
</tr>
<tr>
<td></td>
<td>Workshop with the project group (3 hours of dialogue)</td>
</tr>
<tr>
<td>Participant observation of meetings (not audio-recorded)</td>
<td>Project leader meetings (x2)</td>
</tr>
<tr>
<td></td>
<td>Project group meetings (x4)</td>
</tr>
<tr>
<td>Non-participant observation of literature-based lessons</td>
<td>Book café (2 lessons)</td>
</tr>
<tr>
<td></td>
<td>In class (10 lessons)</td>
</tr>
<tr>
<td></td>
<td>At the school library (4 lessons)</td>
</tr>
<tr>
<td></td>
<td>At the public library branch (2 lessons)</td>
</tr>
<tr>
<td></td>
<td>At the main public library (2 lessons)</td>
</tr>
<tr>
<td>Interviews</td>
<td>Teacher-librarian (1h 20m)</td>
</tr>
<tr>
<td></td>
<td>Public librarian (1h)</td>
</tr>
<tr>
<td>Photos</td>
<td>Literature-based lessons, book cafés, student work</td>
</tr>
<tr>
<td>Secondary empirical data conducted/written/made by others</td>
<td>Meeting minutes, interviews, observation notes, surveys, lesson plans, documents, pedagogical artefacts, participant presentations, local curriculum, published reports from the Multiplicity Project</td>
</tr>
</tbody>
</table>

5.3.2. Methods and data sources in the articles

First, I will explain the methods of the first article, which is a theoretical article. Thereafter, I will discuss the data sources I have analysed in detail in the two empirical articles.

When it was clear that my PhD project would be a part of a larger inter-institutional intervention project, I wanted to gain a better understanding of methodological issues in educational
intervention research. Article 1 is a result of that work and lays the foundation for theoretical claims in articles 2 and 3. The article reviews the similarities and differences between the intervention methodologies of developmental work research and educational design research. My close reading of nineteen academic publications on these two methodologies constitutes the primary data sources in article 1.

In article 2, the primary data sources are observation notes, audio-recordings and minutes from the project leader meetings of the Multiplicity Project. The project leader meetings were held approximately every third month. I participated in seven meetings. I have observation notes from two of these meetings and audio-recordings of five. I applied the participant observation method, as I sometimes took part in meeting discussions. The project leader group held the meetings in a room at the main public library downtown. Members of the project leader group included the head teachers of the two project schools, the director of the main public library, the lead researcher of the Multiplicity Project and the dean of education at one of the two teacher education institutions involved in the project. Meeting participants were not fixed. The head teachers sometimes could not attend; in such cases, another member of the school’s leadership team represented them. The public librarian, who collaborated with one of the schools, took part in meeting 18 instead of the public library director who resigned after meeting 17.

The primary data sources analysed in article 2 are project leader meeting 15 and audio-recordings from project leader meetings 16, 17 and 18. The critical conflict that arose in meeting 15 was the starting point for the selection of the data to be analysed. I carefully read and listened to all the data material I had access to from the project leader meetings. I wanted to explore how the project leaders responded to the conflict with the local education authority and how the conflict affected the sustainability and further development of the intervention object. I selected the data in which the discursive interactions centred on these issues. I needed to closely examine the interaction data to assess if and how the critical conflict triggered new conflicts and dilemmas, especially in relation to the discussion about the further development of teacher and librarian partnerships at the project schools. For this purpose, I used Nvivo8 to code and analyse the discursive interactions between participants in the three audio-recorded meetings (six hours of dialogue). The analytical procedures are explained in section 5.4.

In article 3, I used the following primary data sources: non-participant observation of two book cafés at the school library of Eastside Primary School (3 hours); four audio-recorded teacher team meetings (in which I participated) held during school time in the school library (4 hours of talk); a reading log that the teacher team presented to the parents at the first book café; and, finally, the
teacher-librarian’s meeting minutes. I took short notes during the book café and expanded notes with analytical comments as soon as possible after it ended (Silverman, 2005, pp. 171-183). I audio-recorded four out of eleven teacher team meetings and obtained access to the teacher-librarian’s comprehensive minutes from the rest of the meetings. Unfortunately, I was not able to audio-record more than four meetings because the teacher team held most of the meetings ad-hoc during school time, and therefore they could not notice me in advance. The teacher team consisted of the teacher-librarian and a group of five bilingual teachers (Norwegian/Albanian, Arabic, Urdu, Tamil and Turkish). The teacher team’s goals were to stimulate reading engagement in the first and second language and to motivate parents of third-grade language-minority pupils (third graders) to use the library and to read at home with their children. The team discussed a critical issue concerning the declining parent participation in the last of the four teacher team meetings. This issue became the focus of my attention. In my exploration of it, I started to look at multiple sources of collected data in retrospect that could help in the development of ‘converging lines of inquiry’ (Yin, 2009, p. 115). More explicitly, I did so to help build converging possible explanations for the declining parent participation. The pedagogical artefact (the reading log) that the teachers introduced at the first book café was important to understand and explain the origin of the critical issue.

5.3.3. Data triangulation

Due to the changes in the research focus as explained in section 5.1., I collected data during fieldwork that I have not used as primary data sources in the articles. However, I have applied many of these data sources as background data for the analysis of the primary data in the articles. The self-collected background data sources of photos, participative observation of project group meetings and non-participative observations of 18 literature-based lessons provided rich information on the content of teacher and librarian collaboration and literature-based literacy education as developed within the Multiplicity Project and at the book café. The self-collected background data sources of two interviews with librarians and the audio-recorded workshop provided information on librarians’ perception on collaborating with teachers and on teachers’ and librarians’ perceptions on how to plan and implement literature-based lessons. The self-collected background data sources were also helpful to understand the context of the discursive interactions in the project leader meetings and the teacher team meetings.

As described in section 5.3.1., I distinguish between self-collected background data, self-collected primary data and secondary sources of data (data conducted/written/made either by other researchers within the Multiplicity Project or by participants working at the school or the libraries). Primary data are data that have been rigorously analysed and interpreted and that I have used and
referred to in the articles. Primary data can consist of both self-collected data and secondary sources of data. The main result from the analysis in this study is that the two critical conflicts are manifestations of contradictions between literacy discourses. I argue that it would have been much harder to arrive at this result without triangulating different data sources. For example, in article 2, when the local education authorities declined to support the Multiplicity Project, I had rich information through self-collected background data such as non-participative observations of literature-based lessons in classrooms and libraries on what forms of literacy education the authorities were turning down. In addition, in article 3, I present one short excerpt from the final of four audio-recorded teacher team meetings (article 3, pp. 112-113). This was the only sequence in the audio-recorded materiel in which the teacher team discussed the issue of declining parent participation. When I triangulated this audio-recording with observations from the book café, with the teacher-librarian’s minutes from meetings, with photos of student work and with the content of the reading log used at the book café, the issue was manifested as a contradiction between literacy discourses. The reading log artefact, as a secondary source of data, thus became important primary data in article 3 (see article 3, p. 109-110). Other types of secondary sources of data, such as lessons plans and the local curriculum, were helpful for obtaining a cultural-historical and contextual overview of the developments in the Multiplicity Project and at the book café. I also used secondary sources of data such as meeting minutes and other researchers’ observation notes to crosscheck information from my own observations and to ensure the precise chronology of events.

5.4. Data analysis

5.4.1. Constructing a meeting point between theory and data

In this section, I will explain how I have constructed an analytical meeting point between theoretical perspectives and empirical data. My goal was to make inferences that would arrive at the best explanation of the observed phenomena. In addition to the methodological framework offered by Engeström and Sannino (2011), I am inspired by abductive analytical approaches (Tavory & Timmermans, 2014). I wanted to understand underlying patterns and mechanisms behind observations by alternating between theoretical perspectives and empirical facts. The aims of this back-and-forth logic of discovery were to understand and explain the case and to generate new knowledge and theoretical perspectives on the types of contradictions that might occur in teacher and librarian partnerships. By applying the theoretical insights of CHAT and critical theories in education, I emphasised discourse, ideology and power in the analysis of data. Figure 2
Two main, surprising critical conflicts that occurred during the fieldwork (i.e. the lack of support from the local educational authority and declining parent participation) were the starting point for the analysis in this study. After the occurrence of the critical conflicts, I collected more data and coded the data into categories of interrelated dilemmas and conflicts using a CHAT-based methodological framework (Engeström & Sannino, 2011). A pattern of relationships between conflicts/dilemmas in the data corpus and systemic contradictions then emerged. However, using the theoretical framework of CHAT was not enough to explain the two surprising conflicts. Thus, I looked to critical theories on literacy, pedagogy and education (e.g. Apple, 2000; Biesta, 2010; Giroux, 2011; Janks, 2010; Street, 1984) that contributed to explanations of the case and to development of new theoretical perspectives on contradictions in teacher and librarian partnerships and literacy education. A theory of contradictions between a technocratic and a sociocultural discourse in literacy education can be analytically generalised (Yin, 2009, p. 43) back to the broader theories of CHAT and critical theories. However, support for the theory of systemic contradictions in literacy education generated from this study depends on its usability as an explanatory framework of conflicts and dilemmas occurring in similar future cases of teacher and librarian partnerships in literacy education.
5.4.2. Discursive interactions

From a CHAT perspective, *discursive interactions* are embedded in dynamic and multi-voiced processes of object-oriented activity within and across activity systems (Engeström, 1999a). In concrete inter-institutional communicative situations (e.g. the project leader meetings in article 2 and the teacher team meetings in article 3), practitioners attempt to negotiate and co-construct potentially shared objects of activity across boundaries of practice. Such boundary-crossing processes of collective communication are unstable and situated on a continuum from severe tensions to trouble-free agreements. In a CHAT-based analysis of discursive interactions across activity systems, the tension-laden interplay between discourses, objects of activity, knowledge cultures and motives is highly relevant for understanding barriers and opportunities to development (Cetina & Reichmann, 2015; Edwards & Daniels, 2012). The conflicts and dilemmas that arise out of such interactions call for an analysis of contradictions in relation to power, the division of labour and control within and across activity systems (Daniels, 2016).

5.4.3. Analysing discursive manifestations of contradictions

Engeström and Sannino (2011) offered a methodological framework to identify and analyse discursive manifestations of contradictions in transcribed meetings data. A theoretical premise for the use of this framework is to view *conflicts* and *dilemmas* as potential manifestations of historically accumulated contradictions within and across activity systems. Such an approach aims at understanding the possibility of expansive transformation to resolve the contradictions of an activity.

As mentioned previously, we cannot identify contradictions directly but can do so indirectly through their manifestations as dilemmas and conflicts in discourse and human actions. Professionals who interact within and across institutional contexts are carriers of historically institutionalised motives that influence their cognition, discourse and actions. Therefore, to analyse the dialectical relationship between what practitioners do and say and their professional knowledge cultures within institutional settings, we have to recognise ‘the historicity of categories in talk’ (Mäkitalo & Säljö, 2002, p. 76).

