

## Contextualizing inquiry



Contextualizing inquiry  
Negotiations of tasks, tools and actions  
in an upper secondary classroom

Patrik Lilja



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## Abstract

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The challenges for education in contemporary society are complex. The emergence of the post-industrial society – an information- or knowledge society, where the development of digital technologies are pivotal – have altered the premises for the production, communication and uptake of knowledge. Students of today are not only expected to learn specific knowledge and skills, but also to develop more generic and complex competences and dispositions, like critical reasoning and democratic values. They are also to be life-long learners.

How can education be arranged and instruction carried out in order to face these challenges? One answer is to develop instructional methods building on principles of inquiry. Inquiry has a long history, originating from progressivist and constructivist traditions, with roots in the work of John Dewey. In the last decades, inquiry has received renewed attention, both theoretically and practically.

The work presented in this thesis sets out to investigate, theoretically and empirically, how principles of inquiry are integrated, or contextualised, in contemporary education and the consequences for classroom activities; and for learning and development.

The empirical material was collected in an ethnographic field study in a Swedish upper secondary school program, organised according to principles of inquiry. The students are involved in planning their own studies, organise their work according to a PBL-format and carry out thematic projects spanning over several school subjects. Digital technologies are integrated in the students' activities. In four analyses, different aspects of the students' work are penetrated.

In the first empirical chapter, students' planning of group work, involving complex questions, is analysed. How the students manage tensions between integrative and local rationales inherent in the task, and the consequences of this for the development of competences for managing inquiry, is discussed.

The second empirical chapter addresses argumentation. In the analysis, students' unfolding argumentation in a controversial issue is followed over an extended period of time. The relationship between the involvement in argumentative activities, authenticity and learning in the setting is discussed.

The third empirical chapter considers text production. Students' work with an essay is investigated focusing on how writing activities are organised and integrated as part of inquiry, and how these contribute to the development of literacy.

In the fourth empirical chapter, students' project work – where they have the task of planning a housing area – is studied. As part of the work they are to move outside the school, investigating how city planning is carried out in the local society. The analysis is focusing on how the actions of the students are directed, how they navigate in the intersection between school and society, and what kind of knowledge is developed in the process.

All analyses point to the central role of negotiations of tasks, tools and actions in realizing pedagogy in accordance with the principles of inquiry. This “communicative ecology of negotiation” plays a key role in creating premises for the processes of learning and development observed.

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*Patrik Lilja*

## CHAPTER 1

### INTRODUCTION

The goals of education in contemporary society are complex. In the narrow sense, education aims to provide the means necessary for *learning* particular knowledge and skills. In a wider sense, it also aims at promoting the *development* of more complex abilities and dispositions, such as habits of critical reasoning and democratic values. Although different ideologies of education emphasize different aspects, educational institutions in general address both these aspects.

A fundamental question is then how environments for education can be designed to provide experiences complex enough to support both learning and development. Since the emergence of progressivism and constructivism, a common answer has been to include student participation and activities in accordance with principles of inquiry in education. Historically, principles of inquiry have been integrated in models such as educational project work, problem based learning and more recently in various applications of computer supported collaborative learning.

The vision of inquiry in education thus holds great promise, and today it is the target of new interest. During the last decades, changes in work life, organizations, and the development of digital media and information technologies have altered the premises for knowledge production, democracy and participation in society, nationally as well as globally (Castells, 1996; Giddens, 1991; Scholte, 2004; Vandenberg, 2006). What such changes may mean for schooling and education is a question in recent educational research and policymaking. New models for education are being called for, capable of responding to these diverse challenges. This is reflected in the growing interest in attempts to define competences and abilities in terms of, for example, *21st century skills* and new *literacies*. At the same time, another agenda, emphasizing formative assessment, measurements and comparability of the results of educational systems, have become prominent.

Progressivist and constructivist thinking have been highly influential, not least in the educational systems in the Scandinavian countries. This line of thought have, however, also been the target of much criticism throughout the 20<sup>th</sup> century and after, which in turn has lead to reformulations and development of

new models. In the literature on progressivism and constructivism, dilemmas in the organization of schoolwork, relating to student centered organization of teaching and learning of specific subject content, have been discussed for more than a century. The discussion about authenticity in education, stemming from these traditions, was reactualized in the research literature during the 1990s, with the emergence of the situated learning movement and sociocultural perspectives (Brown, Collins & Duguid, 1989; Lave 1988; Lave & Wenger 1991; Greeno, Collins, & Resnick, 1996).

In spite of the large interest in education based on principles of inquiry, there are relatively few detailed empirical studies of classroom practices. The study presented here provides detailed analyses of students' activities in an environment where principles of inquiry have been applied in a rather elaborate form. Before the study and the aims are presented, the concept of inquiry in education needs to be further discussed.

## Inquiry in education

The educational use of the concept inquiry is associated with the pragmatist philosopher and educationalist John Dewey. He presented different descriptions, notably a five-step model published in the book "how we think", written specifically for educators (Dewey, 1910). A more complete, formal definition, formulated in the later part of his career, is the following: "Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole." (Dewey, 1938/1991, p. 108) As this definition implies, Dewey viewed inquiry not as a method in education, but a generic process, involved in a broad range of activities involving intelligent action, from scientific exploration to practical problem solving. Its application in education is but a special case.

According to Bruce and Bishop's (2008) contemporary interpretation of Deweyan principles, inquiry in educational settings means teaching methods which includes the elements asking questions, performing investigations, the creation of products, discussions and reflection. These elements are ideally iterated in a cycle. Many specific, contemporary teaching methods include these principles, notably educational project work and problem based learning. At the same time, Bruce and Bishop argue that inquiry-based learning is not to be considered a method, but rather what happens when people do learn. This double meaning makes the concept somewhat elusive. In this study, inquiry-

based methods are understood as teaching methods explicitly designed to involve students in activities according to principles of inquiry.

Educational applications of inquiry have been motivated in relation to several different agendas. Three different arguments are of particular relevance to the research interests and empirical analyses presented in this study:

a) *Inquiry as a way of teaching scientific reasoning and methods.* Edelson, Gordin and Pea formulate the learning potential of inquiry in terms of abilities, skills and conceptual knowledge: “Participation in inquiry can provide students with the opportunity to achieve three interrelated learning objectives: the development of general inquiry abilities, the acquisition of specific investigation skills, and the understanding of science concepts and principles.” (Edelson, Gordin & Pea 1999, p. 393) Littleton, Sharples and Scanlon describes inquiry learning as “the ability to plan, carry out and interpret novel investigations” (2012, p. 1), connected with the development of higher order thinking skills.

In the Deweyan view, the process of inquiry in education and science share the same attributes, in that they both involve the “directed transformation of an indeterminate situation”. Directed transformation means that there is a method involved. The idea is that, by participating in inquiry, students develop new ways of perceiving and new means for action (Biesta, 2009). Under guidance of teachers, the children’s investigations and experience can be expanded as they move through the “complete act of thinking” (Knoll, 1997, p. 5). The idea is that this, in turn, contributes to the long-term development of abilities such as reflection, critical reasoning and argumentation, practiced as an integrated part of the inquiry process.

b) *Inquiry as a way of making learning in institutional settings authentic.* A shared aspect of inquiry-based methods is that they are intended to provide contexts for what Dewey refers to as “active concern with problems” (Dewey, 1916/1966 p. 187). Organizing inquiry in educational settings means organizing activities for students, which provide possibilities for recognizing relevant questions and using knowledge for practical purposes, rather than isolating and presenting particular content. The point of inquiry in educational settings can in this sense be said to encourage action, in which use of knowledge can be recognized as relevant.

Petraglia (1997) argues that authenticity in learning is the central educational ideal of the wider constructivist movement in education. While this will be further discussed in the following chapter, Edelson, Gordin and Pea (1999) provide an example. They claim that inquiry in educational settings is “authentic

scientific practice”. Furthermore, they state that inquiry is active rather than passive and that “authentic activities provide learners with the motivation to acquire new knowledge, a perspective for incorporating new knowledge into their existing knowledge, and an opportunity to apply their knowledge” (Edelson, Gordin & Pea 1999, p. 393). While this argument is formulated in cognitive terminology rather than the non-dualistic Deweyan language (Biesta, 2009) and influenced by the situated cognition movement of the 1990s (Greeno, Collins & Resnick, 1996), it concisely represents one line of argument for inquiry in education.

From a slightly different point of view, Bruce and Bishop argue that ”inquiry requires active learning in authentic contexts. Authentic contexts require that teachers, students and community members become partners in inquiry, including inquiry into the world and inquiry into pedagogy” (Bruce and Bishop, 2008, p. 707). This formulation also leads further to the next theme.

c) *Inquiry as a way of linking the activities of the school and society.* In the progressivist movement of the early 20<sup>th</sup> century, inquiry based teaching methods like educational project work was thought to give students the experience necessary for the development of democratic citizenship (Knoll, 1997; Petraglia, 1997). Waks (1997) attempts to reformulate this agenda in what he refers to as the “post industrial era”, proposing guidelines for an updated project method for education.

Biesta (2009) argues that the means for fostering democracy in education, in a Deweyan perspective, is through participation and engagement with a plurality of different points of view, potentially leading to the transformation of inquirer as well as environment, in the process of *transaction*. Following a Deweyan formulation, Bruce and Bishop argue that the problem of education is located “in the breakdown of connections between individual and community, between formal learning and lived experience, and between the means and ends of problem solving” (p. 705). To re-establish such connections would then be the goal of organizing education in the form of inquiry.

Thomas and Brown (2011) argue in a similar way. In their view, access to the digital information network has radically altered the premises for schooling, rendering traditional models of instruction inadequate. Moreover, constant change has become a characteristic of society. In response to this situation, they “look at the question in terms of how our schools’ environments blend – or fail to blend – with the freedom and wealth of the digital information network” (p. 36). The idea of Thomas and Brown is to provide an environment bounded by

with constraints, in which students can “follow their passion” in inquiry, while digital resources are used as part of a culture in which learning becomes a lifelong interest.

### The empirical study

As demonstrated above, there are several strong arguments in favor of involving inquiry in education, formulated in different times and in different terminologies. A point of departure in this study is that while formal models of inquiry, such as educational project work and problem based learning, provide elements which structure classroom practices, they are also integrated with other elements and practices in the social and communicative environments in schools. In this sense, principles of inquiry are contextualized in education in particular ways, in specific social settings and with particular resources, and need to be studied as such. The contextualization of inquiry in institutional educational settings is thus the object of this study. The aim is to contribute to the understanding of inquiry in institutional educational practice, and the consequences of participating in such practice for students’ work, learning and development.

The empirical case in this study is a Swedish upper secondary school program in social studies. It provides a case-in-point for the study of inquiry, as it involves elements of project work as well as problem based learning. The students work in base groups, and are involved in planning their own studies and activities within themes, involving several subjects. Goals such as the development of social skills, as well as learning to use information- and communication technologies are also emphasized. The empirical material has been gathered through fieldwork. Different activities of students and teachers are explored, involving work with questions, argumentation, direction, documentation and assessment. The role and nature of negotiations in the activities is a recurring interest through all analyses.

### Overview of the thesis

The thesis is a monograph consisting of ten chapters, including four in which empirical studies are presented. Chapter 2 provides a background and is divided in two parts. In the first, a brief history of the inquiry concept as part of the progressivist and constructivist movements is given. In the second part, empirical studies of contemporary Scandinavian educational settings that involve principles of inquiry are reviewed, and central themes in these are pointed out.

## CONTEXTUALIZING INQUIRY

In chapter 3, a theoretical framework for analysing inquiry in institutional educational settings is introduced. Ideas from sociocultural theory, activity theory, systems theory and complexity theory are presented and compared and specific concepts used in the empirical analysis are discussed.

In chapter 4, the aim is further developed and reformulated in relation to the material presented in chapter 2 and 3. In addition, specific research questions are formulated.

In chapter 5, the design of the study is discussed, and the setting for the empirical studies is introduced. Methodological and analytic issues are dealt with.

The empirical studies are presented in chapters 6 through 9. The chapters are addressing how different aspects of inquiry are contextualized in the institutional educational environment. Each study has a distinct empirical focus and conceptual framing and contains separate conclusions.

Chapter 6 contains a study of students' negotiations of the premises and form of a specific task in which they are answer questions.

Chapter 7 is a study of argumentation and narratives in discussions between students and students and teachers, and the significant role they play in the theme.

In chapter 8, the role of writing in the organization of the activities of the students is considered.

Chapter 9 deals with the directing of a complex and authentic project in which the students are to contact actors in the local community.

In chapter 10, an overarching analysis and discussion is provided. Here, the findings from the four studies are integrated and related to the aim and research questions.



## CHAPTER 2

# PROGRESSIVISM, AUTHENTICITY AND INQUIRY: HISTORICAL BACKGROUND AND OVERVIEW OF RESEARCH

A point of departure in this study is that many of the educational ideas historically developed in the progressivist tradition, and later within constructivism, are again gaining influence on a wider scale. The pedagogical practices analysed are the result of teachers' attempts to make teaching relevant for the students of today. In this work, ideas with a long history within educational traditions recur and are turned into something that meets present conditions and demands, though they are sometimes presented as something completely new.

The chapter is divided in two parts. The first part contains the historical background and the second the review of empirical studies. There are three aims for this chapter. The first is to provide a historical background to some of the more influential ways of organizing education based on principles of inquiry. A second aim is to provide a selective review of research in which teaching based on principles of inquiry is the object of study. A third and final aim is to shed light on a set of conceptual issues and practical dilemmas that are of relevance for the current and historical understanding of the premises for institutional education.

Project work is a key theme throughout the historical background presented in this chapter. Through various forms of project work, principles of inquiry are contextualized in educational settings and the idea of projects as the focus of student work has recurred in different guises in different time periods. This does not imply that project work is understood as the only possible way to realize the principles of inquiry in education. In this historical overview, however, it provides a lens clear enough to distinguish the conceptual issues and practical dilemmas found in attempts to apply inquiry based methods in institutional educational practices.

Even a cursory analysis reveals that project work has been argued for with distinctly different rationales in different time periods. Currently, project work is often associated with information technology and attempts to find educational

formats that correspond to new demands for knowledge and competences related to visions of an information society and lifelong learning. Despite its current form, however, project work originally had little to do with preparing students for participation in society. Instead, it began as part of academic education for the elite and later was understood as contributing to democratization in the age of industrialization. Despite these shifts, project work has consistently provided a format through which alternative visions of pedagogy and society have been and continue to be projected.

### Historical background: Elite-idealist education

To give a historical background for this study, it is important to start with classical views of education. Particularly relevant for this study is the rise of the progressivist movement and the classical tradition that this movement, referred to as *elite-idealism* by Petraglia (1998), is a reaction to. This still influential movement, with strong roots in classical Greece, involves elements of both elitism and idealism. To begin with the idealist element, it was a central aspect of the pre-modern or metaphysical worldview. Habermas (1992) identifies four aspects of metaphysical thinking:

- a) Identity thinking: the idea that the manifold of appearances in the world in some way springs from an underlying unity – the One, which also guarantees order in the various manifestations.
- b) Idealism: behind the material creation there are conceptual structures, which relate it to the unity. Reality thus has a conceptual structure, which can be unravelled by reason through a "heroic effort of thought" (p. 30).
- c) The primacy of the philosophy of mind: the idealist tradition is renewed during the enlightenment by thinkers like Descartes, Kant and Hegel. The One is reconceived as inherent in the subject.
- d) The strong conception of theory – the contemplative life, *bios theoretikos*, stands above active life in society.

Clearly, this worldview differs immensely from the modern, which includes evolutionary theory and empirical science as foundations. This difference explains how education could be valued regardless of its practical relevance or in Petraglia's (1998) words, "otherworldliness". In the classical setting, to be educated meant that a person could be distinguished from the working masses and their affairs. There is a certain "disdain for mere practicality" (Petraglia, p. 19) originating from classical views. Education was considered a project for the elite, and the ideal was that educated people were expected to pursue extraordinary ends, in contrast to the everyday. The dichotomy between theory

and practical labour meant that although professionals like medical doctors, lawyers and politicians were educated at European universities from the Middle Ages on; their training was largely theoretical in nature. For example Petraglia describes how autopsies were performed in order to confirm theory rather than to make empirical discoveries.

A case-in-point is the early attempts at project work made in architectural education at Accademia di San Luca in Rome. Here, open academic competitions where the objective was to develop a form of hypothetical building project – *progetti* – were organized as early as the end of the 16<sup>th</sup> century. The idea was transferred to Académie Royale d'Architecture in Paris and in 1763 monthly competitions were organized for the students (Knoll, 1997). Although the project method is closely associated with progressivism (as further described below), it is an open question to what degree these projects can be understood as practical in today's sense. At this time, architecture had started to become established as an artistic profession, distinguishing it from the manual labour artisans were involved in during the building process. To achieve this distinction, theoretical foundations were needed to develop and establish the art of building as a scholastic subject. Artistic creativity in the application of the rules and principles of composition and construction became central and students were challenged to design demanding buildings like churches, monuments or palaces. These were, however, never built, and the projects essentially became imaginary exercises (Knoll, 1997). Petraglia notes that at this time, “the idea of physically performing practical tasks is one that still did not belong in any self-respecting educational system, and this disdain of manual labour carried over to practical education in any form” (Petraglia, p. 20).

## The origins of the progressivist movement

The idea of projects spread to engineering education in the new technical and industrial colleges and universities across the European continent during the 19th century. In addition, project work was also exported overseas to the Massachusetts Institute of Technology in 1864 and Illinois Industrial University (ca 1870). It was here in North America that it became associated with the emerging progressivist movement (Knoll, 1995).

Professor Stillman H. Robinson at Illinois Industrial University came to propose a project format that moved beyond the drawing board and actually included the practical construction of the machines that were planned. This was a break with other engineering schools of the time where the engineer was regarded as a scientific professional and not a craftsman. Robinson's aims were

to make students both practical engineers and democratic citizens believing in both equality and the dignity of labour (Knoll, 1997). Through this initiative, he may have been the first to make the connection between project work and issues of democracy, at least at an academic level. During the end of the 19th century, project work then spread to schools of handicraft and further to certain elementary schools.

These developments took place during a time when industrial revolution placed new demands on education. In addition, the origins of the modern progressivist movement are associated with the establishment of the United States as a democratic republic, even though parallel developments took place in parts of Europe. Education increasingly became viewed as a way to build a democratic society. From the mid 19th century, large groups of immigrants flowed into the USA to be employed in expanding industrial production centres and new social conditions developed with these growing cities. Formal schooling received a more central status where many of the children in these new urban environments lacked experience of farming, traditional households and small-scale businesses. Such experiences had been a taken for granted background and framing for traditional schooling. Teachers and pedagogues therefore started experimenting by organizing primary teaching in the form of projects that could emulate these experiences.

John Dewey, in particular, saw the societal and democratic implications of these developments, and gave them a theoretical framing. In *School and Society*, published in 1900, he argued for project based methods in the school system. He pointed out their potential for preparing citizens for democratic participation in the developing industrial society. The experience concept in Dewey's thinking became a theoretical key in the formulation of the basis of authentic education: "that which is authentic, in a Deweyan sense, is that which brings together not only the material and social conditions that shape one's world, but also one's beliefs about the world" (Petraglia, 1997 p. 27). The consequences are that learners are to be "put into learning environments that permit them to generate their own theories and understandings of knowledge as it operates in the world around them." (ibid, p. 27)

Dewey's pragmatist view of theory and everyday experience strongly resonates with the decline of the metaphysical worldview and the re-evaluation of the role of theory in a wider sense (Habermas, 1992). In this movement, philosophy loses its status relative to science and the hierarchical relationship between practice and theory is increasingly challenged. This did not mean that elitism and idealism were no longer powerful forces in education. Rather, a

situation developed in which there was a need to somehow reconcile the elitist tradition with the democratic project. Petraglia (1997) claims that this was done through the idea of authenticity in education:

In a nutshell, the commitment to authenticity in education is the result of an uneasy and still imperfect reconciliation of two antagonistic impulses: the political and economic desirability of making schooling available to the masses and the retention of schooling's aura of intellectual elitism. Without a continuing commitment to elitism, education would be reduced to vocationalism, while without democratization, education would continue in the constraining elite-idealist tradition – one that clearly could not be reconciled to republican ideals. (p. 25)

Petraglia's point is that the very idea of authenticity, which is one of the main contributions of the progressivist movement, carries a fundamental tension or dilemma. A related, fundamental dilemma also associated with democratization and the necessity for foregrounding students' experience in the educational process. This is discussed by Dewey as early as 1902 in a text titled "The Child vs. the Curriculum" (Dewey, 1902/1998 p. 245). As will be discussed below, this dilemma was further reflected in attempts to develop the project method and is still highly relevant in educational debates.

In 1918, Dewey's student and colleague William H. Kilpatrick formulated a general method for project work. Kilpatrick's idea was that project work could provide the organizing principle for all teaching. His definition was very inclusive – a project is defined as a "hearty purposeful act" (Knoll, 1997, p. 4). He also formulated the sequence of purposing, planning, executing, and judging, and proposed that each phase was to be initiated and completed by students. This was seen as key to the students' development of independence, power of judgment, and the ability to act, virtues that, in-turn, were understood by Kilpatrick as being of utmost importance in the fostering of democratic citizens in the early 20<sup>th</sup> century.

Kilpatrick's formulation was influenced by Dewey, but also by the views of the psychologist Edward L. Thorndike. The initiative and judgment of the student was radically put at the centre, a shift in emphasis that Knoll (1997) describes as a psychologisation of the project method. In this sense it represents a narrowing of the inherently social Deweyan understanding of inquiry in the form of projects. As early as the 1920s, Kilpatrick's definition of project work became the target of critique, notably from the philosopher Boyd Bode. While Bode acknowledged the relevance of projects in education, he contested the idea that the project by itself would be capable of creating the coherence needed. He argued that project work on its own is "too random, too haphazard, too immediate in its function, unless we supplement it with something else" (Waks,

1997, p. 401). Dewey also came to criticize the idea that learner-directed projects could become a general method in education as Kilpatrick had suggested. Instead, he saw it as one of many possible ways of teaching. Moreover, Dewey described the project as a “common enterprise” (Knoll, 1997, p. 5), shared between teacher and students. According to Dewey, the teacher was to provide guidance and direction, thereby expanding the experience of the students and contributing to their education.

To return to the text “The Child vs. The Curriculum” mentioned above. Dewey notes that when it comes to the student (or any person for that matter) “there is no such thing as sheer self-activity possible – because all activity takes place in a medium, in a situation, and with reference to its conditions” (Dewey, 1902/1998, p. 245). Dewey’s point is that attempting to isolate or depart from either the teacher/curriculum or the student/child in educational theorizing is not possible. Attempting to do so means that “a really serious practical problem – that of interaction – is transformed into an unreal, and hence insoluble, theoretic problem.” (Dewey, 1902/1998, p. 236)

To conclude this section, the modern idea of educational projects contains fundamental tensions and potential theoretical problems, at least if it is defined as involving a commitment to authenticity and inclusion of the active involvement and experiences of students. These tensions and problems are still vitally present in contemporary educational practice and debates.

## Constructivism and the child centered movements in Europe

In a similar way as in the North American progressivist movement, the democratic projects in European countries such as Great Britain and Sweden were combined with efforts to give children the right to an education adapted after their own interests and dispositions. Alternatives to traditional, authoritarian methods, which often involved physical punishment, were reconsidered in the post war era and child centred conceptions of schooling gained influence. It is in this historical context that the developmental psychologist Jean Piaget gained influence in European educational thinking and practice. Although several important European educationalists (notably Lev Vygotskij, Célestin Freinet, Ellen Key and Maria Montessori) were active at the time of the rise of the North American progressivist movement in the early 1900’s, Piaget became the most influential theorist on educational thinking and practice in the early European constructivist movement that emerged in the post war era.

Piaget was concerned with cognitive structures called *schemata* and how these operate on, and are reconstructed by, information (Piaget, 1953). In educational interpretations of Piagetian theory, “quotidian experience” (Petraglia, 1997, p. 8) rather than formal episodes of learning were emphasized. The Piagetian view is that each child is a unique learner: “according to Piaget, each individual’s ability to accommodate and act on new information is unique insofar as no other learner occupies a particular space in the universe physically, historically, or mentally” (Petraglia, 1997, p. 47-8). Such ideas became a perfect match for the agenda of the child centred movement and lead to an emphasis on, for example, active teaching methods, discoveries and experiments.

Here it should be stressed that the Piagetian ideas are not progressivism in the Deweyan sense. Even if both traditions argue in favour of similar teaching methods, emphasizing experimentation and activity, and acknowledge communication and social processes as driving forces in learning, there are differences. The emphasis of the child centred movement on the curiosity and initiative of the child, motivated by social and democratic goals, has a historical parallel in the intellectual current behind Kilpatrick’s attempt to psychologize the project method. In the educational philosophy of John Dewey, the continuity of experience between school and everyday life, as well as the lived experience of democracy in schools was essential. In fact, the question of democratic participation is not separate from questions regarding the organization of schooling in the Deweyan tradition (Säljö, Jakobsson, Lilja, Mäkitalo & Åberg, 2011, Bruce & Bishop 2008).

In the European post war era, the Piagetian view of development was widely adopted and became part of established views on education. In Great Britain, an influential government report was published in 1967 that is often referred to as “the Plowden report”, but has the official title “Children and their primary schools”. In this report, even the title points to a departure from more traditional stances toward taking the viewpoint of the child. It emphasizes inquiry and discovery and the teacher is described as someone who is leading from behind, stimulating activity and interest.

Turning to the Scandinavian countries, the Norwegian national curricula introduced in both 1987 and 1997 explicitly recommend project work as a method, but formulations about student activity and group work were already included in the 1939 edition (Rasmussen, 2005). From a Swedish perspective, it can be noted that since the 1962 national curriculum and the first curriculum for a unified primary school, progressivist thinking has influenced national curricula. A governmental report “Barnstugeutredningen” (SOU 1972:26, 1972), that was

presented in 1972 and resulted in the 1975 preschool regulations, is another central Swedish educational policy document that reflects the same core ideals. It suggests that both school and home environments must both ensure that conditions are created for the development of all children as well as the fostering of democratic values. It can thus be stated that Swedish curricula have called for teaching methods influenced by principles of inquiry since the foundation of the current school system. In the curriculum of 1980, this is perhaps most explicitly expressed:

The point of departure for work in different subjects should be the pupils' view of reality. The teacher has to attempt to build on the pupils' own interests, let them formulate and find answers to their own questions, pose problems which stimulate their curiosity. The work should therefore begin with something topical or nearby. But just as important is that the teaching then directs the pupils further and expands their view of reality in time and space. (National Board of Education, 1980, p. 48, translated by the author).

In the formulation below, from the same page of the 1980 curriculum, the role of the teacher is described in a way which lies strikingly close to both the Deweyan approach to education based on principles of inquiry, and contemporary formulations of the project method.

In such a method, the teacher plays an active role in making the pupils work critically, realizing the value of their observations, reflecting, asking questions, learning to single out, organize and present material. The teacher also has to play an active role in directing the inquiries of the pupils toward significant areas and avoid getting stuck in insignificant questions. (National Board of Education, 1980, p. 48, translated by the author).

These quotes describe an orientation towards the experience and view of reality of the pupils, demonstrating a commitment to the ideals of authenticity. In both Swedish and wider European educational policy and pedagogy, there is thus a long tradition of inquiry based teaching methods; even if the theoretical motives are of varying kinds and the impact on educational practice have varied.

### Re-formulation of inquiry methods in the postindustrial era

After the post war era, new social developments take place. Of relevance here is not least the changing status and role of the self and identity construction. Honneth describes this succinctly:



Whatever the actual structure of the social causes may have been, it seems indisputable that within the space of only two decades a marked individualization of ways of life took place: Members of Western societies were compelled, urged, or encouraged, for the sake of their own future, to place their very selves at the centre of their own life-planning and practice. (Honneth, 2004, p. 469)

The attempts to reformulate educational methods building on principles of inquiry, as well as educational policies in general during the 1990s can be understood against this background. Popkewitz argues that the pedagogical activities originally associated with progressivism have gradually been infused with a partly different set of ideals for good learning practices. He notes that, although there are frequent references to the progressive ideas of Dewey and Vygotskij in constructivist literature, "contemporary school reforms exist within an amalgamation of institutions, ideas, and technologies that are significantly different from those of the turn of the century" (Popkewitz 1998, p. 536). In relation to this, the findings presented by Olson (2008) are of relevance. Olson investigated the altered views of citizenship in Swedish educational policy documents during the late 1980s through to the 1990s. She notes that the long established society-oriented discourse on citizenship is first replaced by a consumer-oriented discourse in the beginning of the 90s and later, a "globalization-orientation" (p. 250) is added. In this discursive shift, the nation state loses its status as reference for the "we" of citizenship.

Progressivist pedagogical thinking and reform was originally part of larger projects associated with modernity, involving the development of the welfare state and related institutional changes. The last few decades have seen a renewed interest, not least in project work as a pedagogical tradition (Waks, 1996), but also towards an increased emphasis on student responsibility, reflection and self-evaluation (for example Skrøvset & Lund, 2000). There is no current consensus or standard model for project work, but a recurring idea is that the method is described in terms of a cycle with steps. In Bruce and Bishop's (2008) version, there are five steps (asking questions, performing investigations, the creation of products, discussions and reflection), while Skrøvset & Lund (2000) introduce a cyclic model involving twelve steps. It can also be noted that the model presented by Skrøvset and Lund as well as other contemporary formulations of project work, share similarities with what is referred to as the seven step process in problem based learning. In the version of problem based learning presented by Hmelo-Silver (2004), the steps are: Presentation of problem scenario, identification of facts, generation of hypothesis, identification of knowledge deficiencies, application of new knowledge, abstraction and evaluation. There is

thus an on-going exchange between these two traditions both of which can be traced to Deweyan philosophy and educational thinking.

Problem-based learning originated during the development of medical education at McMaster University in Hamilton, Ontario in the 1960s. The model also uses Barrows and Tamblyn's (1980) analysis of the different phases in medical doctors' work with clinical cases. The point of departure in problem-based learning is thus clinical practice and the use of authentic problems. These ideals have had a considerable influence on Swedish higher education and have come to be applied in many more areas than medical education. Similarly, and much as project work did earlier in history, problem-based learning began at the university level but has since spread to both primary and secondary school settings.

## Project work, digital technologies and a changing media culture

Common to contemporary implementations of both problem-based learning and inquiry learning models is widespread use of digital technologies. The idea that technologies, not the least digital technologies, have the potential to realize educational ideas has its origin in the progressivist tradition and has long been recognized. In particular, digital technologies provide many possibilities for information seeking, collaboration in networks and media production. The introduction of digital technologies is, more generally, an aspect of educational reform, providing new infrastructures for learning and education (Guribye, 2005) that potentially removes borders between institutions and the surrounding society.

Erstad (2005) notes that the introduction of various forms of project work is common when digital technologies are involved in pedagogical innovation. For example, he describes how authenticity can be achieved since digital technologies allow projects in schools to be linked to "fascinating activities in the outside world". He also provides early examples of how students in Norwegian classes collaborate in information seeking, production of movies depicting physical processes, and in particular how one group kept contact with a polar expedition in Antarctica and experts at the University of Oslo (Erstad, 2002; 2005). These uses of technology are in many ways consonant with the educational ideals of the progressivist tradition. An example of a contemporary reformulation of an essentially Deweyan agenda is found from Bruce and Bishop (2008) who argue for "community inquiry" as a method, or rather a methodological principle in

the fostering of new literacies. They view literacy “as part of living in the world, not simply as a skill to be acquired in the classroom” (p. 699).

The association between digital technologies and pedagogical reform is also reflected in the development of academic fields such as CSCL (computer supported collaborative learning), which started developing during the mid 90s together with growing access to the Internet and local area network technologies (Jones, Dirckinck-Holmfeld & Lindström, 2006). Various systems for supporting learning according to principles of inquiry have been developed and empirically tested. See for example, Hakkarainen (1998) and van Joolingen, de Jong & Dimitrakopoulou (2007).

## Contemporary research on inquiry in institutional education

With a historical background provided, the interest is now turned to empirical studies of contemporary pedagogical practices. To begin with it can be noted that given the long historical tradition and current interest in inquiry in education, there are surprisingly few recent empirical studies of classroom practices available. Polman (2005), for example, contends that “the dearth of research on classroom discourse in project-based classrooms is surprising” (p. 431). Regarding project-based learning in post secondary education, Helle et al (2006) conclude that, “serious research on the topic is virtually non-existent” (p. 287). Moreover, while there are numerous studies of classroom implementations of technologies supporting inquiry in the CSCL-literature, these are generally not concerned with institutional aspects or are intervention studies aimed at testing a particular technology or system. Since the research interest of this study is how principles for inquiry are contextualized in institutional educational practices, studies that provide analysis and discussion of institutional processes in context have been selected. The chosen studies all share an interest in institutional contexts, a sociocultural theoretical framing, and most involve project work in some form. They have all been conducted in Scandinavia during the past decade.

The review of the studies attempts to identify themes in the findings and similarities and differences in the investigated settings. The overview is organized in three thematic sections: Digital tools, institutional rationales and students’ actions; Documentation and the process of inquiry; and finally, Assessment and qualities in inquiry.

## Digital technologies, institutional rationales and students' actions

The impact of digital technologies in educational practice is a prominent theme in the selected studies. Lundh (2011) presents four studies of information activities and the formation of information literacies in classrooms where project-based teaching methods are employed during the first years of Swedish primary school. From these studies she concludes that the information activities undertaken are characterized by conflicting demands. These conflicts originate from a “collision” between different traditions of schooling. Moreover, the information literacies of the pupils are enacted in relation to conflicting rationales. In one of the studies, Lundh analyses an episode in which a teacher approaches two girls working with a project about the Guinness Book of World Records. The analysis shows how the teacher introduces additional “imposed” questions to guide the girls’ project besides their own “self-generated” questions about specific Guinness records. Through the intervention, the teacher “is trying to persuade the girls to include questions about the history of Guinness World Records and the rules and regulations for setting records” (p. 113). Lundh argues that self-generated and imposed questions cannot be unambiguously distinguished, since students and teachers negotiate them through situated language use. At the same time, she concludes that the activities are organized in a way which demands that the students learn to reformulate the suggested imposed questions, dealing with them as if they were not imposed (Lundh, 2011, p. 54-55). Lundh argues that the pupils are given a lot of responsibility in these complex communicative activities and need to adjust to institutional expectations. She also argues that pupils would benefit from more support from teachers in the process. Based on several of similar studies, Lundh concludes that “the introduction of ICT in primary school, does not seem to be a frictionless process, as they seem to collide with traditional teaching methods and traditional tools for communication still prevalent in primary school” (Lundh, 2011, p. 6).

Addressing similar issues from another perspective, Rasmussen (2005) followed what is referred to as the “participation trajectories” of Norwegian pupils in a 7<sup>th</sup> grade class who were working with multimedia production in a project-based format. She followed the work throughout the projects and analysed the pupil’s use of “copy and paste” strategies as part of extended collaborative processes and digital media production. Copy and paste is the use of digital tools to copy text from a source and paste it in reports or other digital documents. Part of the background of the study is that several critical reports

and evaluations concerned with copy and paste strategies in schools have been published during the last decade (see for example Alexandersson, Limberg, Lantz-Andersson & Kylemark, 2007). Rasmussen's analysis shows that copy and paste strategies are a common element of project work, but also demonstrate that more than the transportation of text is involved. Rather, active and creative meaning-making can be identified in the process.