Engeström and Sannino (2011) identified four types of discursive manifestations of contradictions:

1. ‘A *dilemma* is an expression or exchange of incompatible evaluations, either between people or within the discourse of a single person’. Linguistic cues to dilemmas in talk often take the form of hesitations and uncertainty, such as ‘on the one hand’, ‘on the other hand’, ‘Yes, but’, ‘I didn’t mean that’, ‘I actually meant’ (p. 373).
2. A *double bind* is a strong form of dilemma in which ‘actors repeatedly face pressing and equally unacceptable alternatives in their activity system, with seemingly no way out’ (p. 374). An example from the project leader meetings is when the public librarian feels obliged to provide equal services to the project schools and all other schools but lacks the resources for this. A double bind can often be identified in talk, as expressions of helplessness or in the form of rhetorical questions, such as ‘What can we do?’

3. A *conflict* ‘take[s] the form of resistance, disagreement, argument and criticism’ (p. 373) and often occurs when there are divergent interests between individuals or between groups of people. For example, two linguistic cues of conflicts in talk are ‘no’ and ‘I disagree’.

4. ‘Critical conflicts are situations in which people face inner doubts that paralyze them in front of contradictory motives unsolvable by the subject alone’ (p. 374). When there is a critical conflict between individuals, groups or institutions, there is often much at stake for one or both of the conflicting parties. Critical conflicts can often be identified in talk in the form of personal and emotional accounts that use rich metaphors and a narrative structure to express feelings of being ignored, suppressed, silenced, marginalised, excluded or violated.

The methodological onion in Figure 3 is a metaphor for how to analyse contradictions in discourse data. The analyst starts with peeling away layers of linguistic cues prior to entering the layer of discursive manifestations of contradictions. Finally, the core is reached, where the systemic contradictions are found (Engeström & Sannino, 2011). The aim of such an analysis is to identify potential dialectical relationships between the micro-level of discursive interaction, the meso-level of conflicts and dilemmas and the macro-level of contradictions.

![Methodological onion for analysing contradictions in discourse data (Engeström & Sannino, 2011, p. 375)](image-url)
5.4.4. Making sense of the data

In this section, I provide a detailed explanation of my analysis of discursive manifestations of contradictions in this thesis, starting with the data sources of audio-recorded teacher team meetings.

I did not transcribe all the audio-recorded teacher team meetings for the analysis in article 3. I became especially interested in the isolated critical conflict with the declining parent participation. The teacher team only discussed this incident in their last meeting. At that time, I had not started to transcribe the data from the previous meetings. I transcribed the section with the critical conflict and listened carefully through the other five recordings two times while writing a content log to decide what else I needed to transcribe. From there, the theoretical propositions of ‘discursive manifestations of contradictions’ helped in specifying and focusing a form of comparison between multiple sources of data (observation notes, teacher-librarian’s minutes, pedagogical artefacts, audio-recordings). After the occurrence of the critical conflict with the declining parent participation, I needed to start building converging possible explanations for this conflict (Yin, 2009, pp. 141-144). Thus, I had to put emphasis on analysing data for the purpose of theory generation rather than verification. I wanted to avoid ending up with trivial knowledge as a result of reproducing the informants’ account of critical conflicts without offering plausible theoretical explanations.

Use of the triangular model of the activity system as a heuristic device

In this section, I will illustrate how I used Engeström’s triangular model of the activity system as a heuristic device to analyse the problems with the reading log and the declining parent participation at the book café. Practitioners’ efforts to implement new forms of practice (such as the book café) at a school often trigger secondary contradictions between aspects of the school activity system, such as between the use of new pedagogical artefacts and old institutionalised rules (Engeström, 1987/2015). Paying attention to the secondary contradictions that arise can generate interlinked data on systemic barriers that teachers and institutional leaders have to work on to sustain new practices. Engeström’s model helped to identify contradictions within the activity system of the book café and the interrelations between them. Figure 4 is an illustration of one of my drawings while working with the triangular model as a heuristic analytical tool.
I identified four interlinked secondary contradictions within the activity system of the book café. First, there is a secondary contradiction between ‘pedagogical artefacts’ and ‘community’, illustrated as (A) in Figure 4. This contradiction was manifested as a conflict caused by the use of a standardised reading log in a community context of multilingual family literacy practices. Second, there is a contradiction between ‘pedagogical artefacts’ and ‘object’. This contradiction was manifested as a conflict between the use of a reading log and the object of voluntary reading engagement (B). There is a third secondary contradiction between the ‘division of labour’ and the ‘object’ caused by the teacher team’s neglect to invite the parents in planning and evaluation of the book café (C). This is especially problematic because the teacher team wanted the book café to be an extracurricular and culturally responsive activity aimed at empowering parents’ ability to support their children’s voluntary reading engagement. This contradiction is closely linked with another contradiction between ‘rules’ and ‘division of labour’. More specifically, it is linked with the contradiction between principles of inclusion and culturally responsive literacy and the actual uneven distribution of power between the teacher team and the parents (D). In article 3, I argue that these four secondary contradictions are the main explanatory factors for parents’ declining participation.
In Chapter 7, I discuss how contradictions at the school level are manifestations of a contradiction between a sociocultural discourse and a technocratic discourse in literacy education. An indication of the latter in my data sources was a quaternary contradiction between the ‘object’ of the local education authority and the ‘rules’ of the book café. This contradiction was manifested as an imposed budget cut by the local education authority on bilingual teaching resources at the school (E). The budget cut would decrease the number of work hours of the bilingual teachers at the school. It is reasonable to infer that the budget cut negatively affected the motivation of the bilingual teachers. I observed the teacher team discuss the budget cut while expressing frustration due to feeling marginalised or ignored. Unfortunately, I was not able to audio-record this sequence of talk.

To conclude from the analytical procedure above, first, contradictions are manifested in discourses and in actions. Second, when I worked with analysing multiple sources of data, I found that the ‘triangular model of the activity system’ was useful in order to generate data on secondary contradictions, to identify how they are interlinked within the activity system and to analyse how different levels of contradictions trigger each other (Foot & Groleau, 2011).

**Audio-recorded project leader meetings**

When I worked with the transcripts from audio-recorded project leader meetings, I used the qualitative data analysis software NVivo8 to make coding nodes and to process the coding of crude data in three steps (Richards, 2009) (Appendix 3). First, I applied **topic coding** starting with the question ‘What are the participants talking about?’ Second, I conducted **purposive coding** to identify all the dilemmas and conflicts occurring in the data. Third, I developed **analytical coding** using the methodological framework of Engeström and Sannino (2011) to identify the conflicts and dilemmas that potentially qualified as manifestations of contradictions.

The **topic coding** gave an overview of the topics talked about in the meetings (Appendix 1). This was helpful as a first step for asking analytical questions to the data corpus, such as why the project leaders did not discuss the role of the public librarian in the project and why the sustainability of the project became a more talked about topic in the meetings over time.

The **purposive coding** of dilemmas and conflicts made it possible to trace when and how these tensions appeared in the meetings, how the project leaders responded to them and any attempts to resolve them. I coded the different types of dilemmas and conflicts as well as how many sequences of talk they appeared in and in which meetings (Appendix 2). The purposive coding showed what types of dilemmas and conflicts were pressing issues in the project leader meetings and which were difficult to resolve. I found one dilemma that appeared in sequences of talk in all
three meetings: the dilemma of how to make teacher and librarian collaboration sustainable at the project schools despite lack of support from the local educational authority.

When I identified a dilemma or conflict, I concurrently assessed them as potential manifestations of contradictions in light of CHAT and different critical theoretical perspectives in educational and literacy research. Some expressions were quite explicit discursive manifestations of contradictions. Other expressions needed more attention. In these expressions, I was looking for linguistic cues that indicated conflicts and dilemmas within the discursive interactions of the participants. To illustrate this, I will give an example of detailed analytical coding of an excerpt from a project leader meeting. I developed the analytical procedure along the way when trying out different ways to make sense out of the data. For the purpose of illustration, I have used different text images to differentiate between different coding categories. ‘Bold’ indicates that a participant presents some sort of idea or suggestion to the other participants. I call this category ‘questioning’. ‘Italic’ indicates a ‘response’ to the questioning. Words that indicate emotions such as irritation, support and disagreement are ‘underlined’. These words might be linguistic cues to dilemmas or conflicts in the transcripts. ‘UPPERCASE+UNDERLINE’ is used to mark sequences and sentences indicating explicit discursive manifestations of contradictions, typically when dominant educational concepts are being criticised or questioned, such as ‘learning’, ‘assessment’ and ‘school-home collaboration’.

**Excerpt from project leader meeting:**

**Bold** = Questioning  
**Italic** = Response to questioning  
**Underline** = Linguistic cues to dilemmas or conflicts  
**UNDERLINE + UPPERCASE** = Explicit discursive manifestations of contradictions

<table>
<thead>
<tr>
<th></th>
<th>Lead researcher:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is one thing I [would] like to say. Now we start with the literature-based programme at the fourth grade, but ideally, it should be started in the first grade. It was a kind of [a] coincidence that we started with the fourth and fifth grade because the head teachers thought that this was the right age to start. <strong>However, if you start with the first graders and they begin to love books, I think that makes a different starting point. I [would] suggest that you think about this.</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Library director:</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td><em>In that connection, are you interested that we continue after the Multiplicity Project is over?</em> [addresses the head teacher at Eastside]</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Head teacher, Eastside:</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Yes, yes, I was about to say that it annoys me that the hill up to the public library branch is so steep.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Lead researcher:</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td><em>What do you mean? Is it still too steep?</em></td>
<td></td>
</tr>
</tbody>
</table>
Head teacher, Eastside: I have not investigated it properly, but it is too steep for many teachers at our school. It is connected with the perception that they don’t have time. ‘WE DON’T HAVE TIME’, they say. But, I’m wondering. What are you doing when you don’t have the time? There is a pressure as well. The teachers experience that they get the worst results in town. THEY LIVE UNDER A PRESSURE TO PRODUCE HIGH TEST SCORES. Therefore, I think that very often TEACHERS BELIEVE THAT LEARNING IS DEPENDENT ON THEIR DIRECT INSTRUCTION BECAUSE IF I DON’T THE PUPILS WON’T LEARN ANYTHING. And that is nonsense; I’m totally sure that is something that pays off in the long run, we need to work a lot with broadening the learning perspectives of teachers.

In the excerpt, the lead researcher suggests starting with a literature-based literacy programme in the first grade (lines 6-9). This is the first questioning in the excerpt. The library director responds by asking a new question addressed to the head teacher related to sustaining the Multiplicity Project (lines 10-11). The head teacher responds to the library director by indicating a possible conflict between the teachers and the leadership at the school. The head teacher’s comment of ‘it annoys me that the hill up to the public library is so steep’ (lines 13-14) means that he thinks the teachers should use the public library more and that they have some kind of reluctance towards public library use. The expression ‘it annoys me’ is also a linguistic cue of a conflict. The lead researcher asks the head teacher to elaborate (line 15). The head teacher does so by expressing counter-hegemonic thoughts (Gramsci, 1999; Kontinen, 2013) about ‘teacher performance pressure’ (lines 22-23) and teachers’ belief that learning is dependent on direct instruction (23-26). He ends the argument by claiming that they ‘need to work a lot with broadening the learning perspectives of teachers’ (lines 28-29).