In one of her examples, a group of pupils use a diagram tool to illustrate the relationship between different texts they have copied and used as sources. Based on the diagram, they discuss how to order their argument through the presentation of the material. Rasmussen concludes that

The texts, copied from one context, were integrated into a new context created by the pupils, which required social and cognitive effort. The pupils created a diagram to illustrate the connection between the disjointed texts they had copied. As such, the creation of the diagram represented an act of integration. (Rasmussen, 2005, p. 197)

Based on this and similar analyses, Rasmussen argues that copying should not in any simple way be understood as unproductive. Rather, she argues that the activity of copying and pasting is not the critical point when it comes to what pupils learn in ICT- rich learning environments. Rather, what is critical is the process of “understanding what to do and how to do it and manage integration” (p. 211). She describes the process of integration as shaped through the interdependent relationships among pupils, teachers and ICT. Teachers are found to mainly focus on the scaffolding of planning rather than on content feedback, which in turn creates a “space in which the pupils would choose and define the task according to their interests” (p. 213). Rasmussen argues that, although teachers see copying as part of students' everyday use of the Internet, there is a tension between the norm that copying is a problem and copying as an important part of pupils' skills in handling information. Furthermore, Rasmussen discusses what she refers to as the “fact finding” approach, in which students seek, copy and paste material without integrating it. Rather than pointing to the role of the digital tools, she argues that it may be a practice characteristic of institutional teaching and learning (p. 211). Rasmussen thus identifies a complex relationship between institutional norms, digital tools and learning in the context of inquiry-oriented activities. She argues that pupils are dependent on their teachers' conceptual scaffolding to transcend the fact-finding approach.

## Documentation and the process of inquiry

In another Norwegian study, Furberg (2010) analyses lower and upper secondary school students' activities in digital environments. The lower secondary school

students use viten.no, a web based multimedia environment in which phenomena from different scientific disciplines are illustrated or demonstrated. The upper secondary school students use FLE2, a system especially developed for supporting collaborative problem solving and knowledge development. By studying the “interaction trajectories” of these students during group sessions at a computer, Furberg identifies recurring phases in the students’ activities. These phases are revealed as a recurring pattern in which the students are, on the one hand able to discuss and reason from various perspectives such as ethical, financial and scientific, in a “rather complex and advanced reasoning process” (Furberg, 2010, p. 76). On the other hand, the arguments developed by the students in the group were not documented. Instead, material from the web was copied and pasted into reports. From these findings, Furberg concludes that “the most challenging features in the students’ inquiry processes is to figure out how to document findings and make reasoning visible for themselves and others” (p. 79).

Like Rasmussen, Furberg attempts to understand the use of copy and paste strategies against the background of more complex relationships among “more or less explicit values, demands, and expectations” (p. 71) in the both institutional setting and students’ use of ICT. More specifically, she relates the students’ strategies to the long tradition in schools of using textbooks and other instructional materials, often in conjunction with particular types of tests based on the content of the texts. Furberg suggests that the students’ understanding of how they would be assessed, in combination with a lack of guidelines and technical support for documentation, leads to the following situation:

With no guiding principles about how to deal with documenting their arguments and findings, it becomes the students’ responsibility to figure out how they can manage their accomplishment of the given tasks. Without explicit guidance as well as explication of expectations and assessment guidelines, it is possible to assume that the students were attuned toward how they would be assessed and what the teacher expected from them. (p. 80)

A further issue highlighted by Furberg is that digital tools contain designs and media that may contribute to the reproduction of particular institutional models of teaching. The tools used in the study, FLE2 and viten.no, contain support for participation in inquiry at the same time as they “embed residues of more or less explicit institutional practices reflecting specific ways of organizing, for instance, instruction, learning activities and assessment” (p. 80). These aspects of the tools may reify institutionally established patterns of engaging with material such as when the students use copy and paste rather than documenting their own reasoning.

The questions surrounding documentation in digital environments designed for learning through inquiry addressed by Furberg can be related to Boström's (2011) study of Swedish students involved in upper secondary school projects. Boström followed the students over a period of eight months during their last year in upper secondary school (it should be noted that Boström's study deals with the upper secondary course "project work" from the national curriculum in which the students specialize and make extended investigations of specific questions, hence the long time span of the study). The topic of the projects was math and computer gaming in primary school settings. In his analysis, Boström shows how the students, throughout their project work, successively coordinated their actions with institutional expectations. More specifically, he attempts to analyse how the students' consciousness of advanced communicative activities develops and how they gradually appropriated and took over the organizing of activities. Of particular relevance here is Boström's description of the qualitative changes in the students' understanding of the relationship between the investigation in the project and the documentation. The analysis shows how even rather successful students in the last year in upper secondary school need to go through an extended process in order to appropriate a developed way of documenting their work.

Building on Wertsch's (1979) development of Vygotskij's theory of learning, Boström shows that there are several crucial shifts in the students' understandings of how to perform the project as well as how to document it. The model detailed in the study specifies four phases in this process that is used as a point of departure in the analysis of the students' development throughout the course. The critical developments that Boström suggests can only briefly and in part be described here. In the shift from phase one to phase two, students are starting to see their work in relation to the cultural resources available for approaching a task rather than as a personal problem (for example the formulation of aims and questions and the use of previous studies). During phase two, the students start exploring these resources. The shift to phase three occurs as students take what Boström refers to as "insights" that come from their investigations and reformulate them in more general terms as urged by their teacher. This makes it possible for the students to use more generic concepts in their analysis. Moreover, students are to describe their reasoning in reports. This leads to an increased awareness of the work involved in writing and understanding of the communicative aspects of the report. In the shift from phase three to four, through the writing process, students take on a more general problem by ordering their findings in an outline. In phase four students are

increasingly able to take over the responsibility for organizing their writing and are able to distance themselves from their own formulations and discuss them in relation to alternatives. The study also provides a rather detailed description of how the orientation of both students and teachers shift during this process. Boström's findings suggest that documentation practices in institutional educational activities may often be obscure to students. Particularly when new media and means of documentation and assessment are introduced simultaneously, it can be expected that, for students, it is not always clear what is to be communicated and for what purposes.

### Qualities of inquiry based education and the issue of assessment

Another issue raised related to inquiry in contemporary institutional education that has been rarely analysed in empirical studies is the relationship between the means of assessment and other elements of project work. One study by Åberg, Mäkitalo and Säljö (2010) is an exception. In this study, the authors analyse student work in a Swedish secondary school project in which the summative assessment is a panel debate. The authors demonstrate how, long before the actual event, students anticipate the debate format of the assessment. In the work leading up to the debate, the students were concerned with argumentation. They considered whether particular information would strengthen their cause or not and also anticipated potential counterarguments. These findings show how the means of assessment influences how the students take on other, seemingly unrelated, activities during a project such as information seeking.

Another study that addresses the relationship between means of assessment and students' work in projects is Jakobsson, Mäkitalo and Säljö (2009). In this study, Swedish secondary school students' (14-15 years old) communicative practices in projects relating to the greenhouse effect are analysed. The findings show that, over time, the students are able to successfully appropriate scientific modes of reasoning. These results are contrasted with numerous previous studies based largely on the use of written tests that show significant problems in students' conceptual understanding of global warming and the greenhouse effect. Jakobsson, Mäkitalo and Säljö argue that students' misconceptions as documented in research on conceptual change may largely be an artefact of the research methods, which are based on written questionnaires. Of particular relevance here is the finding that the students in the project format are able to "meaningfully talk about rather complex phenomena and develop their understanding to approximate thematic patterns of scientific reasoning; their



knowledge allows them to identify gaps in their own understandings and to discuss, question, and build on what their partners say” (p. 992). The authors further suggest that written tests, “where students have no opportunity to check their understanding by asking others or by engaging in any kind of knowledge seeking activity, which nowadays is part of science learning in many classrooms” (p. 979), may not be a suitable way to assess this kind of learning process. This raises further questions regarding the relationship between documentation and project work.

## Reflections on contemporary research

In this overview of empirical research in contemporary Scandinavian settings, three recurring themes have been identified. First, in the environments studied parallel but different conceptions of schoolwork, sometimes involving conflicting rationales, are described. A second theme in the review of empirical research is that established resources as well as norms and rules are challenged by pupils and students’ use of digital tools and media. A third theme is descriptions of what is described as qualified work of pupils and students in activities involving inquiry.

In relation to the first and second themes, that picture that emerges from the empirical studies is a one in which there are parallel and sometimes conflicting demands, creating tensions and even “collisions” between tools and different teaching traditions. Teachers are highlighted as important resources in the managing of these conflicts. Further support, scaffolding and guidance from teachers are explicitly suggested in several of the studies. There is the common presupposition that it is the responsibility of teachers to help with overcoming the gaps in students’ work.

In relation to the third theme, the results seem to imply that students in different age groups are all able to participate in local discussions involving different perspectives and reasoning. When it comes to the students’ documentation, however, the studies point to difficulties – students are not always able to reproduce the qualities of their reasoning process in writing. When the results of Boström are related to these other findings, it is clear that the students in his material are able to successfully document their upper secondary school project. This is, however, only after a long period of instruction and training on how to document their work in a particular genre. Boström demonstrates how this appropriation process involves several qualitative transformations of understanding through which students become increasingly conscious of the communicative premises involved the

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documentation practices they are asked to undertake. Moreover, changes in reasoning from the specific to more generic can be demonstrated. In this sense, project work and documentation become intertwined aspects of a single process. Appropriating documentation practices in project settings is thus a process that, as Boström in particular shows, potentially takes a lot of time and a work. Taken together, the findings presented in this review suggest that the role of documentation and assessment may be an underexplored topic in the literature on project work and, in the wider sense, progressivism in education.

## CHAPTER 3

### THEORETICAL FRAMING

Engeström (1998) traces problems in many educational development programmes to the lack of understanding of the organisational dynamics of schools. He argues for the study of what he calls the middle level, between the formal, organisational structures of schools and classroom practices:

The middle level consists of relatively inconspicuous, recurrent, and taken-for-granted aspects of school life. These include grading and testing practices, patterning and punctuation of time, uses (not contents) of textbooks, bounding and uses of the physical space, grouping of students, patterns of discipline and control, connections to the world outside the school, and interactions among teachers as well as between teachers and parents [and administrators]. (p. 76)

In the educational program investigated in this study, several of these “relatively inconspicuous, recurrent, and taken-for-granted” aspects are undergoing changes. In this sense, the program can be understood as a systematic attempt to alter what is here referred to as social and communicative ecologies, rather than the application of any specific classroom practice.

The empirical study thus deals with an educational practice characterised by attempts to develop and restructure activities, alter modes of participation and change the relationship between students and teachers. This involves providing new spaces for technology and redefining the relationship between school subjects. Issues relating to agency, the relationship between individual, context and media resources, as well as the tension between stable and more dynamic aspects of the practice, are therefore of central importance. The aim of this chapter is to frame the object of study, drawing on a selective reading of the literature from fields in which the inter-relationship between agency, context and the use of tools are central to the analysis. To this end, conceptual work in the fields of socio-cultural activity theory, dialogism, complex systems theory, and actor-network theory are eclectically reviewed. The aim is to identify conceptual innovations that will inform the analysis of data. Concepts that have proved particularly helpful are foregrounded in the discussion. A secondary aim is to point to tensions in the literature; tensions that account for strategy of synthesising insights and concepts from multiple traditions.

The theoretical framing is discussed in five sections and deals with both theoretical and methodological issues relevant for the analysis of activities in educational practices which can be characterized as open:

- Agency, mediation and activity
- Practices, activities and action
- Time scales and development
- Change, stability and contradictions in action and activity systems
- The relationship between micro and macro ecologies

### Agency, mediation and activity

The use of tools, material and semiotic, is intrinsic to human action and culture. By definition, tools extend the possibilities for action of the individual or group who learns to use them. The age-old question of how to conceptualize agency is critical, not least in the analysis of educational activities in which achievement is often understood in terms of individual learning. Actor-network theory and sociocultural theories offer related but differing perspectives on the relationship between human agency and tool use. Both provide relevant perspectives for this study.

In activity theory, the concept functional organ, that originates in the work of Luria has been taken up and developed by Kaptelinin (1996):

Functional organs are functionally integrated, goal-oriented configurations of internal and external resources. External tools support and complement natural human abilities in building up a more efficient system that can lead to higher accomplishments. For example, scissors elevate the human hand to an efficient cutting organ, eyeglasses improve human vision, and notebooks enhance memory. The external tools integrated into functional organs are experienced as a property of the individual, while the same things not integrated into the structure of a functional organ (for example, during the early phases of learning how to use the tool) are conceived of as belonging to the outer world. (Kaptelinin, 1996, p. 50-51)

The formation of the functional organ leads to the extension of the agent's means of agency. In this sense, an agent can be understood as a dynamic functional network or system of resources that integrate elements from the "outer world".

In the examples provided by Kaptelinin, material tools are used as illustrations. However, from a sociocultural perspective, semiotic resources can also be conceived as tools or mediational means (Wertsch, 1998; Cole & Wertsch, 1994). Semiotic resources can include signs, words, conceptual representations, or even communicative genres.

From a sociocultural perspective, the promotion of literacy is one of the main objectives of the institution of schooling (Luria, 1976). Students are required to master literate concepts and communicative genres as part of their school-based literacy training. According to Olson (2009), “metalinguistic concepts” like *genre* are needed to attain higher forms of literacy. Other examples include: *main point*, *assumptions* and *evidence*. The use of mental state and speech act verbs like *infer*, *describe* and *explain* are also connected to the ability to understand higher forms of literacy practice. Verbs of this kind are “reflexive and meta-representational, suitable for talking about talk and thought” and thereby “words for thinking with” (Olson & Astington, 1990, p. 717). From this perspective, literacy training can be understood as a way of extending the agency of the child. It allows the child to participate in literate activities such as the reading of textbooks and writing of essays. Through progressive mastery of these literacy practices the child develops the identity of a literate person. However, a child’s capacity to acquire new literacies depends upon existing language practices and previous forms of discursive socialization. This means that success with literate school tasks tends to correlate with the development of the child’s identity as a literate person within the context of their family life outside school (Olson, 2009).

Wertsch (1998) suggests a distinction between mastery and appropriation, to point to the possibility of mastering the operation of a tool, but not appropriating it in the sense of making it central to one’s identity. In Wertsch’s analysis, it is thus clear that neither agency nor identity can be analysed independently of tool use. He also points out that tools constrain as well as afford actions. In short, while affording new possibilities for action, the use of tools may simultaneously result in the loss of others. Mediation involves what Lemke calls *heterochrony*. The textbook provides a relevant example relevant to the context of school. Textbooks have unique developmental trajectories. These are influenced by the material and semiotic characteristics that constrain and afford they ways as they are used in classrooms over different time scales.

Actor-network theorists attempt to avoid privileging human intentionality and agency. According to the principle of generalized symmetry human actors or *actants* should not be understood differently from non-human actants (see for example Guribye 2005; Kaptelinin & Nardi 2006). From this perspective, agency and stability are not the property of actants (whether human or nonhuman). Rather, agency emerges from the inter-actions between actants and should be understood as a network effect. Crawford (2005, p. 1) argues: “Actors are combinations of symbolically invested ‘things’, ‘identities’, relations, and

inscriptions". In this respect, actor-network theory radically questions essentialist notions of agency and identity.

In *We have never been modern*, Latour argues for an abandonment of the modernist dichotomy between nature and culture, or the human sphere and the sphere of the natural sciences altogether. Part of the analysis deals with exchanges between processes originating in very different time scales:

I may use an electric drill, but also a hammer. The former is thirty-five years old, the latter hundreds of thousands [...]. Some of my genes are 500 million years old, others 3 million, others 100,000 years, and my habits range in age from a few days to several thousand years. As Péguy's Clio Said, and as Michel Serres repeats, 'we are exchangers and brewers of time', [...]. It is this exchange that defines us, not the calendar that the moderns had constructed for us. (Latour, 1993, p. 75)

The analyses of educational practices offered in the empirical studies presented here share an interest in how configurations are formed out of combinations of actors with material and semiotic resources. Moreover, they seek to describe how these configurations, in turn, constrain and afford agency.

## Practices, activities and action

*Practice* has become a core concept in the contemporary social science in general and educational research within the socio-cultural tradition in particular. The *relational* character of the phenomena described is key to understanding contemporary theories of practice. For example, in an influential formulation, Lave and Wenger (1991) describe a theory of practice:

Briefly, a theory of social practice emphasizes the relational interdependency of agent and world, activity, meaning, cognition, learning, and knowing. It emphasizes the inherently socially negotiated character of meaning and the interested concerned character of the thought and action of persons-in-activity. This view also claims that learning, thinking, and knowing are relations among people in activity in, with, and arising from the socially and culturally structured world. This world is socially constituted; objective forms and systems of activity, on the one hand, and agents' subjective and intersubjective understandings of them, on the other, mutually constitute both the world and its experienced forms. (Lave & Wenger 1991 p. 50)

Defined in this way, the concept of practice has an intrinsically relational meaning. It emphasises the *mutual constitution* of phenomena like learning, thinking and knowing; phenomena that are traditionally understood as individual or subjective. From the relational perspective, the analysis of practice can be developed in quite different directions.

In the sociological literature (cf. Schatski, Knorr-Cetina & von Savigny, 2001), the concept of practice has also been widely discussed. For example, Erickson (2004) argues that scholars who set out to overcome traditional sociological

explanations of social action in terms of a traditional distinction between rule following and structural causation, have not been successful when it comes to empirical work. Erickson describes how Bourdieu argued against the deterministic assumptions dominant in both structuralism and socialisation theory. Nevertheless, he finds the empirical work of the later Bourdieu problematic in precisely the same way. The moment-to-moment unfolding of activities like going to school, shopping or grading exams are not really analysed. The subtle changes that occur when practices are repetitively performed are thereby eclipsed in the empirical analysis. In contrast, Erickson (2004) uses the metaphor *wiggle room* to emphasize the non-deterministic relationship between past and present actions. In short, that a practice has become institutionalised does not mean that it is repeated over and over again in a mechanical sense. An agent (or a group of agents) can relate to previous ways of doing things, in a way that makes repetitions of the same action similar but not identical. Consequently, Ericksson stresses that; “practice is conservative and progressive at the same time” (Ericksson, 2004, p. 163).

Turner argues that there are several theoretical problems with the practice concept and offers an individualistic critique of practice theory and related sociological approaches, claiming that *individual habits* have more explanatory power. From this perspective, shared practices need to be understood as groupings of individual competences.

Barnes’s (2001) counters Turner’s individualist critique and contends that a correct understanding of shared practices is a necessary but insufficient basis for understanding human behaviour. He uses the example of members of a company of cavalry. On the one hand, a cavalry are possessors of a shared practice “manifest in their riding, in their use of weapons, and generally in the business of mounted combat” (Barnes, 2001, p. 19). These collective practices are socially recognized, and transmitted from generation to general of cavalymen. Nevertheless, individual skills and habits emerge in specific cavalries. Turner’s approach cannot account for the *coordination* between members of social groupings, whereas for Barnes, practice remains both an individual and collective achievement. To emphasise this point, Barnes stresses

We must imagine individual riders taking account of variations in terrain, monitoring the actions of others and adapting accordingly, even perhaps imagining future scenarios, for example the consequences of a possible slow-down at the front as a slope is encountered, well before they occur. Only in this way coordination will be retained and a shared practice enacted. Only in this way will a social power be exercised. The successful execution of routines at the collective level will involve the overriding and modification of routines at the individual level. (Barnes, 2001, p. 23)

Barnes thus claims that to understand a practice like riding in formation we need to understand it in terms of human beings orienting to *each other*, as an inherently social process that is not solely governed by a collective object or conceivable in terms of individuals moved by habits. Barnes' analysis offers a way forward. However, it could be argued that it needs to be extended to explain how mutual orientation in local activities relate to the mutual recognition of more complex practices and their objectives, which is the next theme in this section.

Schatzki suggests an alternative framework for analysing rationality and objectivity in both individual and collective action. In his account the concept of practice is needed for examining "social entities":

By a "practice" I mean an interrelated, open-ended manifold of actions linked by actors' shared understandings. Although actions, in order to form a practice, need not possess any particular degree of interdependence, coordination, coherence, similarity or agreement, those composing a practice will exhibit these features sufficiently to distinguish themselves from the sets of actions that form other practices. More importantly, the actors involved will share understandings about what they are doing and about the relations among their activities, for example, that and why particular actions are appropriate responses to others. Their agreement, however, need only be partial. Participants in a practice can have conflicting interpretations of it. Such conflict, however, occurs within a wider (although revisable) background of agreement concerning what the practice is and which actions generally belong to it. (Schatzki, 1995, p. 148)

This view, developed as part of the analysis of rationality, is interesting in several other ways. First, a particular practice (Schatzki mentions witchcraft) can be distinguished from other practices through actors' recognition of the relations between actions that supposedly belong to the practice, rather than any fixed criteria. There can also be conflicting interpretations and understandings. Secondly, this points to the negotiability (and need for negotiation) of practice against a "wider background of agreement". Schatzki's analysis parallels the concerns of another tradition, namely activity theory, introduced in the first section. Also in this tradition the relations between individual and collective action has been in focus.

In activity theory, the concept of *object* is a core construct (Kaptelinin & Nardi, 2006). An object is the problem space a collective activity is directed towards. It works as a "sense-maker" for participants (Kaptelinin and Nardi, 2006) and can have both material and socially constructed aspects. Objects of activities should not be understood as static, or even singular, but rather as multifaceted and evolving. Foot argues that



Schatzki's observations [in the quote above] point to a key consideration for activity theorists - that actors'/participants' perceptions of the *object* need to be viewed as dialogical, both with one another and with the historically accumulated meanings of the activity". She adds: "objects tend to be relatively long-lived entities with some stability because nothing would ever get done if people constantly contested objects. (Foot, 2002, p. 169)

In the empirical studies presented in this thesis, the concept *shared object*, inspired by the ideas of Barnes and Schatzki will be used to refer to the evolving mutual orientation in the groups of students followed. It is also inspired by, but should not be conflated with, the use of the object concept in activity theory, which addresses another level, that of the activity system.

## Time scales and development

The analysis of project tasks stretching over several weeks or months requires the analyst to consider how meanings and activities develop over time. In the beginning, the tasks studied had the character of vaguely defined ideas that required development in several dimensions or aspects, and their rationale needed to be further defined in a process of construing a shared object. The students needed to approach them, find ways of working with them and finally come up with a product that could be assessed and recognized by the teachers as living up to particular requirements.

To study such processes in what Lemke refers to an "ecosocial systems", one needs to determine "what's going on, what's participating and how, and how one going-on is interdependent with another" (Lemke, 2000, p. 275). For example, in order to explore identity development, Lemke suggests that we need to ask: "what is the system, or network, within which a notion of "identity" can be defined?" (p. 283) In turn, this involves the analysis of different processes unfolding in different *time scales*. When discussing the developmental processes related to identity formation, learning and socialisation Lemke states that

The formation of identity, or even fundamental change in attitudes or habits of reasoning, cannot take place on short timescales. Even if short-term events contribute toward such changes, it is only the fact that they are *not* soon erased, do not quickly fade—that subsequent events do not reverse the change—that makes it count. It is the longer-term process, including the effects of subsequent events, that determines for us the reality of basic human social development. So how could events on the timescale of a conversation or an experiment or reading a story even contribute to identity development? (Lemke, 2000, p. 278)

For sociocultural theorists, the interest in processes unfolding over different time scales is central to the analysis. They explore the interactions between developmental processes that operate on very different time scales (Cole, 1996;

Donald, 2002) and combine the analysis of mediated actions and meaning-making practices in observable time (microgenesis), with the development of individuals over a lifetime (ontogenesis) and the developmental processes that unfold over biological or evolution time (phylogenesis). From this perspective schoolwork is not simply about learning particular domains of knowledge. It involves learning to participate in particular, institutionally re-created ways of doing things. Furthermore, it involves learning to take and produce meanings of relevance to activities valued in the practice. For example, a students' encounter with a particular task is preceded by a history of more or less similar encounters. Therefore, past experiences become resources for encountering new tasks that demand active interpretation. Indeed, Bergqvist (1990, p. 37) argues that: "Tasks in classroom settings are ambiguous and negotiable phenomena that demand active interpretation and, even more importantly from our point of view, they are interactionally construed."

Similar themes are discussed in Linell's (1998) presentation of *dialogism* as a framework for communication studies, drawing upon multiple traditions including phenomenology, pragmatism, symbolic interactionism and sociocultural theory. From a dialogical perspective meaning is not created in isolated situations but in a reflexive relationship to others in context. He argues that

Perhaps the most profound aspect of dialogism lies in the insistence that the actor, the progenitor of meaning, is (directly or indirectly) in constant interaction, "in dialogue" with, other actors and various kinds of situational and cultural contexts. Therefore, any stretch of discourse, created in actors' interaction with other actors, is embedded in a matrix of contexts. Moreover, it is not simply embedded or situated in contexts, but has a *reflexive* relationship to these contexts. Discourses and contexts mutually constitute and select each other, and hence form a basic, indivisible whole. (Linell, 1998 p. 204)

This relational interdependency, make it necessary to study the relationship between actor and context as a "reflexive", "indivisible whole".

The study of talk in interaction is a primary area of interest for dialogism. When studying talk in interaction each unit of talk is understood as related to both previous and following units. Linell (1995, p. 115) stresses: "the elementary unit of communication, whether we take this to be an idea unit or a turn at talk, is intrinsically sequentially positioned and related to its outsides, the prior units and the projected next ones."

The principle of sequentiality means that interactions are not reducible to individual acts of thinking, speaking or writing. Linell argues that

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If discourse, with its constituent episodes and topics, develops a joint construction, then it seems hard to explain it properly by recourse only to individual speaker intentions. Utterances do not realize communicative intentions that have been established prior to verbalization; rather, there is a constant interplay between the speaker, his interlocutor(s) and contexts. Verbalization and content formation are locally and jointly produced, and have *emergent* qualities. (Linell, 1998 p. 77)

In a parallel discussion, Erickson (2004) states that “people in interaction constitute environments for each other and the social ecology of mutual adaptation is a process that not only takes place within the real-time conduct of the interaction but *underlies or enables it*” (Erickson, 2004, p. 4-5, emphasis added). In school tasks and projects that stretch over longer timespans and involve communication between students and teachers in various situations, the emergent quality of meaning becomes highly conspicuous.

To analyse how meanings emerge and develop, schoolwork needs to be studied over time. For example, Greiffenhagen (2008), demonstrates how a task in which students use multimedia software to produce a presentation, is enacted over time. He describes how students mutually constitute the task as it evolves over time:

Tasks are conceived of as oriented-to and achieved phenomena, i.e., as defined in and through participants activities (and it is a contingent matter as to whether parties attempt to construct a plan of things to be done in advance of undertaking them, or whether they set out on the task with only one vague idea of what is to be done and then figure out, in the doing, what it is that they need to be doing and how they are to do it). (Greiffenhagen, 2008, p. 36)

Here Greiffenhagen includes *doing* in his analysis of the emergence of a school task over several working sessions. In other words, language and meaning-making practices are anchored in practical activities. When tasks stretch over several meetings, lessons or other types of interactions, sequences of internally related utterances become intertwined with other practical activities.

From a dialogical perspective, the idea that language use is anchored in, and points to, contexts is also of crucial importance. Linell (1998) notes that “words do not contain or reflect their meaning or reference.” (p. 99). Communication does not need not result in complete and shared understanding for agents’ to be able to manage and proceed with their practical business. Incompleteness, vagueness and ambiguity are an inherent characteristic to language use and are inescapable. They ought to be understood as natural aspects of social encounters. When attempting to understand participation in institutional practices, like education, this is also the case. However, it is also important to point out that Linell stresses that there is another side to the dialogistic perspective; a more idealistic, normative form of dialogism which stresses that

ways “intersubjectivity and joint accomplishment, coordination and cooperation, reciprocity and mutuality as conceptually basic to the analysis of interaction and communication.” (Linell, 1995, p. xii)

## Change, stability and contradictions in action and activity systems

Bergqvist and Säljö (2001) note that different conceptions of schoolwork may live side by side within the very same school:

The practices of schooling are continuously modified so as to incorporate new ideals and modes of conceiving human learning and development. Different premises for learning live on side by side in the institution, and it takes considerable skill and sensitivity on the part of the participants to realize what is expected of them in their role as learners. (p. 123)

These observations imply that when theorizing practices in educational institutions, the existence of multiple conceptions of learning ought to be taken into consideration.

Nystrand and Graff (2000) demonstrate how multiple conceptions might be taken into account when discussing the findings of an empirical study that investigated why a middle school class failed to write argumentative papers - rather than “factoids” - in spite of skilled and engaged teachers. They found that “the epistemology fostered by classroom talk and other activities was inimical to the complex rhetoric the teacher was trying to develop in encouraging students to write arguments” (p. 1). In this case, writing emerged in tension with competing, or more or less contradictory activities, associated with different premises for learning.

In this study, the analytical focus on tensions and contradictions is inspired by activity theory and expansive learning theory. Engeström and Sannino (2010) stress that contradictions are the driving force of transformation:

The object of an activity is always internally contradictory. It is these internal contradictions that make the object a moving, motivating and future-generating target. (Engeström & Sannino, 2010, p. 5)

Building on Davydov, Engeström and Sannino describe expansive learning as the formation of “theoretical concepts – theoretically grasped practice – concrete in systemic richness and multiplicity of manifestations” (Engeström & Sannino, 2010, p. 5). This means that expansive learning “requires articulation and practical engagement with inner contradictions of the learners’ activity system” (p. 5).

The very social position of being a student or pupil may contain inherent contradictions that may not be overcome as long as they remain in the institutional educational system. Here it is argued, however, that conflicting agendas need to be addressed as part of the analysis of educational practice. For this purpose, different kinds of contradictions need to be distinguished:

There is a substantial difference between conflict experiences and developmentally significant contradictions. The first are situated at the level of short-time action, the second are situated at the level of activity and inter-activity, and have a much longer life cycle. They are located at two different levels of analysis (Engeström & Sannino, 2010, p. 7)

All conflicts and tensions are hence not developmentally significant. Conflicts of various kinds can exist on the action level, without significance for expansive, developmental learning. Conflict experiences in students' schoolwork may, however, also be reflecting actual, developmentally significant contradictions within institutional organised activities that are realized in concrete actions.

### The relationship between micro and macro ecologies

Erickson introduces the notion of *ecology* to emphasize the dynamic and interactive work that characterise human communication. In his words, "people in interaction constitute environments for each other" (Erickson 2004, p. 4-5). The "social ecology of mutual adaptation" provides a prerequisite for communication. Communicative interactions would not be possible without it. Erickson is here close to the view of Barnes (2001), specifically addressing the ecology of the face-to-face encounter, or the "local" communicative ecology, as he refers to it.

Nardi and O'Day (1999) suggests that ecology metaphors do away with an over emphasis on stability. They mean that communities are often thought of as timeless or slow to change, like a prototypical Irish village or a Tibetan monastery. In contrast to the notion of 'community of practice' that has become dominant in research on education (Lave and Wenger, 1991; Wenger 1998) the notion of 'ecology' emphasise diversity and continual evolution, rather than stability. Their use of the term "information ecology" also emphasises how information generated in one situation is circulated and used in completely different settings.

The issue of how to conceptualize students' participation in schoolwork in terms of practice theory is discussed by Haggis (2009) in a critique of Lave and Wenger (1991). Haggis points to a contradiction in their work. Their ethnographic case studies foreground the ways individuals move from peripheral

participation to a position of mastery in a community of practice. Further, they explore how individuals' identities are shaped, as they become enculturated into a community of practice. They deliberately choose not to discuss schools. Nevertheless, they are still "persuaded that rethinking schooling from the perspective afforded by legitimate peripheral participation will turn out to be a fruitful exercise" (p. 41). Moreover, they state, "such an analysis would raise questions about the place of schooling in the community at large in terms of possibilities for developing identities of mastery" (p. 1). In his critique, Haggis (2009) points out that 'legitimate peripheral participation' is posited as a pedagogic technique even though the principles of situated learning implies that no such situation overarching statements would be possible (p. 45). Moreover, Haggis notes, "The linguistic and semiotic tools which shape individual performance are not limited to the collectivity which is the focus of the analysis, but arise out of much bigger types of collectivity in which the community of practice or activity is embedded" (Haggis 2009, p. 50). In short, Haggis questions which community provides the correct unit of analysis for conceptualising educational practices.

When the systems perspective inherent in the ecology metaphor is further articulated, it may lead a different way of understanding the relationship between the individual actor and context, as in theories of ecosocial systems (Lemke, 2000) and complexity theory (Haggis, 2009). In complexity theory, embedded dynamic systems are seen as self-organising and operate on different scales from cells to humans to social formations of various degrees of complexity. They are nevertheless seen as interrelated and responsive to other systems, which intersect with their environment. Lemke and Sabelli (2008) suggest a number of detailed research foci for analysing schools and educational systems in terms of complex systems. Nevertheless, as an approach to educational research, systems theory is still under development. In this section, some basic ideas will be introduced.

All dynamic systems interact with other dynamic systems. These interactions, and the constraints they provide, are necessary for the self-organizing to occur at the level of the smaller system (Haggis, 2009). At the same time, each system is unique. Lemke (2000) argues that

A classroom, and indeed every human community, is an individual at its own scale of organization. It has a unique historical trajectory, a unique development through time. But like every such individual on every scale, it is also in some respects typical of its kind. That typicality reflects its participation in still larger-scale, longer-term, more slowly changing processes that shape not only its development but also that of others of its type. (p. 278)

The development of dynamic systems, of various levels of complexity, can thus not simply be controlled or determined by the constraints provided by the environment. This principle is referred to as *structure determinism* (Haggis, 2009). Learning in systems terms can be understood as self-organising responses to constraints that are emergent in the interactions between systems on different levels. Haggis points out that this redefines questions about the locus of learning, meaning-making, and the premises for the discussion between individual and social approaches in educational science. It even questions the idea of mutual constitution as articulated in practice theory. From the systems perspective the relationship between individual and social processes are not possible to define theoretically in any definitive or abstract sense.

In actor-network theoretical analyses of schools and education, pedagogy becomes the accomplishment of a network rather than produced by teachers. The pedagogic environment is rather conceived as “as a reciprocally created dynamic where teachers (and students) are network effects” (McGregor, 2004). For example, Nespors (1997) critiques the conception of pedagogy as the application of particular practices that produce learning outcomes, “rather than as real practices slowly accomplished over time and space, continuously modified to deal with change and contingency” (Nespors, 1997, p. 42). From this perspective, relations “between the subject department as a whole, or between the teachers and the community as a ‘practice-relevant configuration’” (McGregor, 2004 p. 366) may be more relevant to understand the development of an educational practice.

Power relationships tend to be central in actor-network theory analyses. For example, actor network theorists explore how relationships between network centres and peripheries are constructed and maintained. McGregor (2004) suggest that this perspective can help us to account for the stability (or resistance) of certain classroom practices. These practices reflect power relations that are parts of much more inclusive networks. In this view, pedagogic development and change needs to be successfully stabilised in relation to spatial and temporal network connections, if it is going to remain.

## Summary

In this chapter, theoretical frameworks of relevance for the study and analysis of students’ activities in open educational practices have been presented. Each of the five sections, summarized below, deals with both theoretical and methodological issues relevant for the analysis of activities in educational practices which can be characterized as open.