The excerpt is from the subsequent meeting held two months after the critical conflict with the local education authority in meeting 15, in which the authorities turned down the Multiplicity Project’s suggestion to expand teacher and librarian partnerships to more schools in the district. I argue that the head teacher’s account in the excerpt is a discursive manifestation of a systemic contradiction in education between a socio-cultural discourse and a technocratic discourse. I discuss this contradiction in more detail in Chapter 7.

The public library director resigned a few months after the critical conflict with the local education authority occurred. I have no information from the library director confirming that the critical conflict was the reason she left her job. However, it is reasonable to assume that the critical conflict with the local education authority affected the participants of the Multiplicity Project.
5.4.5. A methodological contribution

My analytical procedures for making sense of the interaction data add to Engeström and Sannino’s (2011) methodological framework to identify and analyse discursive manifestations of contradictions. In the following paragraphs, I will explain how.

As shown in the excerpt above, the sequences of discursive interactions that consisted of conflicts and dilemmas often emerged out of dynamic linguistic patterns of questionings and responses:

- **Questioning** – someone questions or criticises some aspects of the past, present or future practice, indicating a conflict or a dilemma.
- **Response** – a short or longer reply, indicating approval of or disagreement with the questioning.

The individual questionings and responses together formed collaborative arguments (Andriessen, Baker, & van der Puil, 2010). Collaborative arguments might involve elaboration, reasoning, criticism and a needs analysis that is oriented to one or more object(s). A distinctive type of a potentially transformative collaborative argument is a **turning point** (Kärkkäinen, 1999). A turning point is identified when the object is outlined in new ways. Turning points open up possibilities for resolving conflicts and dilemmas.

In the following paragraphs, I will use the project leader meetings (article 2) as an illustrative example of how I identified different types of contradictions. The most challenging topic in the project leader meetings was how to consolidate and sustain a new model of teacher and librarian partnerships and literature-based literacy education that had been developed through formative interventions at two project schools. This type of effort to consolidate new models of practice is equivalent to the seventh learning action in the expansive learning cycle (Fig. 5). Engeström assigned different types of contradictions to specific learning actions in his visualisation of expansive learning (Fig. 5).
In Engeström’s model (Fig. 5), primary contradictions appear when ‘questioning’ a present practice (learning action 1). Secondary contradictions appear when ‘modeling’ the new practice (learning action 3). Tertiary contradictions appear when ‘implementing’ the new model (learning action 5), and quaternary contradictions appear when ‘consolidating and generalising’ the new practice (learning action 7).

In my study of the project leader meetings (article 2), all four types of contradictions appeared within learning action 7. The critical conflict between the local education authority and the intervention project that appeared in project leader meeting 15 (article 2, pp. 244-245) was a manifestation of a quaternary contradiction between literacy discourses. This quaternary contradiction became a barrier for consolidating and sustaining teacher and librarian collaborations at the project schools. The quaternary contradiction triggered new conflicts and dilemmas that occurred in subsequent meetings. These conflicts and dilemmas were manifestations of primary, secondary and tertiary contradictions. Thus, from my study of contradictions occurring in five project leader meetings over approximately a year, I conclude that how and when different types of contradictions trigger one another is unpredictable and multidirectional (illustrated in Fig. 5.6.). The identification of contradictions therefore requires attention to mini-cycles of learning actions within the larger learning actions of an expansive learning cycle (Engeström, 1999b; Engeström, Rantavuori, & Kerosuo, 2013).
In Table 5.2., I have summarised the most important types of contradictions, their discursive manifestations as conflicts and dilemmas and their linguistic patterns of questionings, responses and turning points. As described above, these contradictions triggered each other within the seventh learning action over a period of five project leader meetings seen as a compound entity. As Engeström and Sannino (2011) noted, ‘Concrete studies on agentic uses and resolution efforts of contradictions in organizational change efforts are sorely needed’ (p. 385). I believe my study and the analytical procedures described in this chapter contribute to this need.
Table 5.2. Discursive manifestations of contradictions in project leader meetings

<table>
<thead>
<tr>
<th>DISCURSIVE MANIFESTATIONS OF CONTRADICTIONS</th>
<th>CONTRADICTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Questioning (critical conflict):</strong></td>
<td><strong>Quaternary contradiction</strong> between a technocratic discourse (local education authority) and a sociocultural discourse (the Multiplicity Project) in literacy education</td>
</tr>
<tr>
<td>The public library director with a personal account of being humiliated in the meeting with the local education authority: ‘I felt I was nailed to the wall’</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Counter-argument (conflict):</strong></td>
<td><strong>Tertiary contradiction</strong> between the object of the Multiplicity Project and dominant literacy practice in the school district</td>
</tr>
<tr>
<td>Head teacher at Westside disagreeing with the library director: ‘Why on Earth should we spend a lot of time on this?’</td>
<td></td>
</tr>
<tr>
<td>3. <strong>Turning point (resolution effort):</strong></td>
<td><strong>Secondary contradiction</strong> in the schools between the rules of standardised literacy education imposed by the local education authority and new pedagogical artefacts of literature-based literacy education introduced in the schools by the Multiplicity Project</td>
</tr>
<tr>
<td>Public library director responds to head teacher at Westside and tries to resolve the critical conflict by outlining the objects of the project in two new ways: 1. convince the local education authority about teacher and librarian partnerships as a means to become the best school district and 2. ‘consolidate our work at the leadership level’ to make the project sustainable in the participating institutions.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>Response (dilemma):</strong></td>
<td><strong>Primary contradiction</strong> within the aspect of pedagogical artefacts. The use value of teacher and librarian partnership and library use in schools is considered low by most head teachers relative to the exchange value of good results on national and international achievement tests (despite research showing that student literacy improves with increased teacher and librarian collaboration)</td>
</tr>
<tr>
<td>Head teacher at Eastside elaborates on the public library director’s turning point by emphasising the importance of institutionalising sustainable structures in the participating schools. The dilemma is how to sustain these structures without support from the local education authority: ‘There has to be a school librarian in the school. If not, everything falls apart’</td>
<td></td>
</tr>
<tr>
<td>5. <strong>Turning point (intervention):</strong></td>
<td>Conflicting motives between the head teacher at Eastside and the public librarian. The head teacher argues for keeping the public librarian resources at his school, while the public librarian argues for extending teacher and librarian collaboration to more schools</td>
</tr>
<tr>
<td>Head of research supports the head teacher at Eastside: ‘It is important to develop this way of working with literacy education in every grade at both schools’</td>
<td></td>
</tr>
<tr>
<td>6. <strong>Questioning (conflict):</strong></td>
<td><strong>Quaternary contradiction</strong> between wide-scale technocratic reforms of standardised literacy education, supporting statistically significant test score outcomes versus small-scale innovations, supporting increased reading engagement in local contexts</td>
</tr>
<tr>
<td>Public librarian responds to the preceding arguments by being sceptical of the resources the Multiplicity Project demands from the main library: ‘Is it wise to spend so many resources on only two schools?’</td>
<td></td>
</tr>
<tr>
<td>7. <strong>Argument (conflict):</strong></td>
<td><strong>Primary contradiction</strong> in the public library’s division of labour. The public librarian wants to continue collaboration with the project schools and at the same time equally serve all schools.</td>
</tr>
<tr>
<td>Head teacher at Eastside responds to the public librarian by arguing that schools do not miss anything from the public library services because of the pressure from the local education authority with regard to testing and teaching basic skills: ‘Local bottom-up development is almost zero because everybody is absorbing what is coming from the top’</td>
<td></td>
</tr>
<tr>
<td>8. <strong>Response (double bind dilemma):</strong></td>
<td>The <strong>primary contradiction</strong> in the division of labour of the public library working as a source of change and development. The need to resolve this contradiction resulted in a contract as a possible new solution to sustaining teacher and librarian partnerships in the two participating schools and the main public library</td>
</tr>
<tr>
<td>Public librarian responds to the head teacher at Eastside in an ambiguous way: ‘Yes, no, maybe it is only us who feel that way, hmmm..., but, of course, we want to continue collaborating with you’</td>
<td></td>
</tr>
<tr>
<td>9. <strong>Questioning (turning point– resolution effort– new solution):</strong></td>
<td><strong>Primary contradiction</strong> in the division of labour of the public library working as a source of change and development. The need to resolve this contradiction resulted in a contract as a possible new solution to sustaining teacher and librarian partnerships in the two participating schools and the main public library</td>
</tr>
<tr>
<td>The public librarian at Westside makes an effort to resolve the double-bind dilemma and consolidate teacher and librarian collaboration in the two project schools and the public library: ‘Shouldn’t we write some sort of contract with you?’ (addressing head teacher at Eastside)</td>
<td></td>
</tr>
</tbody>
</table>
5.5. Judging the research quality

In this section, I will discuss issues of reliability and validity. However, I start with arguing for how and why the concept of causality is relevant in this study.

5.5.1. Causal explanations

Causal explanations in qualitative research start from a premise that social phenomena exist both in our minds and in an external social reality and that there are some causalities between them that can be accessed and thereby explained by the researcher (Hammersley, 1992; Maxwell, 2004, 2012; Miles & Huberman, 1994). However, the researcher’s access to social phenomena is not a direct representation of the world. The researcher is always engaged in (re)-constructions of reality and truth-claims. Thus, causal explanations in qualitative research are compatible with a constructivist epistemology. However, ‘seeing our understanding of causation as a construction does not make it “fictional”’ (Maxwell, 2012, p. 657). Even social constructions are real and affect our actions. In this connection, it is important to distinguish between ‘causal relationships’ according to a correspondence theory of truth that entails a variable-oriented and universal view on causality and ‘causal explanations’ according to a coherence theory of truth that entails a process-oriented local view on causality (Engeström, 2011). The latter is relevant to this study.

From a CHAT perspective, causation can be investigated with the help of ‘historical methods and narrative evidence, as well as [the] close observation and recording of unfolding chains of events’ (Engeström, 2011, p. 610). My two empirical articles are examples of such process-oriented research. In article 2, the critical conflict is the starting point for my research. I then follow a chain of events in three subsequent project leader meetings of how the project leaders respond to the conflict, what they do to resolve the conflict and how the conflict affects the sustainability and further development of the object of activity. In article 3, the starting point for research is a critical conflict evident in the teacher team’s discursive interaction at their last meeting. From this starting point, I conduct a retrospective analysis using multiple sources of data in order to study the contradictions in the chain of events that led up to the critical conflict.

Engeström (2011) suggested a focus on the three layers of causality if one wants to observe and reconstruct a chain of events among human beings. The first layer is the interpretive layer in which humans act according to their interpretations of events. The second layer of causality is the contradictory layer in which humans face contradictions within and between the activity systems. The third layer of causality is the agentive layer in which individuals or collective actions aim at transforming the activity. In my study, there are several chains of events in which these three layers of causality are present. One example is when the public librarian identifies a dilemma that
occurs in one of the project leader meetings (interpretive layer). She then faces a contradiction related to multiple motives among participants of the project leader group (contradictory layer). Later she suggests that the project leader group develop a contract in order to deal with the contradiction and possibly resolve it in the longer term (agentive layer) (see article 2, p. 247-250).

According to Maxwell (2012, p. 657), causal explanations in qualitative research ‘identify process as a necessary and central aspect of causation’; it is local rather than general, ‘makes context intrinsic to causal explanation’ and ‘extends causal efficacy to beliefs, values, intentions, and meanings’. Following Maxwell, I emphasise that my accounts of causality between discourse, actions and contradictions is limited to the particular context of this case study. This view is in line with sociocultural and cultural-historical tenets – specifically, ‘people grow into the frameworks for thinking afforded by the cultural practices and tools made available to them in the social setting of their development’ (Ellis, Edwards, & Smagorinsky, 2010, p. 4). Therefore, causality in my study starts from the social interaction of subjects within a local cultural-historical and institutional context. It is not an account of universal truth, but it accepts notions of specific local individual and community forms of truth that occur through social and discursive interactions.

5.5.2. Reliability

Could another researcher have produced the same results as me under the same conditions? Can my interpretations be trusted? Such questions concern the reliability of this study.

All the data sources listed in Table 5.1. are accessible to others in a case study database I created in Nvivo8 (see Appendix 3). The database offers a detailed account of how I coded and categorised the transcripts from the audio-recordings. I have also discussed possible interpretations of data with other researchers participating in the Multiplicity Project. Moreover, all three articles have undergone rigorous peer review prior to publication in renowned academic channels.

To avoid anecdotalism, I carefully investigated all my data. In article 2, I transcribed and purposely coded all the dialogues in the meetings. In article 3, I critically investigated and compared all the primary sources of data. The selection of data presented in the articles is a result of careful analysis (see section 5.4.1) and is what I consider the most relevant manifestations of systemic contradictions occurring in the two interventions.

In section 5.1., I have accounted for challenges that occurred during my study. I had to change my research focus more than once. I do not view this as a limitation; rather, these changes signify necessary turning points in the research process. In my opinion, research on interventions should
always be prepared to focus on surprising phenomena that might occur within the intervention, even if it means that one has to change research questions and collect new sets of data.

5.5.3. Validity

Validity in all research relates to the inferences that are drawn. Valid research ‘means that you are observing, identifying or “measuring” what you say you are’ (Mason, 2002, p. 39).

The construct validity of this study concerns how well the data material represents systemic contradictions in literacy education. Is it valid to draw inferences from the observed indicators of conflicts and dilemmas associated with the abstract construct of systemic contradictions? Yin (2009) suggested three tactics to increase the construct validity of case studies. The first is to use multiple sources of evidence, the second is to establish a chain of evidence, and the third is respondent validation. As accounted for in section 5.3., I have used the first two tactics.

Concerning respondent validation, Silverman (2005) warned that it might be ‘a flawed method’ if we give a privileged status to respondents’ accounts (p. 212). I informed my respondents about the purpose of this study, but I did not present my interpretations of data to them. I found it unnecessary to do so because the data sources – especially the audio-recorded meetings – represent the respondents’ reactions to the conflicts and dilemmas that I analyse as manifestations of contradictions.

The internal validity of this study concerns whether there is coherence between the evidence and the theoretically informed interpretations and explanations of the case. This has to be assessed in light my perspectival interpretations using CHAT and critical theory to analyse the empirical data (see section 5.4.). In this connection, it is important to mention that I view teacher and librarian partnerships as important for improving students’ reading engagement. Thus, I am not neutral in my opinion of the objects of the two interventions. However, I have tried to avoid normative statements when discussing the results from this study. I have also attempted to make the analytical procedures transparent to help clarify the inferences made from the analysis and the theoretical propositions that drives the analysis (see section 5.4.).

My analysis of interrelations between contradictions, discourses and actions is a possible interpretation of generative mechanisms in a local context rather than a claim to represent objective truth. My aim has been to move beyond the surface level of the empirically observed and to offer credible theoretical explanations of structural conditions that affect two specific interventions of teacher and librarian partnerships in literacy education. My analysis of local causality in these interventions focuses on processes through which actors’ intentions and motives observed in discourse and actions are affected by systemic contradictions (social structure) found
within and between their respective activity systems (schools and libraries) and neighbouring influential activity systems (governance, tool producers, pre-service education). From this, I conclude that contradictions exist in reality. However, I want to repeat the crucial point that we cannot observe contradictions directly from within that reality; we can only observe them through their manifestations in human actions and discourse and from there trace their cultural-historical developments (Engeström, 1987/2015; Engeström & Sannino, 2011).

The potential to ‘refute assumed relation between phenomena’ is another issue concerning internal validity (Popper, 1954 as cited in Silverman, 2005, p. 213). Are there other rivalling explanations to the case? Could the critical conflict associated with the declining parent participation have appeared even if the teacher team did not use a reading log at the book café or invited the parents in as partners when deciding the content of the book café? Moreover, would the Multiplicity Project have experienced problems to sustain and develop the project, even with the support from the local education authority? It is possible to construct other explanations for the critical conflicts and assume that they would have appeared even if the chain of events changed. However, it would be mere speculation. Because my study is a theoretically driven analysis, the credibility of my explanations for the critical conflicts can only be judged in relation to the framework of CHAT. However, I am open to the fact that other theoretical propositions may lead to alternative explanations.

External validity ‘refers to the degree to which findings can be generalized across social settings’ (Bryman, 2008, p. 376). Generalising results from a qualitative single case study is problematic, given its interpretative, perspectival, context-bound and theory-laden nature. However, Flyvbjerg (2006) argued that it is possible for one to generalise from a single case. The premise, however, is that the results of a qualitative case study are to be generalised analytically to theory rather than to populations or statistics: As Bryman (2008) noted, ‘It is the quality of the theoretical inferences that are made out of qualitative data that is crucial to the assessment of generalization’ (p. 392). I interpret my data from the theoretical framework of CHAT. Therefore, CHAT is one theoretical domain in which the results from this case study can be analytically generalised (Yin, 2009). The results of this study can also be analytically generalised to critical theories in educational research. My analysis shows that several of the conflicts and dilemmas appearing in the data are manifestations of a main systemic contradiction between what I define as a sociocultural discourse and a technocratic discourse in literacy education. I discuss this contradiction in Chapter 7.

It is, however, probably not possible to analytically generalise my results to studies of contradictions in teacher and librarian partnerships in other contexts. To my knowledge, an
equivalent case study to which I can compare my results does not exist. I have reviewed studies that address barriers in teacher and librarian partnerships that are similar to the barriers that I have analysed in this study (See sections 3.2.3. and 3.2.4.). However, the reviewed studies are largely descriptive and do not offer an explanatory analysis of coherence between the reported barriers and systemic contradictions. Therefore, we need more qualitative studies that focus on how contradictions work as barriers and opportunities for developing teacher and librarian partnerships in different cultural and social contexts.

5.6. Ethical considerations
My PhD project is approved by the Norwegian Center for Research Data (NSD). It means that the data are stored and processed according to NSD regulations. I informed all the participants about my project and its purpose. All participants gave their informed consent for the observations, interviews and audio-recordings. Moreover, I provided the participants and participating institutions with fictitious names, and no sensitive personal information is in the published articles or in this extended abstract.

5.6.1. A narrative from the field
In this section, I will discuss an ethical dilemma that occurred in my first meeting with the teacher-librarian and teachers at the project school. The purpose of the meeting was to initiate a dialogue with these practitioners about my forthcoming fieldwork at the school. I started with informing them about my research questions and expressed that I was interested in doing non-participative observations of literature-based lessons in classrooms and in the school library. I explained that the purpose of the study was to gather data about teacher and librarian collaboration in literacy education. The immediate response from the teachers and the teacher-librarian was that my project was too vague and the research questions were too general. They also expressed that it was unclear what I was going to find out by doing observation. One teacher commented that several researchers working with the Multiplicity Project (see section 5.1.1.) had conducted observations in their classes and that the teachers thus far gained very little from participating in the project. The teachers and the teacher-librarian told me they wanted a detailed long-term plan about when and how I was going to conduct observations at the school. They also told me they wanted more feedback from the research group in the Multiplicity Project. I responded that I thought that their demands were reasonable and that I would inform the research group in the Multiplicity Project about their concerns about receiving too little information about the research conducted for the project. A couple of days after this meeting, I made a detailed plan concerning my observations at the school, which was approved by the teacher-librarian and the teachers.
5.6.2. The reflexive researcher

A lesson to be learned from the narrative above is that intervention researchers need to be reflexive and sensitive of participants’ experiences with and attitudes towards research being conducted at their school (Burner, 2016). A reflexive researcher is able to have an internal conversation with oneself. In a reflexive internal conversation, the research asks self-critical questions about his/her beliefs, biases, values, ideological positioning and routinised actions (Alvesson & Sköldberg, 2009; Archer, 2003). A reflexive researcher uses internal conversations to correct one’s own actions in order to build the trust and appreciation of the participants (Postholm & Skrøvet, 2013). I believe that by showing appreciation, humbleness and a willingness to adjust my fieldwork in accordance with the teachers’ and the teacher-librarian’s concerns, I actually managed to build up a trusting relationship with them over time. This type of reflexive praxis in qualitative research is important because the motives of participants do not always coincide with the motive of the researcher. Practitioners’ motives are often short-term and more sympathetic towards research that can help them to deal with problems they face in their everyday practice. The motives of researchers are often more determined and long-term. All intervention researchers need to take such contradictory motives seriously. For a detailed discussion of how to build strong partnerships with practitioners and improve our understanding of challenges in educational intervention research, see article 1.
6. Article summaries

6.1. Article 1


Article 1 is a theoretical investigation of which a qualitative intervention methodology is best suited for building stronger partnerships between researchers and practitioners in educational research. In the article, I analyse and compare the methodology of educational design research (Cobb, Confrey, diSessa, Lehrer, & Schaeuble, 2003; Plomp & Nieveen, 2010) and the CHAT-based methodology of change laboratories (Engeström, 2007c, 2011). I also review key texts within both methodologies. The discussion is centred around Engeström’s criticism of educational design research with an emphasis on the concept of double stimulation (Engeström, 2007c; Sannino, 2015) and the differentiation between formative and linear interventions (Engeström, 2011). From this position, I discuss the types of contradiction that might occur in educational interventions. This discussion is a theoretical contribution to sub-question 1. Moreover, I argue that the formative interventions of the change laboratory methodology provide analytical tools that can enable practitioners to collectively question, analyse and resolve contradictions within and across activity systems. This argument is a theoretical contribution to sub-question 3.