### *Agency, mediation and activity*

Various kinds of tools and resources, material as well as semiotic and conceptual, are a central aspect of educational practices, as well as human practices in general. In the analysis of agency and situated activity, the role of tools and resources is therefore a primary concern. This theme is discussed using central concepts from sociocultural theory, activity theory and actor-network theory.

### *Practices, activities and action*

In several traditions that theorize practice, different levels are analytically distinguished. In education, students' activities can be considered as part of the organization of institutional practices, but activities are also organized in ways to promote different kinds of agency and participation. This issue is discussed using concepts from situated learning theory and activity theory.

### *Time scales and development*

When schoolwork is organized in the form of project tasks, stretching over several weeks, the premises for meaning-making and problem solving are altered. This issue is considered in relation to the theoretical perspective offered by dialogism.

### *Change, stability and contradictions in action and activity systems*

In educational practices there may be parallel and potentially conflicting expectations and understandings of learning; particularly in practices in the process of change. This issue is discussed and analysed using concepts from activity theory and complexity theory.

### *The relationship between micro and macro ecologies*

When instructional practices are altered to make room for knowledge and experiences originating from different sources, the relationship between the local social and communicative ecologies of the classroom and the wider ecologies of which these are part are changed. This issue is discussed using concepts from actor-network theory and complexity theory.



## CHAPTER 4

### AIM AND RESEARCH QUESTIONS

In this chapter, the aim and research questions of the study is formulated, grounded in the considerations presented in the preceding chapters.

The overall aim is to contribute to the understanding of the contextualization of inquiry in institutional educational practice. This is done by exploring the consequences of principles of inquiry for classroom activities, learning and development.

The notion of contextualization will here be further developed. A presupposition in the study is that the principles of inquiry are integrated with elements of- and practices in the social and communicative environments in schools. Of particular interest is what Engeström refers to as “middle level” phenomena, described as involving assessment practices, uses of time and physical space as well as groupings of students. The middle level also involves interactions among teachers and connections to the outside world (Engeström, 1998). These can be said to be part of an infrastructure underlying specific classroom practices. Attempts to alter all these elements are part of the educational program that is studied here. An important part of the analysis is thus to describe how students’ and teachers’ actions relate to social and cultural processes which stretch outside specific lessons or local activities in the classroom, in social space and take place on larger time scales. This also means considering relations to processes outside school. As Haggis (2009) argues, linguistic and semiotic tools, which shape the actions of individuals in activities, may be originating from much bigger collectivities than the local practices (p. 50). Such relations are also considered, particularly in the analysis of the local uses of genres and narratives (see chapters 7 and 8).

The point of departure of the analysed is however the local activities of the students’ and the teachers, and the patterns of interaction that evolve over time. The study seeks to answer a set of interrelated questions, mainly, but not exclusively corresponding to each of the empirical chapters (6-9).

*1. What are tensions in the students' group-work and how are these tensions managed?*

Conflicts and collisions between different institutional teaching methods, norms and expectations were pointed out in the review or contemporary research. Digital tools, in particular, are recognized as generators of such conflicts in contemporary empirical studies. The historical overview, however, demonstrates that the very commitment to authenticity in education is associated with fundamental tensions between different agendas, as well as potential theoretical problems (Petraglia, 1997). Specific questions of interest in this study are how tensions and conflicts related to the institutional organization of learning activities manifest in the students' work, and how they are managed. In this study, these questions are addressed mainly in relation to how the students' handle joint tasks in group-work or in theoretical terms and the formation of shared objects in group-work activities. This is mainly discussed in chapter 6.

*2. How do students argue for diverse viewpoints, and how do teachers respond?*

A key in education aspiring to authenticity is to open room for students' (mediated) experiences and meaning-making. At the same time, the teachers have an agenda and a curriculum to relate to. How to arrange for the meeting between "the child and the curriculum" (Dewey 1902) is an issue, which has been much debated throughout the history of constructivism and progressivism. Argumentation is the main topic of chapter 7.

*3. How are students' work and reasoning shaped by text production?*

The role of documentation and writing in inquiry is addressed in several of the studies reviewed in chapter 2. The documenting of processes in inquiry, as well as the use of digital tools in writing, were both found to be subject of tensions and difficulties in the students' activities. To make *reasoning* visible in text is one of the main challenges facing students pointed out (Furberg, 2009) and in chapter 2 it was concluded that writing is an underexplored topic in the literature on project work. Research questions in this study are therefore how writing is integrated in the organization of the activities, and how the students approach it. This is the topic of chapter 8.

*4. How are the students' actions directed?*

In both the historical overview, and the review of contemporary research, the role of the teacher is addressed. Different theoretical traditions within the progressivist and constructivist movements formulate the role of the teacher relative to the child or the student in different ways. A key to this is what Dewey refers to as the direction of inquiry (Dewey, 1991/1938). Empirical studies, like

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Greiffenhagen (2008), also points to the role of practical activities in the emergence of school tasks. Direction in this sense becomes not simply a matter of teachers' actions, but rather an interaction between the students and different elements of the environment. This is discussed in chapter 9, the last of the four empirical chapters.

The specific question addressed should be understood as specific points of entry in the analysis of the processes involved in contextualization. Each chapter contains a study developed on its own premises, utilizing specific theoretical analytical tools. The results from the different chapters are synthesized in chapter 10, in a wider discussion of the design of the program in relation to the aim of this study.



## CHAPTER 5

### DESIGN AND METHOD

The empirical material in the study has been collected in a fieldwork. The method has been inspired by the traditions of school ethnography (Jackson 1969; Wolcott 1999; Bergqvist 1990). In this chapter, the empirical setting and the study are presented and the methods considered in relation to literature on the subject. The process of analysis is also described. Finally, the selection of students and ethical aspects are considered.

#### The setting

The upper secondary school program in social studies, where this study has been conducted, is situated in a school in one of the larger Swedish towns. In information material, the program is described as departing from holistic perspectives rather than traditional school subjects. The teaching format is described as a version of problem based learning, adapted for upper secondary school, but it is also combined with core elements from project work. The development of skills related to information handling and group work, as well as the development of responsibility for learning, are overarching goals. The use of computers for writing, printing and accessing the Internet, as well as the resources available in the school library, is standard.

The program belongs to a school in a big, old building. Several other upper secondary school programs with more traditional format are also housed in the same school. The rooms in the building are to large extent traditional classrooms. There are also a few larger, open rooms, group rooms, and computer rooms.

The studies are organised in *themes* with duration of 6-7 weeks. These are generally based on goals from the curricula in social studies, history, the natural sciences, religion and Swedish. Two examples of themes are “Africa” and “City Planning”, both investigated in the studies presented here. A few other subjects, like math, English and other languages are generally not included in the themes, and are studied separately. The teachers describe the program as essentially different from other, more traditional, programs. A main reason for this is that

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work is organized in base groups with supervising teachers rather than teacher led classes. The teachers also describe the environment as demanding, since it requires the ability to maintain a large number of social relations. Some of the students describe how the teachers get to know them very well during the course of the program.

There are some recurrences in the way a theme progresses. The work is introduced through a vignette, which can consist of a teacher or an invited guest giving a lecture or telling a personal story with connection to the theme. The vignette can also be a movie, a play or something similar. Immediately after this vignette, the students are to produce a set of questions, intended to guide the work during the theme. The base group does this in a “brainstorming” session, during which the students sit together and associate terms and concepts connected to the theme, using a special technique. After this, the group formulates the shared questions, building on the brainstorming and the ideas stimulated by the vignette.

After the students have written their questions, the supervisor of the base group hands them the theme document, which consists of a list of goals that the students are supposed to reach during the theme. It also contains a set of key concepts and a collection of sources; often textbooks and other printed material as well as Internet links. The key concepts are selected from the subjects that are part of the theme, and also become very important in the work of the students. They are also commonly included in the examination tasks belonging to the theme.

Within the themes, there are often shorter, subordinate tasks with more specific content and material. The “envelope task” described in chapter six is an example of such. There can also be labs and study visits. The main constituent in the students’ work in the themes is however working sessions, in which the aim is to work in base groups and individually. Usually, the teachers also give lectures during the course of the themes. During the working sessions, it is common that teachers sit down with the base groups and asks questions about work. Sometimes, this kind of interactions can stretch over longer periods, and can even be difficult to separate from lectures.

The base groups have regular meetings in which a chair and secretary, who produces a written protocol, is appointed. The base group supervisor is usually also present. During the base group meetings, work and homework is jointly planned. Information from the supervisor and evaluations of the work process are recurrent activities. In the base groups followed here, a frequent issue was

how to divide responsibility for “fika” (coffee and cake or buns), since the group had coffee during the base group meetings.

## Conducting the field study

In the initial part of the field study, it turned out that the students’ activities were highly integrated and continuous. This made it difficult to follow and understand the activities of the students at separate sessions. This meant that following the work of individual base groups throughout whole themes was the best method to generate data, which could be used to interpret the emergent and developing activities and meaning-making of the students. After the first weeks into the main data collection period, it was decided that it was to be continued by following the work of individual base groups.

Initially, the idea was to follow the work of individual students. It however turned out that the activities the students were engaged in when they worked individually was mostly reading, preparing for examinations and other activities which are difficult to follow with ethnographic methods. It would have been possible to let the students continuously comment on what they were doing, or let them write a diary. This would have been considerably more intrusive in the activities of the students, and the data would also be dependent on the self-analysis and descriptions of the student, and was therefore considered less relevant for the purposes of the study. Instead, interviews were conducted with students at the end of the themes.

It also turned out that a lot of the individual work with reading and writing of essays was taking place in other locations than the school (it even happened that the teachers asked me if I knew where the students were during working sessions). Much of the students’ activity in school consisted of discussions in classrooms and in front of computers, which made it practical to follow record them.

During the first weeks of the main data collection, field notes were the primary method for recording observations. However, it was soon visible that multiparty interaction and discussions were a fundamental and constituent part of the schoolwork. Since field notes is not a suitable method to capture details of this kind of human exchange, audio recordings was added to the set of observatory tools.

The main part of the material analysed in this study was collected during a period of four months (two months during spring 2002, and two months during autumn 2002). Before that, a couple of pilot studies were conducted, and afterwards a series of interviews. During the main period of data collection, one

to four hours, up to four days a week were spent in the setting. The goal was to gather data from all joint activities of the base groups follow during school hours. The result is a documentation of the activities and discussions of the work of two base groups, one during theme “Africa”, and one during theme “City Planning”. The material in chapter 6-8 belongs to the theme Africa, while the material in chapter 9 belongs to the theme City Planning. The base group followed throughout theme Africa consists of the students here called Amanda, Nathalie, Nina, Marcina, Lina, Merit and Josefine. The base group followed throughout the theme City Planning consists of the students Nina, Marcina, Samuel, Jesper, Frida, Therese, Petra, Jenny, Sabah and Sandra. Two students (Nina and Marcina) participated in both base groups.

Audio material was mainly recorded during the themes Africa and City Planning. Field notes were written mainly during the same themes, and consist of 400 hand-written A5-pages. Tasks and instructions and material handed out by the teachers were collected. Besides, there are 13 interviews as well as recordings from a previous theme. In addition, the protocols from base group meetings, shared printouts and other material was gathered whenever it was practically possible. The audio material consists of about a hundred tracks of varying length, and the total material is 40 hours. The transcripts are in the empirical chapters presented using parantheses (.) to mark pauses in speech.

Another method, which could have been relevant, is video recording (Erickson, 2006). The practical circumstances on the educational program were however less suitable for this method. In the environment, the students move around, which would have made it difficult to follow them with a camera while writing field notes. It would also be considerably more intrusive to follow the students with a camera. The main reason for not using video recordings, however, is that they were not considered necessary for answering the research questions of this study.

### Analytic considerations

The field study has been inspired by the traditions of school ethnography (Jackson 1969; Wolcott 1999; Bergqvist 1990). The prolonged presence in the setting made it possible to document central and recurring activities. In ethnographic research and research based on field studies however, a continuous selection is also done throughout the study. Regarding this, Wolcott writes:



Ethnographers may say that they are not exactly sure what they are looking for when pressed to divulge what they expect to learn in the course of an inquiry. That answer is always partially true, and I think it becoming for us to preserve all we can of such tentativeness toward what we are observing and what we could make of it. Nonetheless, without some idea of what we are about, we could not proceed with observations at all. Observation is, of necessity, a zero-sum game: the cost of looking at anything is at the expense of looking at something else, or looking elsewhere. (Wolcott, 1999, p. 70)

This means that the empirical material is shaped by the continuous selection, and the premises for the analysis are formed already in this process. In practice, the qualitative analysis in this study can be described as a series of transformations between forms of representation. During the process, recorded passages have been selected and transcribed in various degrees of detail, and field notes have been re-written to narrative text. After a number of such transformations, a text material and graphical depictions of complex processes stretching over long periods of time was produced. This made it possible to overview what Rasmussen (2005) refers to as “trajectories” in the activity of the students. The empirical chapters build on such trajectories and consist of theorized analyses of them. The data in the chapters are for this reason ordered in temporal progression.

The analysis has also been inspired by what Baszanger och Dodier (2004) refers to as *combinatory ethnography*. The idea with this approach to ethnography is to relate observed action in a setting to different rationales and resources, potentially revealing conflicts and tensions. Furthermore, although video was not used, the analytic approach was inspired by the principles of video analysis in current educational research as described by Erickson (2006):

The most interesting current work combines serious attention to subject matter and learning with close attention to the behavioral organization of the social interaction, verbal and nonverbal, within which teaching and learning take place, as well as to the ways in which spoken and written discourse in classrooms relate to social and cultural processes in operation across wide spans of time and social space, beyond the walls of the classroom as well as within it. (Erickson 2006, p. 187)

The object of analysis is also inspired by Engeström’s (1998) conception of a “middle level”, introduced in chapter 2. Engeström traces problems in many educational development programmes to the lack of understanding of the organisational dynamics of schools. He argues for the study of what he calls the middle level, between the formal, organisational structures of schools and classroom practices. In the educational program investigated in this study, several of these “relatively inconspicuous, recurrent, and taken-for-granted” (Engeström, 1998, p. 76) aspects are undergoing changes. The analyses attempt to capture phenomena dependent on the this level, as program can be

understood as a systematic attempt to alter social and communicative ecologies, rather than a result of the application of specific classroom practices.

The point of departure in the analysis has been the activities and interactions of the students and teachers. In the analysis, it turned out that the descriptive language needed to be thoroughly considered. The language available to describe what goes on in schools is shaped by our more or less shared cultural understandings of schooling. As a researcher, one may to some degree need to break with them to establish alternative ways of describing what goes on. To view things differently, an analytic language with the goal of producing descriptions and analyses of relevance to a scientific community, need to be appropriated or developed. Establishing such understandings, allowing for different kind of descriptions and perspectives, may even be considered a fundamental aim of educational research.

Coming to terms with normative perspectives became an important part of the analytic work involved in writing this study. The data was collected through fieldwork, partly inspired by ethnography as developed within social anthropology. Part of the ethnographic process is breaking down initial, “culturally shaped” understandings of what goes on in a setting. In a later phase, the aim is building up, or rather “writing up” (Wolcott, 1991) alternative representations of social and cultural processes. The rationale of this study, and the aims, can be understood in relation to this process.

Theoretically, the initial influence came from various authors and studies in the sociocultural and dialogic literature cited in chapter three. This meant that the focus of observation initially was on the organisation of the social practices and what participants are doing in settings, how they were talking and what resources they used. In this phase, this is a focus typical of ethnography, regardless of perspective. A delimited and specific theoretical-analytical focus was however not enough to carry out productive analyses, as it turned out; uncovering cultural and normative framings of schooling and education also became critical.

To take an example from the analysis, the students are often instructed to do “planning”. This is one of the recurring activities that are integral to the problem based pedagogical model used in the program. Initial analyses concluded that the students often had difficulties meeting the teachers’ demands and coming up with “plans” that could be followed. In this phase of analysis, there was little discrimination between what was a problem to be locally managed for teachers and students, and what could be regarded a problem in analytic terms, or a problem with the teaching method, for that matter.

The students' problems with planning were later in the analysis understood as a response to a situation of considerable complexity, of a kind they had not encountered before. This changed view came after the analysis proceeded through closely following how the difficulties were resolved as work with the task continued and new resources were introduced. While failure to do planning may have been a problem there-and-then for the teachers and students, it was not necessarily a problem from an analytic point of view. Rather, the way the troubles were resolved became analytically interesting, since it revealed something about the social organization and dynamics of the instructional setting. This can be described as a way of distancing the analysis from the normative perspectives of the teachers and students, without becoming ironic or critical, but rather treating their interactions as doing a particular job, which makes the environment what it is. This was a turning point in the analysis.

Later, it also turned out that the meaning of "planning" was not given or obvious to the participants, but under negotiation in relation to specific circumstances. When their work was viewed from this perspective, the students' activities not only made more sense. It also became visible that their actions and reasoning display some rather sophisticated qualities. Students' work appeared less as problems and more as reflections of the *dynamics of the social ecology* (the students are viewed as constituent parts of the ecology). "Student activity", "responsibility", "planning" became less understood as labels of activities, attitudes or actions and more as participant categories that were used to practically organize pedagogic activity and make this kind of schoolwork locally meaningful. Or in the words of Arnseth and Säljö, as means for locally stabilizing participation:

An institutional setting where learning is the main objective is characterized by a multiplicity of meanings, concerns and projects. While some pupils might be interested in acquiring good grades, others might be genuinely interested in the subject matter taught. The organization and structure of educational activities are characterized by a considerable indeterminacy. Actors who come together in a classroom enter it with different sets of interests and expectations. Therefore, the outcome of their activities is the product of locally negotiated and temporarily stabilized forms of participation, where what counts as meaningful, appropriate and accountable action is established locally as the actors 'do' schooling to use ethnomethodological parlance. (Arnseth & Säljö, 2007, p. 427)

This does not mean that failure or success to do or accomplish things is viewed as some kind of illusions. They are core categories in the social and interactively construed reality of the participants. The point is that successes or failures are part of the lived worlds of the participants, as places for *becoming* someone in the environment (Biesta, 2006), and may have life altering consequences when the

students leave school. The analytic question is what the consequences are and how they emerge as patterns in the social and communicative ecology.

The point of analysis as it is developed here is thus not just to describe the activities the participants in the setting are involved in and how they talk about them, but also to describe how they fit, or relate, to the logic of phenomena on what Engeström (1998) calls the “middle level” of the institution. As this concept is understood here, it is a matter of how configurations of activities and resources over time build “patterns that connect” (Bateson, 1979) partly outside the viewpoints of the participants. It will be argued that these patterns ties things together, and contribute to making activities in the environment coherent enough for it to function as educational setting. They also give it certain characteristics - social and educational consequences of this particular way of managing “the ecology of schooling”. Some of these characteristics are elucidated in the final chapter. Gradually, the idea of *social ecology* proved to be useful in both integrating findings from the initial analyses and to give them theoretic coherence, thereby also making them more focused, and thus became an organizing principle and theme of the study.

## Selection of students

The base groups followed in the study were selected since the students were verbally very active, as well as quite engaged in their schoolwork. The activities of the groups followed here were also afterwards described by the students as well-functioning.

It should also be said that the students in the base groups that were followed cannot be considered representative of all students on the program, and not for youth in their age group. Generally, the students who attend the program have actively chosen it. This may mean that they prefer the educational and instructional format the program, which may have consequences for their participation. The results of the study can therefore not in any simple way be generalised to the use of project methods or problem based learning more generally.

The base group in theme Africa consists of girls only, and, in theme City Planning; two boys are part of the rather large base group. This reflects the gender balance in the program, which is dominated by girls. The four students here referred to as Therese, Marcina, Nina and Nathalie figure more than other students in several of the chapters. These are all girls who function rather well in the environment, and several of them have previously studied at primary school

with a profile which likely has prepared them for the kind of tasks that are common on the program.

The case could rather be understood as a “case in point” – a study of students who function relatively well in a well developed instructional setting. This has consequences for how the results can be understood, and their potential implications.

The participation in the base group discussions planning of the two boys Samuel and Jesper are very limited in theme City Planning. This could be interpreted as that they are being marginalized, although there are many other potential explanations. Samuel explained that he felt the theme was to “practical”. Even if there are elements of marginalization involved, it is not necessarily only boys who are less visible, however. Thorne (1993) warns against the possibility of “big man bias” in field studies related to gender in schools. This bias means that conclusions regarding a heterogeneous group of boys are drawn based on the behaviour of dominant individuals. This could naturally apply equally to the girls who talk a lot and are successful in this setting.

## Ethical considerations

Before the start of the data collection, the principal was informed about the aim of the study and the kind of material which were going to be collected. The principal gave permission to proceed with the study. After this, two teams of teachers were informed and asked for permission to conduct the fieldwork in their classes. The teachers were positive and after this the students and their parents were informed about the study.

The schoolwork of the students in the base groups followed here has been studied for extended periods. The students gave their permission to be documented in field notes and audio recordings, and were informed that they were free to chose to be removed from the study at any time, for any reason. No student asked to be removed during the study, but some of the talk documented turned out to contain sensitive information not related to schoolwork. None of this has been transcribed or included in the analyses. The names of the students, teachers, stakeholders in the city and the names of places have been changed.



## CHAPTER 6

### NEGOTIATING THE PREMISES AND FORM FOR GROUP WORK

One of the most common activities for the students on the program is the joint formulation and answering of questions in base groups. The process of answering such questions often involves seeking information, reading and discussing texts and other material with peers in the group, as well as interacting with teachers. This can be considered a fundamental type of educational inquiry. How work with questions is organized and engaged in the students is thus of central interest to this study.

In this chapter, a sequence of discussions about a particular task involving questions, referred to as *the envelopes*, is analysed. The envelope task builds on questions originally formulated by the students during the brain storming session at the beginning of the *Theme Africa*. The teachers gathers the questions written by different base groups and put them, together with newspaper articles and other resources, in envelopes labelled with the names of different African countries. A couple of weeks after the beginning of the theme, these envelopes are handed to the students. The task is not formally assessed, but is presented as a way of helping the students to “structure their learning”, as the teachers describe it.

This task involves an attempt by the teachers to address the premises and form of students work. The students are explicitly instructed not to “gather facts” in this task, but instead be “process oriented”. By the end of the second year, the students have had a lot of previous experience of both producing and answering questions during this upper secondary school program. There is thus a long history of similar activities behind this task. As the studies by Lundh (2011) and Rasmussen (2005) show, this kind of task can be found at different levels in the Scandinavian school systems, and it is highly likely that the students whose work is analyzed here, have experienced this kind of work even before coming to upper secondary school. Moreover, the procedure by which questions are divided up and answered by using information-seeking and copy-paste strategies is a well-rehearsed part of the students’ repertoire for dealing with such tasks.

As in Rasmussen's (2005) study, there is awareness among teachers and students that copy-paste and "fact finding" occur. The envelope task is explicitly designed to be taken on in a different way. The teachers have included a lot of material in each envelope – newspaper articles and other kind of relevant information – in order to counteract that the students spend much time on seeking information on the Internet. Thus, students' typical ways of approaching this kind of task are being challenged. The aim of the analysis is to describe how joint work with questions is organized and negotiated by the students, and what issues become prominent in inquiry as contextualized in this situation.

The data that is presented in transcripts below are mainly from one base group meeting, which lasts about one hour. Additional material from field notes and interviews has been used in the analysis, to enable reference to developments over longer time-scales. The presentation draws on all these types of data.

## Identifying the problem

When the teacher Lena announces the task she says it will be about African countries, and that envelopes will "function as help" to the students, so that they will "know what to look for". She also says that the whole group should join in the work, and that the questions in the envelopes are not supposed to be split up between members. Moreover, she says that the important thing is "process orientation", to discuss from different perspectives, and not to "gather facts". Thus the task is announced with a clear emphasis on form – how the students are supposed to work with it.

When the students open the envelopes, questions about form immediately become central. A few days after the students have opened the first envelope (South Africa) and read the questions, the base group meets to discuss how to deal with the task. They decide to open a second envelope, labelled Zimbabwe. They discover that there are strong similarities with the questions in the South Africa envelope. It is then suggested that all envelopes should be opened to find out if all of them contain similar questions, so that all questions can be sorted and assigned to different base group participants, so that the students "do not have to do the same procedure" over and over, as Marcina describes it. Although they have been recommended by the teachers not to divide up the questions, that is what is planned at this stage. Ida then starts opening more envelopes. In the following excerpt, she reads the questions in the Tanzania envelope aloud:



Excerpt 6:1

- Merit: How was the political development affected by the period of colonialism? What does it look like today? How has the life situation changed from independence onwards? What is exported and imported? How has the trade developed and of what importance is this for the country? How large is the share of the world trade?
- Marcina: But if all countries look like this there's no chance we will make it in time
- Nina: But I don't understand how the teachers think, how bloody much are we supposed to have really?
- Julia: But can't we make an appointment and tell them off?

Marcina's immediate response when hearing the questions is that there is "no chance" the group will have the time to finish the task. Nina questions how the teachers "think", and Julia even suggests that the teachers should be told off. Marcina, Julia and Nina thus immediately and strongly react to the questions. The students thus react quite strongly against working with these questions, although they have themselves been part of producing them, and that several of them (including Nina, Marcina and Julia) express personal interest in African history and politics.

A central question becomes how to manage the envelope task within the time limits and how to do it in a productive way. One of the questions, about colonialism, differs from the questions in the two previous envelopes the students have opened. Though several of the questions the students themselves wrote in the beginning of the theme deal with colonialism and economic development, they do not mention these at all during the discussion about how to take on the envelope task. Part of the background is that there will be no formal examination of the task and it is more or less up to the students to make something productive out of it. Moreover, during the remaining weeks of the theme, three other tasks compete for the students' time: a test of key concepts, an oral exam in natural sciences and the final essay. The students have thus encountered a problem that needs to be resolved, and the rest of the session is devoted to negotiations about how to do this.

## Two rationales

Marcina comes up with a suggestion about how to proceed:

Excerpt 6:2 a

- Marcina: Can't we all study the different countries and then we sit down in group and discuss the questions
- Merit: Yes

## CONTEXTUALIZING INQUIRY

Marcina: And try to come up jointly instead of everybody sitting and writing down a lot of facts that everybody has to sit and read

This is a different kind of method than that previously suggested (to divide the questions between group members), and it also seems to be in line with the teachers' descriptions of the intentions behind the task. Marcina's formulation, however, also throws light on what was an implicit assumption underlying the previous one: that it would involve the production of copy-paste texts and that the resulting documents would be copied and handed out. She also refers to the copy-paste texts that the base group is already working on (which contain information about African countries), suggesting that they prepare for the joint discussion of the questions by reading them. Nina, however, objects to this suggestion. She argues that the material the group has about the countries at this point is just "basic facts", and that they still will have to "sit and search for the answers", since the questions are "much deeper". These distinctions need some additional examination.

Every theme has a temporal organization, what can be referred to as a progression. Fairly early in the theme Africa, for example, the students have to take a test on keywords, which can guarantee them a "pass" grade. This test corresponds to what the students often refer to as "facts". Later during the theme, when more resources have become available, and the students have access to more material, other kinds of reasoning are demanded (also, potentially representing the achievement of higher grades). This is referred to here as "deeper" knowledge. Nina's argument is that the questions in the envelopes require this deeper reasoning, but that they do not yet have access to the material, which would support it. Implicit is that it would, *at this point in the theme*, not be possible to sit down and discuss the questions in the way that Marcina suggests.

Josefine answers by proposing that they limit themselves to three envelopes. Nina, however continues to argue for her position, even claiming that the suggestion she opposes "would be the ideal way, but I do not think we have the time", the point being that the production of copy-paste documents would be less than "ideal" but still save time. Below, it will be argued that this distinction, between an "ideal" way to take on the task (which would be more productive for learning and also be in general correspondence with the teachers' intentions with the task), and the other (corresponding to use of dividing up questions and using copy-paste techniques) reflects two different rationales, both of which the students need to relate to – the *local*, task specific and the *integrative*, theme integrating.

Josefine and Merit come up with further arguments against dividing up the envelopes:

Excerpt 6:2 b

- Josefine But it won't work either if we are to and sit and share and make papers about each thing
- Merit Because I won't read all this (.) or I will definitely read it, but I won't understand everything
- Josefine So it is much better if we like
- Merit Stuff everything in our heads, okey
- Josefine But some questions we can use, like Merit has a lot of sources and Nina you know lots and Nathalie everybody knows something like you sit how has life developed in Africa then everybody has read so we can sit isn't it probably like this so you come up with solutions in the group that is how I mean

Josefine claims that the first suggestion “won't work”, again referring to the production of copy-paste texts as a problem. Merit refers to problems with reading and understanding, first claiming that she “won't read”, which is then toned down to that she will “definitely read but not understand”. The practices associated with the production and use of copy-paste texts is here thus addressed and problematized again. It can also be noted that, in interviews performed after the theme Africa, several of these students describe problems in using copy-paste texts, and claim that they would rather go directly to the sources. In the interview, Josefine says that she “cannot work” in that way, and that she “learns best” from discussions in the base group.

Marcina follows this up, further developing the second suggestion in an interesting way. She is describing, or imitating, a hypothetic situation in which the students, with their respective knowledge, “sit” together, well prepared. She gives examples of hypothetical contributions to the dialogue: “isn't it probably like this”; “how has life developed in Africa”; and “isn't it probably like this”.

Nina, however, still responds with the same argument (after the excerpt): “Yes that's fine but I don't think we have the time”. Josefine then comes with another counter argument. She says it will be “simplistic” when you do everything yourself” and elaborates this with AIDS in different countries as an example, which reflects further previous experiences of working with copy-paste documents. Nina responds by suggesting that they work in pairs to avoid this, introducing a kind of compromise suggestion.

In relation to this, Nina introduces yet another aspect. She points out that the forthcoming essay, which will be the final examination in the theme Africa, either can be written on one occasion in school or as a home assignment over an

extended period of time. She argues that they would not have to read everything before if they choose to write the home assignment. Using the same kind of imitative speech that Marcina does above: “like now I am in Tanzania, yes right here are all the papers I have about Tanzania”, vividly illustrating the amount of papers that will be present. This argument shows how Nina relates work with the envelopes to work with the forthcoming essay. Part of the students’ work is that of sorting material and organizing text to be used. Nina’s connection shows that she sees the possibility of directly using material gathered when working with the envelopes for working with the essay. This, however, presupposes that text is to be produced, rather than oral presentations.

The students’ argumentation can so far be summed up in relation to the two different rationales. There is an agreement (including Nina) that the way the teachers suggest they should work with the envelopes is preferable, even “ideal”, when the task is considered in relation to the local rationale. Several different arguments against dividing up the questions and writing copy/paste texts are presented. Notably, the issue of comprehensibility, and usefulness of copied material, potentially taken out of context, rewritten and/or considerably shortened is brought to light. Moreover, the argument is presented that the problem of material being biased or “one-sided” will be less if the questions are answered in the group. These arguments clearly reflect negative and shared experiences of working with copy-paste texts in base group tasks.

Nina consistently argues for sharing the envelopes and producing texts, in relation to the integrative rationale. When Nina’s argumentation is scrutinized, it is rather clear that she finds that that the envelope task is better integrated *with the rest of the work in the theme* by dividing up the questions, including a consideration of assessment. A main issue is how to manage time, which becomes crucial, not least since the envelope task is not formally part of the assessment in the theme Africa. Another issue regards the material the students have available at the present point in the theme – the students may not have access to the material needed to answer the questions, and will need to search for it anyway. Finally, the production of copy-paste texts would be useful in writing the essay (an argument which suggests that Nina aims at using the material gathered during work with the envelopes in her essay writing, which would save time and effort). An issue that is never articulated, perhaps due to its sensitive nature, is that considerably more time is likely to be spent on individual reading and writing if the envelopes are shared, which brings up the question of how much time should be spent on working collectively, and if this is perceived to be helpful. This seems to be preferred by some of the students but not others.

The exchange of arguments above shows how the students relate to various previous experiences and refers to several rationales in their attempts to agree on a way to proceed. When the discussion continues, the students start to blame the teachers. Nina says “usually we have like lectures from the teachers”. Martina continues: “now we’ve not had any guidance whatsoever”. And Nina follows up: “now we have fifteen envelopes we are going to learn and then write an essay”. Anna even claims: “they are like giving us a headache on purpose”. This *blaming* can be related to the situation that the teachers have clearly specified the demands for the envelopes, corresponding to the local rationale, while it is unclear how it relates to the rest of the tasks in the theme, in relation to the integrative rationale. The students do not manage to resolve this argument themselves, and decide to get the teacher Erik, to ask him what to do.

### Questioning the task

The teacher Erik is available for questions, and the students call him to the room. The sequence of about 20 turns that follows his arrival will now be analysed. Amanda starts by asking about what he has in mind with the envelope task:

Excerpt 6:3 a

- Amanda    What are we to do with it then, did you have in mind that we like split it between us then
- Erik        No that maybe we do not think that is so good for you to do really, right
- Josefine    Then we will not make it in time
- Erik        But the religion question which really is a kind of question it looks in a way (.) there you could actually split it like I can check a little now I do not remember but I think Algeria is involved and possibly Nigeria you could say I look a little on Nigeria what kind of religions are can be found there and this thing with tribal religions and so if it is practiced there and then I look at Algeria then you can split it on two or three since it can be reasonable and then you come back to the group and say yes I have found that Algeria have several tribal religions and as far as I understand it works like this there and someone else says the same about Nigeria

Erik makes clear that the teachers do not think sharing the questions is a good idea. Josefine immediately objects, bringing up the question of time. It can also be noted that she takes up Nina’s argument from the preceding discussion between the students, an argument that then was used *against* Josefine – a detail that will be further discussed below.

Erik responds to Josefine’s objection about the time available by giving quite a detailed description of how the work can be “reasonably” distributed. He uses the same kind of imitative speech that Marcina and Nina use above, describing the actions and perspectives of students in a hypothetical comparison of religions in Algeria and Nigeria. By mimicking the voices of students in a hypothetical situation in this way, he is instructing the students by demonstrating what kinds of reasoning can be expected.

As described in the introduction to this chapter, the teachers presented the envelope task from the beginning as being about “process orientation” rather than “gathering facts”. The idea behind the envelope task is to avoid a situation where students individually search for information without presenting the results verbally in the group. Erik offers a suggestion in which the students first decide on a common investigation of religions in two different countries, and then return to present what they have found out. There is no mention in his instruction of copy-paste texts. He thus describes a way of dividing up the questions, which would still include group interaction in the task. It could also be noted that the solution Erik suggests has strong similarities with the second, “ideal” suggestion about how to take on the task that the students discussed before contacting him.

Excerpt 6:3 b

- Nina            But like that is what we have done but the thing is that this is like the papers from one envelope, it is like eight envelopes (.) that is quite a lot to read
- Josefine        Yes you cannot sit
- Nina            And then add pure facts about the countries

Presumably, by her claims that they “have done” what Erik describes, Nina points to the compromise that she suggested which involved the dividing up the questions between couples of students working together. Her point seems to be that Erik’s suggestion does not provide any significantly new options for practically organizing work with the task, apart from the two suggestions already formulated (which Erik is unaware of).