The article relates to the main question of this thesis by discussing how contradictions work as barriers and opportunities in educational and inter-professional intervention projects. The article discusses how the concepts of ‘contradictions’ and ‘object of activity’ can provide theoretical and analytical tools to improve our understanding of barriers and opportunities. The article concludes that researchers and practitioners can deal with barriers through a focus on developing a shared object of activity and by identifying, analysing and resolving contradictions occurring in an intervention. Thus, article 1 lays the groundwork for the theory-driven analysis of contradictions as barriers and opportunities in the two empirical articles of this thesis.

6.2. Article 2


Article 2 explores systemic contradictions in teacher and librarian partnerships within literacy education at the inter-institutional level. The primary data consist of discursive interaction in five audio-recorded project leader meetings of a four-year educational intervention project (referred to as the Multiplicity Project). The aim of the intervention was to develop collaboration between
teachers, school librarians and public librarians in two project schools. The intervention regarded
teacher and librarian partnerships as a precondition for students’ reading engagement and literacy
achievement. The object of collaboration between teachers and librarians was to provide
extensive access to books and to stimulate a passion for voluntary reading through literature-
based activities in class and in the school and public libraries.

The project leader group consisted of institutional leaders of the two project schools and the main
public library as well as researchers from two teacher education institutions. The analysis of
contradictions starts with a critical conflict that occurred in one of the project leader meetings.
The lead researcher had invited two local education authority officials to this meeting to discuss
expanding teacher and librarian partnerships and literature-based literacy education into more
schools in the district. In the meeting, the local education authority surprisingly refused to support
the project leaders’ plan to expand the project to more schools in the district, despite evidence of
increased reading engagement at the project schools.

We thoroughly analysed the transcripts from three succeeding meetings after the meeting in
which the conflict arose. We argue that the critical conflict arose from contradictory discourses of
literacy education held by the local education authority and by the Multiplicity Project. The
Multiplicity Project’s priority was to stimulate reading engagement through literature-based
literacy programmes and collaboration between teachers and librarians. The priority of the local
education authority, however, is the teaching of basic skills and outcome-oriented learning, which
aligns teaching, learning and assessment strategies with student learning outcomes.

Furthermore, we discuss how the contradiction between the literacy discourses described above
creates barriers to sustaining the intervention of teacher and librarian partnerships in the project
schools. We explore how project leaders respond to the critical conflict with the local education
authority. We analyse how the conflict triggers new conflicts and dilemmas within and across the
professions and institutions represented by the project leaders. We argue that some of these new
conflicts and dilemmas are discursive manifestations of contradictions generated by neoliberal
governance in education. The identification and analysis of contradictions in article 2 is a
contribution to sub-questions 1 and 2.

We end the article by discussing the opportunities for the project leaders to deal with the conflicts
and dilemmas in transformative ways. This discussion is a contribution to sub-question 3. The local
education authority’s refusal caused strong dilemmas and emotional experiences of crisis for some
of the members of the project leader group. In the last meeting that we analysed, one of the
group members suggested developing a contract to formalise and sustain teacher and librarian
partnerships between the project schools and the public library. We argue that the contract represents a ‘germ cell’ with the potential to resolve the contradictions triggered by the local education authority’s refusal.

6.3. Article 3


Article 3 explores systemic contradictions in teacher and librarian partnerships within literacy education at the school level. The unit of analysis is an extra-curricular multilingual book café at the school library in a Norwegian primary school. A teacher-librarian and five bilingual teachers planned and implemented the book café. The aim of the book café was to stimulate reading engagement through literacy practices that are inclusive of the pupils’ linguistic and cultural background.

The analysis starts with a critical conflict of declining parent participation that occurred in the second book café. The primary data consist of observations of the book café and of audio-recoded teacher team meetings. I analyse and discuss the connection between declining parent participation and the teacher team’s use of a reading log at the book café. I discuss why the teachers gave the parents ‘homework’ (the reading log) in the first place when the book café was supposed to be an extra-curricular and voluntary activity. Reading for pleasure is, by definition, voluntary. It is contradictory to introduce reading for pleasure and at the same time try to control the reading at home. The teachers did not negotiate with the parents on the decision to use the log; instead, they expected the parents to make use of it without resistance.

I argue that the critical conflict with declining parent participation is rooted in a contradiction between a school literacy discourse and a culturally responsive literacy discourse. This discussion is a contribution to sub-question 1. A dominant school literacy discourse makes universal claims to a generalisable set of skills and teaching methods and presents literacy values as neutral. The use of a standardised reading log fits well into a school literacy discourse. In contrast, a culturally responsive literacy discourse is more open to issues considered important by pupils and parents and is willing to include these issues in the curriculum. Culturally responsive pedagogy involves promoting pupils’ and parents’ engagement and giving shared responsibility to them in developing learning activities.

Furthermore, I analyse how the teacher team responded to the declining parent participation, which is a contribution to sub-question 2. The teacher team placed the full responsibility on the
parents for declining parent participation even though it was the team who single-handedly defined the content and activity of the book café. Even though the teacher team were partly able to resolve the problem with the reading log by abandoning its use, they did not engage in critical self-reflection on how a reading log is in conflict with an activity that they, at the outset, defined as voluntary. It appears that a dominant school literacy discourse influences the cognition of teachers.

Lastly, I discuss how teachers can work to address and resolve systemic contradiction within literacy education. This is a contribution to sub-question 3. The issue with declining parent participation and the reading log shows the importance of addressing tensions, conflicts and dilemmas occurring in teachers’ literacy practices as possible manifestations of systemic contradictions. The standardisation of school literacy as solely basic skills structures the field of action of teachers and consequently restricts the teachers’ autonomy to develop localised and culturally responsive literacy practices. In article 3, the result is an uneven distribution of power between the teachers and parents that prevents parents from gaining influence and agency.

A final thought: If the team had collaborated with a public librarian, it is possible that they would not have introduced the reading log in the first place. A public librarian’s mandate is to stimulate reading engagement through voluntary reading, to serve the needs of the public and to facilitate the development of democratic citizenship (UNESCO, 1994). A reading log is not part of the public librarian’s toolbox. Unlike teachers, public librarians are not obliged to rank and sort pupils. They are not under the same pressure to increase pupils’ reading performance on standardised tests.
7. Discussion

This study shows how two types of interventions concerning teacher and librarian partnerships are having problems with becoming a sustained activity because of unresolved systemic contradictions. Teacher and librarian partnership is an under-researched topic within the educational sciences. This thesis contributes with knowledge about contradictions, barriers and opportunities for developing teacher and librarian partnerships in literacy education. In the following section, I discuss these contradictions, barriers and opportunities in light of the articles; the review; CHAT and the theory of contradictions; and relevant critical perspectives. The discussion clarifies the empirical, methodological and theoretical contributions of this study. The contributions are also summarised in section 8.1.

7.1. Systemic contradictions: barriers to and opportunities for partnership

The articles examine the types of systemic contradiction that occur in two interventions concerning teacher and librarian partnerships in literacy education, how practitioners and institutional leaders respond to the contradictions and how the contradictions can be resolved. My analysis shows how conflicts and dilemmas are manifestations of different types of contradictions. Systemic contradictions exist on the level of human cognition, in discursive interaction, at the level of pedagogic actions and at the level of institutional practice and educational policy and governance. It is this interconnected and multi-levelled nature of dialectical contradictions that makes them systemic.

I situate the analysis of systemic contradictions in this study in a wider policy context. In this chapter, I draw attention to an overarching contradiction between a technocratic discourse and a sociocultural discourse in literacy education. I argue that it is essential to understand this contradiction in order to understand barriers and opportunities for developing teacher and librarian partnerships in literacy education.

7.1.1. Educational technocracy

The rational mindset of technocratic discourses in education relies on quantitative measurement and statistically determined approaches to inferences of evidence-based practice (Crow & Møller, 2017). The role of the administrative upper level is thereby to ensure that, through rewards and punishments, professionals and managers in school apply an appropriate evidence-based practice. A statistical comparison of evidence-based practice between schools, districts and nations naturally directs attention to measurable variables of competencies and skills while neglecting the importance of addressing values, beliefs, motivations and identities. The goal in an educational
technocracy is to ensure educational quality through the effectiveness of educational means and technologies. Unfortunately, this technocratic rationality works at the expense of judgements about what is educationally desirable (Biesta, 2007).

Governments make schools and teachers accountable for the academic success of their students. Technocratic governance in education ‘has converted moral issues of inequality and social justice that should be a shared social responsibility into technical calculations of student progress targets and achievement gaps that are confined to the school’ (Hargreaves & Shirley, 2009, p. 29). A main problem with the dominance of technocratic discourses in educational governance is the neglect of the dynamic and unpredictable ecology of real life in real schools that makes the outcome in classes go up and down from one year to the next. Real conflicts and dilemmas that teachers, students and parents face have little impact on technocratic decision-making systems, which demand accountability for predetermined ends regardless of the social ecology.

A main characteristic of a dominant technocratic discourse in literacy education is the promotion of outcome-oriented, standardised and allegedly evidence-based literacy programmes. I argue that a technocratic discourse is evident in my study’s two interventions of teacher and librarian partnerships in literacy education. In article 2, I show how the local education authority represents a technocratic literacy discourse in her dismissal of teacher and librarian partnership in literacy education. In article 3, I show how the teacher team’s use of pedagogical artefacts and their rules of action are influenced by a technocratic discourse.

7.1.2. The inner contradictions of evidence-based practice

In the following paragraphs, I will discuss the inner contradiction of evidence-based practice in relation to barriers and opportunities for developing teacher and librarian partnerships in literacy education. I will give examples that illustrate how technocratic discourses about evidence-based practice and policy about ‘what works’ is unreliable. Between 2009 and 2013, 173 primary schools and lower secondary schools in Norway participated in a state-run school library programme (6% of the total number of schools in Norway). Several of the schools developed locally based forms of literature-based literacy programmes (Universitetet i Agder, 2011, 2012, 2013b). Surveys with participating school administrators, teachers, school librarians and school district owners evaluated the programme as highly successful and valuable (Carlsten & Sjaastad, 2014). However, despite the positive evaluations, the government did not provide resources to spread the programme to more schools in Norway.

There are some interesting similarities between the state-run programme and the Multiplicity Project. In article 2, I describe how the local education authorities disregarded the Multiplicity
Project although a survey documented that the majority of the participating pupils were significantly more engaged readers two years into the project (Tonne & Pihl, 2012). There is a contradiction here between the actual use value (engagement) of the literature-based literacy programme of the Multiplicity Project as reported by pupils and the local educational authority’s refusal of the programme. The local education authority’s decision to refuse the programme is a contradiction in terms because large-scale quantitative and cross-national tests document strong correlations between literacy engagement and reading achievement (Kirsch et al., 2002; Roe & Taube, 2009; Sullivan & Brown, 2015).

Reading engagement is stimulated through enjoyable, inspiring and thought-provoking reading experiences. Studies from the United States show that children from a lower socio-economic background have limited access to reading materials at home as well as in their classroom and in their school and public libraries (Neuman & Celano, 2001). In Norway, Bakken (2004) documented that the number of books at home significantly affects a student’s reading performance. Thus, an apparent way to reduce the achievement gap is to stimulate children’s reading engagement and reading for pleasure. Well-stocked libraries can provide children with access to varied reading materials that meet different levels of reading proficiency and that are inclusive of children’s linguistic, cultural and social background. However, many teachers perceive the library as a warehouse for books and as a mere extension of the classroom (Limberg & Alexandersson, 2003).