Regardless of how Nina’s response here is to be interpreted, it is clear that she points out the amount of material found in one envelope (a bundle of newspaper articles and other printed resources, prepared by the teachers), underscoring that there are “eight” of them, alluding to the amount of work this represents. She adds that they also have “pure facts” about countries. This is the material that has already been gathered in copy-paste texts, together with descriptions of key concepts. That there is thus a lot material to manage at this

point in the theme is a new argument. Erik responds by continuing to describe how to approach the task:

Excerpt 6:3 c

- Erik Yes but can you summarize this?  
 Nina But then it becomes superficial then it suddenly becomes some kind of  
 Erik No it does not become superficial  
 Nina Sure, it does  
 Erik Noo like if we think like this, Nina you have got out this huge lot about religions in South Africa, let's say that, or it might be Amanda, can you summarize its essence? Because otherwise it always looks like a huge amount if you take it all  
 Nina? Yes but  
 Erik But it is not certain  
 Nina But it is not exactly factual if we say that, yes, South Africa has many tribal religions ehm so do many other African countries  
 Several (laughs)  
 Nina And then we move on to politics  
 Josefine? You want us to go into depth

Erik introduces the idea of “summarizing” and a discussion of whether this will be a “superficial” treatment of the issues follows. Erik attempts to develop his solution through an example including the concept “essence”, but instead of responding in his terms, Nina refers back to Erik’s previous descriptions of how to work with the religion question, parodying them.

Nina thus uses the same formulations, and in this way directly connects to Erik’s previous description of the hypothetical situation in which the students were presenting results of studies of tribal religions. By changing her voice she manages to make this reference with a rather ironic twist, making several of the other students laugh. She continues in the imitative mode of speech: “then we move on to politics”, to underscore how little information would be shared in her illustration of this hypothetical situation. Josefine follows up, emphatically claiming that “you”, the teachers, “want us to go into depth”. This is a rather complex argumentative exchange in which the relationship between the task and the underlying goals of the activity (as a form of enquiry) is questioned by Nina. Her claim is that the task does not provide the conditions necessary for dealing with the questions in a productive way.

Erik, however, keeps developing the example, first by going back to talking about Algeria and Nigeria from the original example:

Excerpt 6:3 d

- Erik           No but what I wonder then is what expressions do they take if you have found something about it in Algeria or Nigeria or South Africa, this about the tribal religions, what is typical for them?
- Merit           But then it becomes one person that gets to sit with all the religion and that is nothing you
- Josefine       Learn from
- Erik           No, but if those who've looked at the religions there bring some form of idea back to the group about South Africa, and then like are there any particular expressions of tribal religion in South Africa that differs from what you found in Nigeria? Or do they match, are they similar? But then you get a synthesis, yes tribal religions apparently have this this is typical for tribal religions, these things, certain rituals (.) that is the important thing to bring out, nothing else

Erik is attempting to identify what is "typical" as a way of "summarizing" complex information. His explanations deal with how to reason while working with the questions. Merit and Josefine object again, assuming a situation in which "one person" works with the questions (presumably writing copy-paste texts). This question addresses the practical circumstances, and how they would potentially affect the value of the work with the questions.

After Merit's and Josefine's objections, Erik shifts to using Nina's example of South Africa. Although they do not reach any agreement in these descriptions of hypothetical situations, this is an example of how Erik and the students on several occasions relate to and re-use specific details in each other's expressions.

A related aspect, briefly noted above, is that at the start of the exchange with Erik, Marcina takes up Nina's argument against the second suggestion concerning the lack of time, in spite of having promoted it before the teacher arrived. Taking the contrary position in comparison with her argument with Nina demonstrates that the students are not simply trying to win the argument, but rather to explore possible solutions, assessing the "situation in terms of what could (or should) be done", in Van Oers (1998) formulation. This negotiation does not end up in any confirmed agreement. Through the exchange, however, it becomes clarified that it is OK for the students to split the questions in the envelope task.

At the end of the meeting, Erik goes back to describing how the students can make their presentations. The students bring up potential problems with this, like what happens if those responsible for certain questions do not "understand". They are also worried that it will take a lot of time to contact and receive lectures from the responsible teachers, indicating that they are not comfortable with - or used to - this way of working. Erik responds to these



issues, affirming that the problems can be solved. The meeting with Erik ends when Marie proposes that they split the group into pairs, and distribute questions of similar character between them. Every pair will be responsible for answering questions and presenting them to the rest of the group through a lecture and written documents. Erik does not disagree with this suggestion, and leaves the room. After Erik has left, the students discuss the teachers again. Nina says: "In the first grade, we had some lectures and some working sessions, now we have no lectures and they must notice that the results drop, cause we don't know what and where to find out".

The students divide up the questions, and a few weeks later they present the results of their work to each other. It involves both copy-paste texts and oral presentations. Some excerpts from these lectures are analysed in the next chapter.

## Discussion

Although these students have a personal interest in international economic and political issues, and they have been part of formulating the questions in the envelopes, they still display a lot of resistance towards the envelope task. This situation needs to be understood against the background of the teachers actively and consciously attempting to arrange a task which invites another kind of engagement than sharing out sub-tasks and using a work process based on preparing copy/paste papers and presentations. As a consequence, the students become involved in a rather detailed exchange about how the work can be tackled. The premises for the task become the topic of negotiation.

On the one hand arguments regarding what is productive for learning are articulated. The students themselves describe and articulate the limitations of working by dividing questions and using copy-paste texts, in relation to what have been called the local rationale. It is clear from the arguments that several students in the base group (including Nina, who still promotes it) do not find it particularly productive (based on practical experience). In the students' arguments for splitting the questions, practical circumstances like the time available are brought up.

On the other hand, the relationship between the envelope task and other elements of the theme, notably the essay that is the final task, are considered. The students' concerns are (and, probably, to some extent need to be) the practical organization and how the envelopes fit with other tasks, particularly the essay, which is assessed in relation to what has been referred to as the integrative rationale. They attempt to relate the envelope task to more or less implicit,

temporal and practical organization principles for work, intertwined with their understanding of assessment.

It has hence been demonstrated that argumentation and negotiation about the premises and form for work with questions become a main ingredient in the process of working with the questions. What, then, are the consequences of repeated involvement in this kind of discussion? The exchanges analyzed above involve argument regarding what is a reasonable way of doing things, sometimes using rather specific examples and building on previous experience. Such exchanges are potentially of consequence for the students' meaning-making and how the activity develops, over longer time scales. Regarding the role of these negotiations in the development of the activity, Schatzki's analysis of the practice concept is of relevance:

[...] the actors involved [in a practice] will share understandings about what they are doing and about the relations among their activities, for example, that and why particular actions are appropriate responses to others. Their agreement, however, need only be partial. Participants in a practice can have conflicting interpretations of it." (Schatzki, 1995, p. 148)

The students' ability to organize inquiry is a central resource for the organization of the program, which explains why the teachers are so concerned with the envelope task. The educational environment is based on the students' participation in developing the forms for their own work.

The relationship between the local and the integrative rationales described above can be considered as an example of an attempt to negotiate such "conflicting interpretations". The students are put in a situation in which they need to come up with a plan for how to jointly take on the task, in a particular way. They need, to some degree, to share understandings of the rationale behind the task to jointly organize work with it. This means that they spend a lot of time and energy on resolving this kind of potential conflict and jointly agreeing on interpretations corresponding to shared understandings. In this case it also involves questioning the teachers' design of the task in relation to the object of activity on the program.

In the negotiations about how to take on the task, the students need to articulate arguments where relevant perspectives are taken on what constitutes a productive way of approaching the task. The students try different arguments and perspectives (and even change positions during the discussion) to find rationales for their choices, and the teacher provides instructions and gives examples to clarify what are relevant ways of working with tasks like this. In this sense, through taking part in these discussions, the students come to participate in the use of what could be referred to as a meta-language for organizing

learning. This language involves reflections on practice in which the students make particular distinctions, come up with examples and conceptualize previous experiences. They use words like “deep knowledge” and “facts”, talking about information and how to work with it. There are also several examples here of imitative speech (from both the teacher and students), which is a specific way of describing how working and reasoning together can be done.

In conclusion then, a discursive space in which particular distinctions, perspectives and concepts become meaningful, relevant and through this learnable, is jointly upheld. Though the students may not work with the envelope task as intended by the teachers, the discussions analysed in this chapter are likely to contribute to the development of repertoires for approaching and reasoning about their work, potentially transforming their habits over long time (Biesta, 2009; Lemke 2000).



## CHAPTER 7

### ARGUMENTATION AND NARRATIVE CONSTRUCTION

An important premise in the organisation of the setting is to open room for students' enquiry and sense-making. Their interpretative work is promoted by different means and methods, such as the initial construction of questions. An important part of the theme Africa is also, in line with this, that the students are encouraged to take a stand. Moreover, they are introduced to materials that describe different aspects of African economy and politics through the envelope task. Through this framing, an argumentative approach to the curricular content is encouraged, and the students in the particular base group followed here become involved in multiple, extended argumentative exchanges about the economy and politics of African countries.

In the analysis of the students' argumentation, a prominent aspect turned out to be the bringing into play of *narratives* and the conceptualisations, metaphors and normative positions that they inhere. The aim of this chapter is thus to investigate thus the role of narratives in the students argumentation and sense making related to Africa as well as in their exchanges with the teachers during the theme Africa. What particular narratives become prominent in the argumentation and discussions during the theme Africa? How are they brought to bear by students and teachers in the discourse, and how are their interactions (reciprocally) shaped by this?

A point of departure is the view presented by Bruner (1991), that reality construction in terms of narrative principles have both a cultural aspect – as systems of narrative discourse, and a mental aspect, as narrative “powers” that are exercised or expressed in or through the aforementioned cultural aspect. Narrative processes are in this sense both cultural and part of the organisation of individual experience. They are not fixed entities, but become part of the organization of the structure of human experience in particular instances or activity settings through negotiation and argumentation. These are the processes that will be analyzed below.

## A core narrative

It will be argued here that a particular narrative is central in the students' way of approaching and understanding the content of the theme Africa. This narrative will be referred to as the "post colonial guilt narrative", or simply the "guilt narrative". This narrative is understood as a cultural story, which shapes understandings of relations between African countries and the West.

In the base group, several of the students are interested in the agenda of NGO's like Attac, and display personal involvement and engagement in the issues treated in the theme Africa (Lilja & Mäkitalo, 2009). Some of them express strong opinions related to these issues, and other students report in interviews after the end of the theme that they felt there could be problems for this reason. Already during the brain storming session in the beginning of the theme Africa, some of the students position themselves in relation to the content of the theme. Four out of the six questions that are collectively produced address relations between Africa and Western countries (as collective agents):

- How has the colonization by the West affected Africa, for example the contact between tribes?
- How is the West exploiting Africa today?
- How have religion and traditions been affected by the West?
- How does the developed world affect the economic situation of the developing countries?

One of the students exclaims "let's depict globalisation so it is something all negative", and other talks about inviting representatives from Attac. It could be added that the project method invites students to bring their own interests and perspectives through their questions. Moreover, later during the theme the students are suggested to express their own views of solutions to problems in Africa and to take a stand in the essay that concludes the theme. In this way, openings for students' interests and perspectives are made part of the institutional practice. As will be demonstrated below, the teachers become involved in considerable efforts to address questions and statements by students that can be related to the guilt narrative. It is, however, never addressed or described directly.

The first occasion in the empirical material where a teacher addresses the students' statements takes place the day before the initial test of the key concepts. The students ask Agnes for a lecture about the keywords colonialism and imperialism. She comes to the group room in which the base group is working. Rather than lecturing, however, Agnes starts questioning the students.

At one point, she asks Julia to recapitulate an earlier formulation about the key concepts Imperialism and Colonialism:

## Excerpt 7:1 a

- Agnes        Julia she put it so well you put it so well what is the difference?  
 Julia:        No but that imperialism is just the will to take over and colonialism is to do it in practice  
 Nina         Aha  
 Agnes        Very good Julia very good difference that is exactly what it is about  
                What were the consequences of this taking over of other economies?  
 Nina -        You hinder their development (.) their independence  
 Julia?        Exactly  
 Marcina:     They were sucked dry  
 Julia?        Exactly

In the question-answer sequence, Agnes brings up Julia's description of the difference between imperialism and colonialism, making clear that it is a legitimate way of defining the concepts in this setting. She follows up with a new question regarding the consequences of colonialism, or more specifically "the taking over of other economies". Nina and Marcina, backed up by other students say that the development was "hindered" and that they were "sucked dry". These descriptions are coproduced and supported by several of the students. They describe the central theme, or breach (Bruner, 1991) in the "guilt narrative", that during colonialism, the population in the colonies were (collectively) victims of exploitation. Of central importance is that countries (both the colonial powers and the colonies) are talked about as *collective agents* with (at least potential) intentional states.

Agnes responds to these descriptions:

## Excerpt 7:1 b

- Agnes        That is rather shallow like the developing countries could you get a little deeper in it like in what way like how?  
 Nina-        They got no chance to build their own industry or their own like  
 Josefina     Own economy  
 Julia        They were like exploited and they took all resources themselves like so they got nothing  
 Nina        So now when they are independent they have no knowledge or such  
 Agnes        Yes it leads to that the industry becomes one-sided that you force them to produce certain commodities (.) what more did it involve?

In contrast to the confirmation of Julia's description of the difference between imperialism and colonialism above, she calls Nina's and Marcina's description of

the consequences of colonialism “rather shallow”, and she asks if they can get “deeper”. The descriptions are rejected, or at least not accepted. She here starts complicating the framework of the narrative that the students have introduced.

In response, Josefina, Julia and Nina fill each other in and come up with further suggestions, all still within the framework of the guilt narrative, also pointing to developments after the colonial times - the colonies were exploited, “got nothing”, and had “no chance to build their own industry”. Here, the normativeness in Bruner’s (1991) terminology, implicit in the guilt narrative is hinted at. The moral of the description is that the *developed world stands in collective moral and financial debt to the colonies*.

After this, Agnes seemingly gives her confirmation but also reformulates what has been said, adding that the development made the industry “one-sided”. It should be noted that she never makes the same descriptions as the students do. She also asks for further descriptions. When no one of the students continues, she asks another question:

Excerpt 7:1 c

- Agnes      Were there any African groups that thought this was positive?  
 Julia      It can’t have been, could it? Do you think?  
 Nina      It probably did  
 Julia      It did?  
 Nina      There were probably some rich people who made something out of it  
 Merit      And those who those who converted to christianity  
 Nina      Some blacks maybe got some good jobs like leaders

Agnes’s question is interesting, since it questions a premise in the guilt narrative – that the population of (colonial) Africa the can be understood as collective victims. Interestingly, Julia responds by immediately saying that it could not be possible, asking the others for confirmation. This could be understood in relation to the organisation of agency and intentionality inherent the narrative – if the colonies are understood as a collective being exploited, it is expected that something positive for them could not emerge from it. Nina, however, starts suggesting African groups that could have benefit from colonialism, exploring the direction that is opened up by Agnes’s question. Agnes confirms this:



## Excerpt 7:1 d

Agnes        And that you recognize from history when you like talk about the roman empire when they had many colonies and provinces they saw to that there were possibilities to recieve good positions so there were of course certain groups who made profit out of it that the Europeans formed power alliances with and you need to think about whose story am I telling here?

Julia        Mm

She makes a parallel with the Roman Empire, introducing the concept “power alliance”. In this way, the premises for the guilt narrative that the students are relating to here are complicated. Interestingly, she ends by urging the students to ask “whose” history they are telling – making the narrative relative, opening up for different stories, addressing the narrative organisation of historical descriptions. As will be shown, however, the guilt narrative recurs in the students’ discussion of other issues later in the theme work. Although it is complicated in this excerpt, it does not mean that it is discarded.

The postcolonial guilt narrative, including its implications, could be formulated like this: During colonialism, the population in the colonies was (collectively) victims of exploitation. Therefore, the population in the developed world stands in collective moral and financial debt. Implicitly, this calls for extraordinary, collective measures to reinstate balance and justice, until this is achieved, the exploitation continues. In Desrées essay finished at the end of the theme, the following story is found in the conclusion:

It was we who colonized Africa and exploited the people and let them slave for us. Today they strive in the same way by selling us cheap raw materials that we then refine and sell back expensively. You can see the same power structures now as then, the white man over the black. North lives on the starvation of South. Is this a conscious strategy from our side? (Excerpt from Nathalie’s essay)

This is the guilt narrative expressed in condensed form. Collective exploitation is connected to race, and though the pronoun “we”, the reader, as well as the author are included (yet Sweden was not a notable colonial power). This “we” can be understood in relation to identity construction. As Bruner points out, “our individual autobiographies [...] depend on being placed within a continuity provided by a constructed and shared social history in which we locate our Selves and our individual continuities”. (Bruner, 1991, p. 20)

Moreover, the final question, whether there is a conscious strategy from “our” side, is coherent with Bruner’s idea that intentional states offer resources for interpretation of the events that take place in narratives. If a collective agency

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is intentional states, it only makes sense to ask whether the exploitation it is taking part in is "conscious" (although it is not a single actor). At least some of the processes involved in narrative constructions described by Bruner seem to be active in this case.

In relation to the next series of excerpts, it will further be argued that this narrative is part of a framework active when the students collaboratively makes sense of the role of particular institutions, or "actors", on the international political and financial arena. This series is taken from a base group discussion right before the test, for which the students are preparing themselves together.

All students except Amanda are present, and the supervisor Martha has left the group. Amanda starts asking about WTO (which is one of the keywords that may be asked about on the test):

### Excerpt 7:2 a

- Amanda But can I ask something about WTO  
Nathalie But shall I tell WTO how it really is  
Amanda No but can I ask my question first  
Marcina (laugh)  
Amanda Since they lending money and so they are  
Nathalie But they have no money  
Julia Not they  
Nina But then it is not WTO  
Nathalie? Then it is the world Bank and IMF  
Nina And IMF  
Nathalie And IMF do it in more in emergency cases the world bank is like supposed to be a bank of commerce  
Nina A little more long-term  
Marcina WTO is just promoting free trade like sees to  
Amanda Yes yes and sees to that it is on the same terms  
Several Yees

Amanda asks if she can ask a question about WTO and starts stating the condition that they are lending money, a project that is interrupted by Nathalie before the question is formulated. Nathalie first proposes that she shall tell, "how it really is", and when Amanda insists and starts formulating the question, she explains that WTO has no money. Nina and Marcina then join and jointly develop the description of WTO, IMF, and the World Bank together with Nathalie. In the end, Amanda connects to the joint explanation, and the exchange is confirmed with a "yees" from several of the students.