As Dressman (1997) argued, teachers need to acknowledge the expertise of librarians to utilise the full potential of the library as a learning space. Professional librarians are experts in putting together collections of high quality reading materials that connect with children’s reading lives and interests (Hedemark, 2012). Professional and institutional partnerships between teachers, school librarians and public librarians increase the range of books and other reading materials that pupils have access to, and these books include topics that they find meaningful and interesting.

However, governments and local educational authorities ignore teacher and librarian partnerships in literacy education although many quantitative studies and qualitative studies have documented the importance of literature-based programmes for reading engagement and reading achievement. This contradiction within the paradigm of evidence-based policy in education indicates that educational governance is based on certain political ideologies and the selective use of theory and research rather than evidence. It is an issue of power and control. Therefore, it is crucial to ask questions about who decides what to count as evidence in literacy education and what the motives are. Any given evidence confirms more than one theory, although some theories are more plausible than other theories (Kvernbekk, 2011). Therefore, decisions about evidence
have to be judged against cultural contexts, normative and ethical considerations, desirability, motives, political and ideological allegiances, personal preferences and experiential knowledge. It is a democratic problem in educational research if only randomised controlled trials and measurable outcomes counts as evidence. However, this seems to be the case. The current evidence-based practice overlooks the sociocultural and situated dimensions of education. Hargreaves and Shirley (2009) claimed that the technocratic overreliance on evidence-based data ‘marginalize[s] the importance of moral judgment and professional responsibility’ (p. 31). A dominant technocratic discourse favours educational research that provides standardised and prototype solutions in contrast to research that points to the need for open and informed dialogues about the purpose, means and ends of education (Biesta, 2007).

The idea of education as a technical treatment towards predetermined ends neglects the fact that education is a moral practice. A dominant technocratic discourse triggers performative contradictions between what teachers express as their ideals (e.g. inclusive and culturally responsive teaching) and what they actually practice. An example in my study is when teachers decide to use a reading log at a voluntary book café, which obliges students and their parents to report on their reading at home. It is contradictory to promote voluntary reading within a regime of strict reporting and control of the reading. One possible interpretation about why such a contradiction occurs as a part of teachers’ practice is to focus on how discourses about evidence-based practice in literacy education affect teachers’ cognition. The teacher team obviously viewed the reading log as an evidence-based pedagogic instrument that ‘works’. However, Biesta (2007) argued that the evidence-based orthodoxy of ‘what works’ makes it almost impossible to critically question teaching activities making use of evidence-based instruments to achieve predetermined ends. If the instrument does not provide the expected results, the reason has to lie somewhere else, such as with the lack of resources or the apathy of parents and pupils (illustrated through the discussion in the teacher team meeting in article 3, pp. 112-113).

In this thesis, I suggest that a strong contradiction exists between the evidence of the impact of reading engagement on literacy achievement and the educational authorities’ low prioritising of teacher and librarian partnerships, library use and literature-based programmes. Even if there is strong evidence in educational research showing the importance of reading engagement for reading achievement, it is obviously not the ‘right’ form of evidence. Otherwise, such programmes would have been more visible in schools and promoted through educational policies. This contradiction indicates that an educational policy on literacy education is, in fact, not evidence-
based. This leads us to a discussion of barriers and opportunities to foster democratic literacy education within a hegemony of educational technocracy.

### 7.1.3. Democratic literacy education

In this section, I argue that a sociocultural discourse stands in opposition to a technocratic discourse in literacy education. A sociocultural discourse promotes participation-oriented literacy programmes responsive to diverse social and cultural contexts, which is a precondition for democratic literacy education.

Schools in Norway are obliged by law to prepare children for active democratic citizenship (The Education Act, 1998). Democratic citizenship involves a movement away from materialistic desires and competition towards a desire to do things that are good in our lives with others. Active democratic citizenship presupposes solidarity and the ability to engage in partnership and dialogue (Biesta, 2011). Culturally responsive and participation-oriented literacy education can stimulate various forms of democratic social interactions locally and globally. Pihl, Skinstad van der Kooij and Carlsten (2017) ‘propose[d] to reiterate the purpose of literacy education as democratic education’ (p. 1). This reconceptualisation of literacy education is inspired by the ‘social turn’ in literacy studies in which literacy is seen as an ecology of social practice not limited to a set of basic reading and writing skills a person holds (Barton, 1994; Gee, 2000; Street, 1984). Literacy as a social practice includes a wide set of communicative actions for specific purposes in a specific cultural and social context of use. Reading and writing only make sense when viewed in interaction with cultural and social spheres of technology, institutions, power relations and ideology (Collin & Street, 2014; Janks, 2010). This democratic and sociocultural discourse is in opposition to dominant technocratic discourses, which make universal claims to standardised, generalisable and value-neutral literacy skills. Democratic literacy education recognises the flow of reading experiences that fuels a desire to read and that instigates people to read the word, the world and the self (Freire, 1972; Janks, 2010; Masny & Cole, 2009). People engage in multiple ways of constantly *becoming* with the world in local contexts such as home, school and community as well as in global contexts of digital social media. Multiple literacies in real social practices are highly unlike technocratic discourses in literacy education in which literacy learning is viewed as a closed system of linear and controlled developments.

The major challenges confronting democratic educational systems in the 21st century involve building public schools for social justice (Apple, 2013), for intercultural tolerance (Gundara, 2000) and for democratic citizenship (Biesta, 2011). Theoretical and professional arguments for teacher and librarian partnerships meet these challenges by emphasising the shared social mandate.
between teacher and librarians: learning, literacy, democratic participation and citizenship (Pihl, 2009; Pihl et al., 2017). In times of rapid social change and increasingly complex tasks for teachers to handle, it is necessary to reflect on the limits of teacher professionalism. Librarians can be effective partners for teachers in terms of promoting a democratic literacy education. Trained librarians working in the children’s department have advanced knowledge about reading engagement and children’s literature. They are experts in promoting quality literature that children find meaningful and that will motivate them to read on a voluntary basis.

So far, I have argued that there is a contradiction between a sociocultural discourse and a technocratic discourse in literacy education. The image of two contrasting discourses in education is, of course, simplified. The complex reality of teaching and learning practices in school can be placed on a continuum from technocratic to sociocultural discourses. An experienced teacher might deliberately try to balance both discourses in her professional practice.

7.1.4. The control of labour-power

Studies on teacher and librarian collaboration indicate some reasons for teachers’ reluctance to partner with librarians. Teachers do not see the benefits of working together with the local library (Leitão et al., 2015); they consider collaborating with librarians as very time-consuming (Mokhtar & Majid, 2006); and they view libraries as warehouses for books and librarians as gatekeepers to a collection of resources rather as pedagogical partners in literacy education (Barstad et al., 2007; Ingmarson, 2010; Limberg & Alexandersson, 2003; Meyers, 2007).

In existing research, plausible explanations of the underlying mechanisms for barriers to teacher and librarian partnerships are not offered. For an advanced understanding of such underlying mechanisms, it is necessary to analyse systemic contradictions in relation to the control of labour-power. Labour-power is the capacity of individuals or groups of individuals to interact in productive activity (Warmington & Leadbetter, 2010). The social positioning of teachers and librarians in a partnership situation is mediated through the ongoing historical and social production of labour-power within and across their respective institutions and professions, in which differing motives and interests are at stake.

To understand these processes associated with the control of labour-power, it is important to consider historical changes in the priorities of the library in relation to societal digitalisation and the emerging dominance of technocratic discourses in literacy education. Sensenig (2011) argued that a main reason for the absence of libraries in US education policy is its move away from supporting children’s literacy and its move towards developing the public library as a social meeting place and a space for democratic debates and citizenship. There is a similar historical
change in Norway (Audunson, 2005; The Public Libraries Act, 1985). The general digitalisation of literacy and of the lifeworld of citizens may be a key reason for these changes. However, I argue that it is likely that these changes in library policy have also been accelerated by the marginalised role educational research and policies have given to libraries.

Through the lens of educational technocracy, teachers can control and modify literacy achievement through advanced, standardised and specialised teaching strategies and instruments. Unlike teachers, public librarians are not under the same pressure from technocratic discourses to increase pupils’ reading achievement. Therefore, the labour-power of librarians, who are experts in fostering reading engagement and voluntary reading, is not considered useful according to technocratic discourses of literacy achievement. Technocratic discourses enhance boundaries of professionalism defined within the professions and the state. The boundaries are set to control professional domains and the strong specialised discourses of professional identity. These strict boundaries of organisational and occupational professionalism are a barrier for developing inter-professional relations between teachers and librarians (Pihl, 2011). However, processes of expansive learning in small-scale educational interventions represent opportunities to work with such contradictions in localised change efforts. In the following section, I discuss these possibilities for change.

7.2. Expansive learning in partnership interventions

An important issue in all three articles of this thesis is how participants in an educational intervention need to gain agency within the intervention as a precondition for change. In article 1, I argue that intervention researchers can assist practitioners in gaining agency through identifying and analysing systemic contradictions occurring in their practice. The analysis of articles 2 and 3 illustrates the need for institutional leaders and practitioners of learning to identify and deal with discursive manifestations of contradictions. Theories of systemic and dialectical contradictions can work as a type of second stimuli and can engage practitioners in critical reflections on conflicts and dilemmas occurring in the intervention. Identifying and analysing contradictions might open up for expansive learning to model new locally based solutions that transcend beyond standardised instruments of the ‘what works’ agenda. The aim of formative interventions is to instigate a learning process in which practitioners gradually take charge of shaping the objects of the intervention.

Standardised wide-scale and top-down educational reforms with predetermined outcomes do not necessarily follow the temporal flow of school practices and only minimally focus on localised differences and needs. Small-scale educational interventions are in a better position to be
sensitive to localised needs, to be aligned with the timescales of school activity and to be engaged in expansive learning cycles in close collaboration with practitioners (Nocon, 2008). Productive interaction aimed at developing a shared object of activity across professions and institutions demands longitudinal and flexible processes of improvisations and compromises that are not restricted by predefined outcomes (Engeström, 2008). Therefore, practitioners and institutional leaders need a third space to reflect and act upon conflicts and dilemmas they encounter within the cycles of expansive learning and in relation to non-dominant communities (Gutiérrez, 2008; Gutiérrez, Engeström, & Sannino, 2016). This involves a critical process of learning to identify and deal with contradictions within and across institutional and professional boundaries.

7.2.1. Interaction mode

Here I will briefly discuss how different types of interaction modes close or open up for addressing conflicts and dilemmas in discursive interactions. There are interesting similarities and differences between the interaction mode of institutional leaders in the project leader meetings (article 2) and the practitioners in the teacher team meetings (article 3). The interaction mode of the project leader meetings is characterised by co-operation both before and after the critical conflict with the local education authority. The project leader group strive to find mutually acceptable ways to deal with the conflicts and dilemmas they encounter. Discursive interaction in the teacher team meetings, however, is first characterised by co-ordination, in which participants organise their activities following their scripted roles, plans and instructions (Engeström, Brown, Christopher, & Gregory, 1997). The teacher team’s main object in the meetings is to decide on activities for the book café and distribute tasks among the team members. The team decides on activities that are close to their school-based activities. This focus on scripted organising leads to fewer potential conflicts and dilemmas being discussed in the teacher team meetings.

Hence, the critical conflict with declining parental participation and the dilemma with the reading log came as a surprise to the teacher team. They had not discussed the possibility of these issues in advance. However, when these problems occurred, the interaction mode of the teacher team changed from co-ordination to co-operation. When we relate the interaction mode of co-operation to the theory of expansive learning, the conflicts with the reading log and the declining parent participation represent possibilities for the teacher team to design a new model of activity for the book café. However, either the teacher-librarian or the teachers were able to move beyond their scripted roles, their professional knowledge cultures or their school routinised actions to start a process of transformative change of their practices.
7.2.2. Reflexivity and turning points

I will discuss **reflexivity** and **turning point** as concepts that can help in understanding preconditions for how to identify and deal with contradictions and stimulate processes of expansive learning. I use data from the audio-recorded meetings as illustrative examples.

Expansive learning requires practitioners to engage in **reflexive** internal conversations (Archer, 2003). Reflexive internal conversations were not visible in the discursive interactions of the teacher team meeting. Reflexivity requires that teachers question their implicit and explicit pedagogical motives and their relations with parents. Becoming **educationally wise** requires professional reflexivity (Biesta, 2015). This type of wisdom includes the personal ability to engage in internal reflexive conversations, which include a meta-perspective of one’s self as a practitioner within a certain institutional and cultural context and critical self-reflection and attention to institutionalised power, discourse and ideology. Such a process of reflexivity could have contributed to identifying the conflicts and dilemmas that occurred at the book café as possible manifestations of a contradiction between a technocratic discourse and a sociocultural discourse in literacy education. ‘Literacy’ is the object of activity in both discourses. However, ‘how the object of activity is interpreted by participants in the activity directs activities’ (Ellis et al., 2010, p. 9). For example, a teacher who views ‘literacy education’ as merely the ‘acquisition of universal basic skills’ acts differently when teaching literacy in school compared to a teacher who believes in the importance of literacy as a social practice. However, there might be a dialectical relationship between teachers’ views and their practices (Borko, Davinroy, Bliem, & Cumbo, 2000). Changes in teachers’ views potentially reveal a contradiction in their practices and in their mindset and may serve as a turning point in both domains.

Empirical research on the mini-cycles of expansive learning (see section 5.4.5.) requires a focus on the objects of activity and turning points. In article 1, I argue that paying attention to how the object(s) of activity is interpreted across professions and institutions is an important step towards identifying and dealing with systemic contradictions. I illustrate this through the data analysis in articles 1 and 2. For example, in my analysis of the audio-recorded data from project leader meetings in article 2, I identified microgenetic turning points when participants began to outline their objects and aims in new ways. The first turning point occurred when the library director linked teacher and librarian partnerships to the local education authority’s aim of becoming the best school district in Norway (article 2, p. 9). The second turning point transpired when the lead researcher suggested expanding the literature based literacy programme to all grades at the project schools (p. 10). The third turning point concerned when the public librarian attempted to balance seemingly incompatible alternatives by suggesting the development of a **material anchor**
(a contract) between the collaborating parties (p. 11). This last turning point indicated that the public librarian was about to change her view on her professional obligation to provide equal services to all schools in the district. The contract would imply more work for her with the project schools. The contract represents a germ cell to new forms of teacher and librarian partnerships. Thus, the interaction data identified concrete microgenetic changes in the moment-to-moment interactions and potentially emerging changes in the sociogenesis of teacher and librarian partnerships within the boundaries of the Multiplicity Project.

7.2.3. The challenge of scaling up and sustaining change

A recurring theme in this study is the challenge of scaling up and sustaining teacher and librarian partnerships in literacy education. In article 2, the lack of support from the local education authority makes it almost impossible to spread teacher and librarian partnerships to more schools in the district. The main problem is that the local education authority closes a possibility for a critical encounter that can lead to compromises between seemingly incompatible motives of conflicts (Engeström, Kajamaa, & Nummijoki, 2015). The local educational authority’s motive is to produce the outcome of ‘reading achievement’ in the school district, while the Multiplicity Project’s motive is to stimulate ‘reading engagement’. However, reading engagement is a key indicator of reading achievement. Therefore, a knowledge-driven and ‘evidence-based’ decision by the local education authority would be to increase reading engagement at all the schools in the district to stimulate the authority’s main object-motive of reading achievement. Instead, the local education authority dismisses a literacy programme that would actually benefit the object-motive in the long term. I argue that this is a result of primary contradictions operating within the activity system of the local education authority, especially within the aspects of rules, instruments and objects. The local education authority relies on technocratic means of literacy education to reach pre-determined ends.

7.2.4. Resolving contradictions

Is it possible to resolve systemic contradictions that occur in small-scale educational interventions? The overarching political and socio-material contradiction between a technocratic and a sociocultural discourse in literacy education cannot be resolved solely through local efforts. It is, in fact, a global political issue. However, barriers caused by systemic contradictions can become opportunities for change in small-scale interventions. Specific local contradictions can potentially be resolved through processes of expansive learning that lead to new forms of practice at the local level. There is also the possibility that new forms of practice developed at one school can be expanded to more schools through ‘imitation’. Imitation happens if other schools hear about the
success of collaborative practices between teachers and librarians at the project schools and decide within the autonomy of their school to try a similar type of intervention. However, top-down technocratic governance imposing evidence-based practice on schools restricts the autonomy of schools. Evidenced-based policies favour standardised and wide-scale linear interventions that seek control of variables to achieve predetermined ends.

Article 2 shows how the local education authority closes a potential ‘space’ for the Multiplicity Project to participate in shaping the future literacy education in the school district. The local education official’s argument is that the project did not demonstrate improvements on reading achievement as measured by national standardised reading tests. The local education authority does not rely on substantial survey data from international reading tests showing that reading engagement is a determinant of reading achievement. This contradiction between short-term and long-term goals in literacy education indicates that the development of teacher and librarian partnerships depends on changes in the dominant literacy discourses of educational governance. It is a problem for localised interventions that evidence of educational quality in literacy education is restricted to a quantitative measurement of immediate outcome. It is a strong barrier for developing teacher and librarian partnerships, as the so-called evidence-based practice imposes standardised pedagogical instruments, assessments and rules of action at every school and in every classroom, and at the same time neglects the value of culturally responsive local interventions.

In relation to whether it is possible to resolve contradictions in a small-scale local intervention, I will now discuss the concept of ‘double stimulation’. I understand systemic contradictions as a type of second stimuli. Following Vygotsky’s method of ‘double stimulation’, the first stimulus is the conflict or dilemma that needs to be addressed. The second stimulus is the artefact that can solve the problem. Sannino (2015) provided this interpretation of double stimulation:

Triggered by an initial problematic situation or first stimulus, a second stimulus is an artifact that has become a sign, i.e., a traceable link between the outside world and inner psychological functioning. The use of second stimuli makes therefore accessible processes which remain hidden when external resources are not mobilized. In this sense double stimulation is a method of objectification of inner psychological processes. (p. 3)
I argue that systemic contradictions can function as second stimulus – i.e. as traceable links between the outside world and individual minds. The argument goes as follows: When a person internalises and understands the theoretical concept of systemic contradictions, it potentially triggers a deliberate and reflexive internal conversation. This, in turn, enables the subject, in dialogue with others, to potentially resolve the contradiction, first, by analysing dilemmas and conflicts as possible manifestations of contradictions, and then by modeling new forms of practice to deal with the contradiction in a local context. In this way, contradictions become the source of collective reflexivity and the modeling of new objects of activity in real work situations within and across activity systems. Such a process of expansive learning requires a holistic and dialectical understanding of reality: ‘Collective reflexivity is triggered by disturbances in daily practices that only make sense when interpreted against an entire system describing the activity as a whole (Schulz, Kajamaa, & Kerosuo, 2015, p. 8).

In article 2, I illustrate how contradictions work as a second stimulus: when the project leader group attempted to deal with the critical conflict with the local education authority by developing a binding contract (Appendix 4) between the participating school and library institutions. The binding contract is a germ cell to teacher and librarian partnerships at the local level and came into existence when the project leader group identified that the literacy discourse of the local education authority contradicted the literacy discourse of the project group. In meeting 18 (pp. 10-11 in article 2), the project leaders were able to move towards what Engeström et al. (1997) referred to as communication, in which the actors collectively reconceptualise their objects to resolve contradictions. Collective processes of expansive learning that transform the object of activity and resolve contradictions are relatively rare in the world of work. In meeting 18, a first move towards such a transformation occurred. The project leader group realised that they have to act on a local level to sustain teacher and librarian partnerships at the project schools without relying on the economic or ideological support of the local educational authority. In the contract between the two project schools and the public library, the institutional leaders co-configured and integrated a set of visions for further development. The contract represents a theoretical tool for ascending to new concrete forms of teacher and librarian partnerships in literacy education.

In article 3, I show another example of efforts to resolve contradictions: when the teacher team understood that they had to abandon the use of a reading log at the book café to deal with the dilemma it created. However, none of the efforts made by the participants in articles 2 and 3 to resolve contradictions ensure sustainability. Therefore, attempts to resolve contradictions at a local level in fact need to gain support at the higher level of educational governance to ensure the
long-term sustainability of new forms of practice. The identification and analysis of systemic contradictions in this study contribute to a better understanding of the barriers and opportunities associated with the development of sustainable teacher and librarian partnerships.
8. Conclusion

In this conclusion, I will first summarise the main theoretical, methodological and empirical contributions of my study. Thereafter, I include some recommendations for educational policies, research and the development of teacher and librarian partnerships in the future.

8.1. Summary of contributions

A common theme throughout articles 1, 2 and 3 is how systemic contradictions work as barriers and opportunities for developing teacher and librarian partnerships. In article 1, I argue that a focus on contradictions can contribute to a better understanding of challenges occurring in educational intervention research and thereby work as opportunities for change. In article 2, I analyse how educational governance, dominant literacy discourses and systemic contradictions are barriers to sustaining a small-scale intervention project of teacher and librarian partnerships. In article 3, I analyse how systemic contradictions between literacy discourses influence teachers’ perceptions, agency and actions at the school level.

This study shows how conflicts and dilemmas are manifestations of systemic contradictions. Systemic contradictions exist on a psychological and societal level and are manifested in discourse and human actions and activities. They are interrelated, and they trigger each other. The identification and analysis of contradictions in collaborative practices across activity systems is a complex task and requires theoretical tools and data that can document how contradictions interfere with desired objects, motives and outcomes over time. I have shown how cultural-historical activity theory in combination with critical perspectives in educational research and literacy research can provide a useful theoretical and methodological framework for the analysis of systemic contradictions in teacher and librarian partnerships.

In Chapter 7, I discuss the results from the articles in light of CHAT, critical theory in education and the review. This discussion points to an overall primary contradiction that permeates public educational activity in our global world and which affects teacher and librarian partnerships in literacy education. This contradiction is a result of a hegemony of educational policy focused on building standardised educational systems for the demands and control of labour-power within a global competitive market. The domination of this market-oriented policy is at the expense of educational development promoting education for democratic citizenship and social justice. This primary contradiction occurs in literacy education as a contradiction between technocratic discourse and sociocultural discourse.
Research from within the library and information sciences on collaboration between teachers and librarians concludes that school culture, the attributes of collaborators, a trusting relationship, management and motivation are all preconditions for well-functioning partnerships (Montiel-Overall, 2008; Montiel-Overall & Grimes, 2013; Montiel-Overall & Hernandez, 2012). Other studies from within the library and information sciences have highlighted the importance of teacher and librarian partnerships in information literacy (e.g. Doll, 2005) and inquiry-based learning (e.g. Kuhlthau, 2010; Montiel-Overall & Grimes, 2013). These are all important factors for developing teacher and librarian partnerships in literacy education.

However, my study supplements the existing research with a more dialectical and critical perspective from within the educational sciences. I argue that such a critical perspective is a prerequisite for developing sustainable teacher and librarian partnerships in literacy education. Sustainability and the enhancement of teacher and librarian partnerships necessitate a focus on systemic contradictions within and across activity systems as barriers and opportunities for development. In addition to the analysis of systemic contradictions between literacy discourses, this study also shows how conflicts of motives and differences in professional knowledge cultures represent challenges for developing teacher and librarian partnerships. To identify contradictions and conflicts of motives is to identify the potential opportunities for transformative actions. I end this thesis with some reflections on the potential future implications of my study for educational research and policy.

8.2. Potential implications

This study contributes to knowledge that is relevant for researchers on literacy and teacher and librarian partnerships, as well as for researchers interested in educational change and development within and across institutions and professions. Additionally, this study is relevant for educational intervention researchers working with practitioners and leaders in schools and libraries. The identification and analysis of contradictions between literacy discourses allow for future educational research on teacher and librarian partnerships in literacy education. This study clearly shows how difficult it is to resolve contradictions at the local school level and make teacher and librarian partnerships in literacy education sustainable. Based on the results of this study, I will outline a few recommendations for educational policies, research and the development of teacher and librarian partnerships in the future.

First, teacher and librarian partnership in literacy education needs to be a national strategy represented in educational policy documents, budgets and legal acts. The school management of every school need to integrate teacher and librarian partnership into their strategic plans. This
would be real measures to accommodate the National Strategy for Libraries 2015-2018, which states the following: ‘Both the public libraries and the schools play a vital role in reinforcing the desire to learn to read and the reading skills of children and adolescents’ (The Ministry of Culture, 2015, p. 17).

Second, the major upgrading and development of school libraries and their partnership with public libraries is essential for reading engagement, inquiry-based pedagogy, critical literacy and cultural competence among all children in school. A tripartite partnership between a school, school library and a public library accommodates the potential of teacher and librarian partnerships within literacy education in terms of social justice in an area of globalisation. In the context of rapid social change, schools meet new challenges that go beyond the core competence of teachers. Partnerships between teachers and librarians in literacy education can contribute to the realisation of the educational system’s democratic and social mandate: the academic and social development and qualification of every student’s participation in society (Pihl et al., 2017).

Third, inter-professional collaboration between teachers and librarians needs to be part of the professional mandate of both teachers and librarians and should be included in the curriculum in all levels. My study indicates that schools and libraries in all levels of education need to develop institutional boundary zones to enable negotiations and the co-construction of a shared object of literacy education across the two professions. Teachers have reported that they do not see the benefits of collaborating with librarians (Barstad et al., 2007; Ingmarson, 2010; Leitão et al., 2015; Limberg, 2002; Limberg & Alexandersson, 2003; Mokhtar & Majid, 2006). Therefore, future teachers and librarians need to learn how to collaborate through their professional training. Furthermore, they should learn about libraries as pedagogical spaces within a formal literacy education with different affordances than the classroom. A recent study demonstrated that teacher and librarian partnerships can be improved through the development of assignments and curricula that foster collaboration in pre-service teacher and librarian education (Gross & Witte, 2016).

This thesis prompts a dialogue between the field of educational research and the field of library and information research. The contemporary absent dialogue between the two research communities of educational research and library research may be due to several reasons. One reason, however, is clearly related to the educational sciences’ lack of interest in teacher and librarian partnerships in literacy education. I hope this thesis can inspire educational researchers to investigate teacher and librarian partnerships in literacy education in the future. More concrete studies that address the barriers and opportunities associated with developing teacher and
librarian partnerships in schools, at the municipal level and at the national level, are certainly needed.
References


Dowd & H. Holmarsdottir (Eds.), *Nordic voices: Teaching and researching comparative and international education in the Nordic countries* (pp. 41–59). Rotterdam: Sense Publishers.


Appendices

Appendix 1: Topic coding

The coverage of talk coded to relevant topics in three project leader meetings. Each meeting lasted two hours. 6% coverage of talk is equivalent to about 7 minutes. ‘Miscellaneous’ would be talk or interaction not related to my research object.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Coverage of talk in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meeting 16</td>
</tr>
<tr>
<td>Joint lesson planning</td>
<td>6%</td>
</tr>
<tr>
<td>Sustainability of the project</td>
<td>3%</td>
</tr>
<tr>
<td>Public library use</td>
<td>12%</td>
</tr>
<tr>
<td>The role of the public librarian</td>
<td>-</td>
</tr>
<tr>
<td>Teacher and librarian collaboration</td>
<td>11%</td>
</tr>
<tr>
<td>Literature-based literacy education</td>
<td>3%</td>
</tr>
<tr>
<td>Relations to the local educational authorities</td>
<td>13%</td>
</tr>
<tr>
<td>Relations to the local community</td>
<td>-</td>
</tr>
<tr>
<td>Coordination of time, tasks, resources</td>
<td>24%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>28%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>
Appendix 2: Distribution of dilemmas and conflicts in project leader meetings

Distribution of *dilemmas* identified in the transcripts of the project leader meetings

<table>
<thead>
<tr>
<th>Type of dilemmas</th>
<th>Number of sequences in meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How to make teacher and librarian collaboration sustainable at the project schools despite no support from the local educational authority?</td>
<td>1 seq. in meet. 16</td>
</tr>
<tr>
<td></td>
<td>2 seq. in meet. 17</td>
</tr>
<tr>
<td></td>
<td>3 seq. in meet. 18</td>
</tr>
<tr>
<td>2. Should we develop a strategy to expand or not expand teacher and librarian partnerships to more schools in the district?</td>
<td>5 seq. in meet. 18</td>
</tr>
<tr>
<td>3. How to increase resources on a literature-based literacy program when the dominant policy discourse is on outcome-based literacy programs?</td>
<td>3 seq. in meet. 17</td>
</tr>
<tr>
<td>4. How can we increase the resources to the school library within tight school budgets?</td>
<td>3 seq. in meet. 16</td>
</tr>
<tr>
<td></td>
<td>2 seq. in meet. 17</td>
</tr>
<tr>
<td>5. How can teachers and librarians collaborate more when they have too many tasks already?</td>
<td>1 seq. in meet. 16</td>
</tr>
<tr>
<td>6. Teachers are not using the nearby public library branch</td>
<td>4 seq. in meet. 16</td>
</tr>
<tr>
<td></td>
<td>1 seq. in meet. 17</td>
</tr>
</tbody>
</table>

Distribution of *conflicts* identified in the transcripts of the project leader meetings

<table>
<thead>
<tr>
<th>Type of conflicts</th>
<th>Number of sequences in meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Head teachers vs teachers (a conflict between what the head teachers want teachers to do and how they perceive what teachers prioritize in practice)</td>
<td>1 seq. in meet. 16</td>
</tr>
<tr>
<td></td>
<td>2 seq. in meet. 17</td>
</tr>
<tr>
<td>2. The Multiplicity project vs. Local education authority</td>
<td>5 seq. in meet. 16</td>
</tr>
<tr>
<td></td>
<td>4 seq. in meet. 17</td>
</tr>
<tr>
<td></td>
<td>2 seq. in meet. 18</td>
</tr>
<tr>
<td>3. Librarians’ vs teachers’ conception of literacy and library use</td>
<td>3 seq. in meet. 17</td>
</tr>
<tr>
<td></td>
<td>4 seq. in meet. 18</td>
</tr>
<tr>
<td>4. Time vs tasks</td>
<td>7 seq. in meet. 16</td>
</tr>
<tr>
<td></td>
<td>2 seq. in meet. 17</td>
</tr>
<tr>
<td></td>
<td>2 seq. in meet. 18</td>
</tr>
</tbody>
</table>
Appendix 3: Snapshot of Nvivo8 coding
Appendix 4: The contract

**CONTRACT**
The contract is made in agreement between Eastside Primary School, Westside Primary School, the public library, and Green Hill College/teacher education department.

**Period**
August 2011 – August 2013.

**Aims**
Consolidation and further development of the experiences made in the Multiplicity Project

- Further development of collaboration between the public library, the project schools and teacher education with regard to use of the library as a learning arena (public and school libraries), reading engagement and literature-based instruction.
- Consolidate teacher–librarian collaboration in the institutional leadership and organization.
- Further development of collaboration between teachers, librarians and teacher educators.

**Content and organization of the collaboration**
A steering group will be established in which the collaboration will be developed further in accordance with this contract. The steering group will choose a leader at the first meeting.

The steering group consists of the head teacher at Eastside Primary School, one person from the leadership team at Westside Primary School, the head of the children’s department at the public library, the school librarians at Eastside and Westside primary schools, and one or two members from the teacher education department at Green Hill College.

Westside Primary School and the teacher education department at Green Hill College will appoint members to the steering group before the first steering group meeting in autumn 2011.

Steering group tasks:

The steering group makes use of the principles in the circle of expansive learning (see attachment) to plan, develop and evaluate collaboration between the professions and the institutions.

- The steering group creates an annual plan for collaboration between the institutions. The plan includes:
  - Collaboration between schools, public library and the teacher education department at Green Hill College.
  - Further development of teacher–librarian collaboration.
  - Further development and consolidation of the school library as a learning arena at the two project schools.
  - Further development of methods to stimulate reading and a literature-based literacy program.

The steering group will evaluate the measures it uses, and it will develop new measures based on the evaluation. The steering group holds at least one meeting in the autumn and one meeting in the spring. The first steering group meeting is set for September 2011.

Date:

Signatures:

Eastside Primary School
*Head teacher*

Westside Primary School
*Head teacher*

The public library
Head of children’s department

Teacher education department at Green Hill College
*Dean*

Attachment: Model - the expansive learning cycle