In this exchange, the students produce a joint version of the relationship between WTO, IMF and the World Bank. Through this they check and confirm each other's use of terminology and its references. Nathalie's first response, however, in which she asks to tell, "how it really is", points to another agenda, re-actualised when Amanda follows up by asking if WTO always is "good":

## Excerpt 7:2 b

- Amanda    So WTO is always good?  
 Nathalie    Noooo!  
 Lina        No!  
 Marcina    (laugh)  
 Nathalie    It is only Japan, Sweden, like the rich countries that decide like the developing countries have no power whatsoever  
 Marcina    No having duties supports the developing countries  
 Amanda    So free trade is in reality actually bad?  
 Marcina    No it is good in some cases  
 Lina        (laugh) it depends  
 Amanda    But is free trade like market economy?  
 Nathalie    Is it the same, isn't it?  
 Amanda    It is (.) good  
 Nathalie    Yes  
 Marcina    Market economy is based on that you are to have free trade like all the way  
 Marcina    That it is to be liberal and

Amanda's questioning statement about whether WTO is good evokes strong reactions from several other group members. Nathalie is quick to start a rather developed argumentation describing major problems with WTO. Amanda's questions can be understood as a strategy for approaching the key concepts and relating them to other available understandings, but it also a way of trying the normative framing of the content against her peers in the group. Through this is also an opening for positioning or identity work created.

While Nathalie in this exchange is describing problems associated with WTO, Marcina and Lina are moderating the use of Amanda's good-bad dichotomy through expressions like "in some cases", or "it depends", which opens up for further explanations. Below, Amanda is following up her good-bad inquiry:

Excerpt 7:2 c

- Amanda But is it only good for like rich countries?  
 Marcina It may be good for the developing countries in some cases  
 Nina But not if they have someone who is competing  
 Marcina No exactly  
 Nathalie Sweden has an internal market we have already built our industry then we have like a good foundation we can like sell out as well but if you take a country like Nicaragua that doesn't have any kind of internal market then it is really difficult for them or the Philippines they cannot sell out just like that and take away their duties and start selling to us in Europe because then they get really poor and like the farmers there cannot even afford eating themselves (.) that's what I think but it is only my  
 Marcina Yes but they need their customs to  
 Josefina? Yes  
 Marcina Expand  
 Amanda Trade barriers right?  
 Flera Mm  
 Nathalie Tariffs

Nathalie then provides an explanation to why free trade could be problematic. This explanation is interesting for several reasons. It is brought into the discussion as a specification of when free trade is not good for developing countries. It both involves the concepts “internal market”, “duties” and a causal claim about financial processes that in some way, not explained in detail, leads to people in Nicaragua and Philippines ending up “really poor”. In this sense, it is of direct relevance to the curricular content dealt with in the theme Africa. It is (at least in principle) a verifiable claim. Notably, this claim also fits well with, and potentially strengthens, the guilt narrative. It probably originates from Attac or some other NGO, and is likely brought in from pages on the web (Lilja & Mäkitalo, 2009). How free trade is fitted in the narrative understanding of Africa is here jointly tried out.

Nathalie ends by saying that this is what she “thinks” and that it is “only my” positioning the statement as a pointed view rather than as something to be taken as verifiable statement or given truth in this setting. It contrasts with her initial announcement of telling, “how it really is”. Nathalie’s line of reasoning is, however, introduced through the comments by Nina and Marcina, who jointly introduce “competition” as something negative for developing countries. Nathalie is not alone in problematizing free trade. Her last statement is understandable in relation to the negotiation of local moral orders, connected to

identity construction. She is trying a description she apparently knows well from another setting in the school environment, but are not sure how it will be taken up or if it will be relevant. Rejecting international financial institutions is a way of demonstrating alternative political awareness.

Marcina's follows up with adding that they need "customs" which Amanda connects to "trade barriers" which is confirmed by Nathalie's specification "tariffs" (one of the keywords). The explanation has been interwoven with descriptions of several of the keywords. It is not at this point clear how Amanda or the silent students position themselves in relation to this argument. The students know each other well, and are to some degree familiar with the others outlook. In an interview after the theme Africa, one of the students reported that she initially felt there might be problems because of potentially diverging views in the base group, but that it turned out to be a very productive cooperation in the end. This episode demonstrates how potentially controversial descriptions are articulated simultaneously with, and seamlessly integrated in, joint discussion and defining of the key concepts.

### Moral orders and telling stories

In this section, the students' dealings with another narrative that figures in both written sources and in teachers' talk, is described. The narrative, which describes the role of Robert Mugabe in the political development of Zimbabwe, is here referred to as the "freedom fighter becomes corrupt dictator" narrative, or simply the "corruption narrative". The name builds on the categories used by the students and the teacher in the excerpts.

The first time the corruption narrative occurs in the data is during a discussion about the test of the key words in the beginning of the theme. Erik is involved in a debate with the students regarding the responsibility for the current financial situation in Africa. The discussion touches upon to the question of guilt and responsibility for the situation, leading to an exchange regarding who is to blame for the situation in Zimbabwe:

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### Excerpt 7:3 a

- Erik But everything is not our fault there is a lot of corruption in those countries
- Nathalie Yes but corruption
- Marcina Yes but they have come out of (.) that they have been treated unfairly
- Erik But how are we to understand him Mugabe like he has not come out of this
- Nathalie Yes he has okay (.) everything he says he does not dare anything now only because blacks are to vote for him because it is from him the blacks get their rights they have been oppressed for hundreds of year so of course he does not dare to do anything now
- Erik Yes but if you then if you then
- Nathalie Then he loses the support

When Erik brings up the question of how to understand corruption, Marcina and Nathalie relates this issue to historically unfair treatment, connected to the colonial past. They are at turns attempting to construe corruption as a consequence of colonialism. When Erik specifies his argument by taking Robert Mugabe as an example, Nathalie responds by portraying him as being caught in a dilemma originally caused by colonialism – if he changes what he “does”, he will lose the support of the population, who are long time victims of oppression. The argument is in line with the postcolonial guilt narrative. In this framework, problems in Africa are generally understood as consequences of colonialism. The root cause of the situation in Zimbabwe is the historical, unfair treatment of the original population by colonial powers or the West in general in more recent history.

The exchange takes a more dramatic turn when Erik rather strongly marks distance from this framing of Robert Mugabe and his role in Zimbabwe:

### Excerpt 7:3 b

- Marcina But he was in the resistance movement to
- Erik But that i do not understand cause why would you defend Mugabe like he is as ill
- Nathalie No of course i do not defend him
- Erik He is as ill a system like what he does you cannot blame anything else than his autocratic ways I think today (.) like I have a hard time thinking because
- Marcina But wasn't he part of the resistance movement during the seventies on the goody party
- Erik Yes but he was the leader of the freedom movement
- Marcina Wasn't he the resistance to the freedom movement

The question “why would you defend Mugabe” is a discursive move which implicitly portrays Nathalie’s and Marcina’s arguments above as defences for Mugabe. Through this, Erik positions Marcina and Nathalie as potential supporters of Mugabe, putting them in a morally dubious position. Interestingly, Nathalie immediately responds by distancing herself from this description, even emphasising it by adding “of course”, which implies that she is clear on that this position is problematic in relation to the moral orders (Luckmann, 1997) of the setting. The negative moral agency of Mugabe is a presupposition in the exchange.

Erik continues by ascribing the problem of corruption to the “autocratic ways” of Mugabe, using the pronoun “I” to presenting it as a point of view, however clearly preferred in this situation. Marcina’s question about the resistance leads to a further narrative about the development in Zimbabwe:

Excerpt 7:3 c

Erik        No he was the leader of the freedom movement there he was leader of the party that came out of the liberation movement there he was leader for many many years and they had a positive financial development then he suddenly it gets into his head to stay in power and staying in power it always use to get to that the country gets into financial distress suddenly because democracy and other things are choked and that often due to there being a crackpot in the lead and it is easy to dupe people right? I think he has duped people that I do not think one can take blame for really

This description is a condensed expression of what is here referred to as the “freedom fighter becomes corrupt dictator” narrative. It departs from a situation in which Mugabe had positive intentional and consequently moral agency, as leader of the liberation movement and subsequently as a constructive leader. The breach, in Bruner’s (1991) terminology, happens when he decides to stay in power (presented as an intentional decision, in line with narrative sense-making). This leads to a negative moral agency, pulling the development in the whole country down with him.

The last sentence, after Erik has finished narrating, is of particular interest to the analysis here: “I do not think one can take blame for really”. This is here understood as being directed towards the students’ previous framing of responsibility for the situation in Zimbabwe in terms of the guilt narrative (corruption understood as result of international injustices). What Erik does in the exchanges above is providing an alternative narrative framing, which is presented in a way that makes clear that the normativeness of the postcolonial guilt narrative preferably should be under-ordered the corruption narrative, and not the other way around as the students had it first. The guilt narrative is thus

not directly questioned, but related to another narrative that places the responsibility in relation to agency and intentionality within the country.

How narratives frame the situation becomes directly related to moral positioning in relation to the local moral orders of the classroom. The relationship between the guilt narrative and the corruption narrative is, however, of considerably wider cultural significance, since their respective normativeness entails dramatically different consequences for the cultural understanding of guilt and responsibility in the narrative construction of Africa. Bruner argues that, on a cultural scale, "the perpetual construction and reconstruction of the past provide precisely the forms of canonicity that permit us to recognize when a breach has occurred and how it might be interpreted." (Bruner, 1991, p. 20) The corruption narrative also recurs in other media that the students deal with during the theme, notably the Swedish National Encyclopedia. In the following series of excerpts, how the students jointly re-tell the corruption narrative as presented in the National Encyclopedia, will consequently be analysed.

About a week after the exchange analysed above, the students in the base group are presenting material they have gathered to answer the questions in the Envelope task to each other, in what they call "mini lectures". In the series of excerpts analysed here, Marcina and Nina are presenting their answer to the question "What is the political situation in Zimbabwe like today as compared to the past?". Marcina and Nina have distributed an in-between-document on which material from the Swedish National Encyclopaedia among other sources is gathered, and below they are going through the material with the other base group members. The excerpt begins with descriptions of events that took place in 1980 (the proclamation of the Republic of Zimbabwe):

Excerpt 7:4 a

- |         |  |
|---------|--|
| Marcina | Zimbabwe became a republic but it was Mugabe who was prime minister I think  |
| Nina    | Yes he had like tremendous power   |
| Marcina | Yeah and he forced the people to low material standard to get money for rebuilding the country after the war like I guess it was pretty demolished there |
| Merit   | Because here Mugabe was still like a leader praised by the whole world   |
| Nina    | Yes like he  |
| Marcina | He was?  |
| Merit   | Yes he was really popular among all like SIDA organisations and such and so that he was a really good leader   |
| Nina    | Oh (.) but that was  |
| Marcina | He was freedom fighter or?   |



Nina It was like he had to it was not like he took the money from the people but it was like that he had high taxes to build schools and healthcare and then they did not have a lot of money left so it was quite logical

Marcina Yes

Nina So it was not some kind of dictator act he did

Marcina and Nina are reporting their findings, describing the actions and status of Robert Mugabe in the early days of the Republic of Zimbabwe. Merit then breaks in and points out that he was “praised by the whole world”, “popular” and considered a “really good leader”. This puts the potentially negative words “tremendous power” and “forced” in a new context, something that alters the moral status of his agency.

From a narrative point of view, what is accomplished here is significant. Merit points out something that is a central aspect of the corruption narrative – that it departs from a situation in which Mugabe has a positive intentionality and consequently positive moral agency. Marcina, who is partly responsible for the presentation, seems surprised by this new information and asks if he was a “freedom fighter” (which is also a reference to a narrative role), while Nina modifies the description by adding that it was not a matter of him taking money from the people, but rather raising taxes for good causes. Consequently, it was not “some kind of dictator act”, but “quite logical”, formulations that align the re-telling with the corruption narrative – the fall is yet to come, and he has not yet taken on the intentionality of a dictator.

Marcina continues by providing arguments against this re-telling, referring to the original formulation found in the National Encyclopaedia (NE):

Excerpt 7:4 b

Marcina But it says like this forced on NE and that sounds very negative

Nina Yes but it does not say Mugabe forced but like the measures he took to like forced the people

Marcina Yes that's true it did (.) ye no but it said like (.) yes but then he was popular during this time he was like the freedom fighter then

It should be noted that, although Marcina was present when Erik told the same story above, she is at first reluctant to change her mind. She refers to a specific formulation in the National Encyclopedia, that Mugabe “forced” the people. When Nina comes up with another formulation of what the National Encyclopedia says, with consequences for the intentionality that can be ascribed to the actor, she however accepts the new element in the narrative and again uses the label “freedom fighter”. The re-ordering of the story is in this sense a joint accomplishment between Marcina, Merit and Nina. Marcina’s description of the merging of the two parties ZANU and ZAPU into the Zimbabwe African

National Union–Patriotic Front (ZANU-PF)<sup>1</sup> marks the breach and the second part of the narrative:

Excerpt 7:4 c

- Marcina And 87 Mugabe a new constitution that he got more power and that the quote for white members in the parliament disappeared and he everything that had with like (.) eh and in the freedom struggle he has a big promise that he would give back all Africans all land and soil from the white but he borrowed a lot of money from for example great Britain but it was interrupted when it was discovered that the members of the government took the best parts of the land for themselves
- Nina Then he starts flipping out here
- Marcina Yes (laugh) now it was
- Linda Now it goes downwards he he
- Marcina Yes and 89 ZANU and ZAPU merged

Here the corruption theme is introduced, and the breach of the narrative is crystallised in Nina’s comment, “now it starts flipping out here”. Marcina’s description of the merging of the two parties ZANU and ZAPU into the Zimbabwe African National Union–Patriotic Front (ZANU-PF) ends the narrative, strongly emphasizing the moral bankruptcy of Mugabe’s rule:

Excerpt 7:4 d

- Marcina And they were merged and it was a tremendously powerful party so there were no political opposition at all the people had no freedom but it was like only they who governed and in the parliament elections year 2000 only 65 per cent voted and 96 it was only 32 per cent actually

The students here re-tell the narrative, not as under-ordered the guilt narrative, but independently, with contributions from several base group members. They re-tell the same basic story that was told by Erik, jointly aligning the narrative elements. The sequence can be understood as a way for the base group to present and potentially coordinate views a potentially controversial issue, in relation to various opinions in the base group. It can also, of course, be understood as demonstrating narrative learning – how a rather disparate statistics and names of different parties are organised in a figure, giving a meaningful answer to the question “What is the political situation in Zimbabwe like today as compared to the past?”.

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<sup>1</sup> The two parties ZANU (Zimbabwe African National Union) and ZAPU (Zimbabwe African People’s Union) were originally formed out of two branches of the nationalist movement, predating the independence.

## Putting arguments together

The guilt narrative and the corruption narrative are aspects of an argumentative co-text that is built throughout the theme, through discussions in the base group, exchanges with teachers and engagement with literature. In this section, a situation is analysed in which different arguments that have been used in other settings during the theme are brought up in an extended discussion with a teacher. The students try different arguments in the discussion with a teacher, who in turn responds to these arguments.

There is a tension during the theme between the argumentative framing and dealing with other aspects of the curricular content, particularly the financial concepts and that are part of the key concepts of the theme, and associated theory. The task for the students is both to appropriate concepts and theories from economy and to take part in argumentation regarding international political agendas that relate to the same concepts. As will be demonstrated, this is not a straightforward process, as the teachers' descriptions of consequences of economic theory opposes the consequences that (at least some of) the students draw from the guilt narrative when it comes to free trade.

The background to the situation analysed in this section is that the students have asked for a lecture on globalization. This request is met, and Sara gives a presentation about globalization for the base group towards the end of the theme, before the students start working with the essay. On a overhead slide, Sara presents what she calls three different perspectives on globalization: "1) Globalization is a trap!; 2) Globalisation is a myth; and 3) the Middle Way." These three perspectives are later included in the essays that the students write, indicating that the lecture is taken up as a significant part of the theme by the students.

After the initial presentation, a discussion follows, largely driven by the students' questions. Arguments that have been introduced earlier, both in the work of the base group and in exchanges with teachers, are brought up. A central question is the role of markets and free trade when it comes to evening out divides. The setup for this question comes from Nathalie:

## CONTEXTUALIZING INQUIRY

### Excerpt 7:5 a

- Nathalie But is that speculations or do like all G8 countries know that it is like that they like talk about that we in the West feed on the others
- Sara Considering that, like the world there are limited resources in the world we know that right, we have a certain number of litres of freshwater we have a certain number of litres of oil there are a certain number of square meters arable land so to speak, what comes out of it is to suffice to the population of the whole world and today it does not
- Nathalie But shouldn't that be like a pretty big issue in that case instead of free trade maybe?
- Sara Yes but the thing with free trade is that you say it is the tool for resource equalization

Nathalie's question introduces the issue whether it is a speculation or not that "we in the West feed on the others". Sara's answer ends in a no and Nathalie's follow-up question presupposes an opposition between free trade and the correction of this situation. Sara then points out that the relation between free trade and resource equalisation is important, reconnecting to the terminology introduced in her first turn. The argument is that in terms of economic theory, the introduction of the concept of balance between resources and needs should be understood as a matter of distribution, rather than a matter of some countries "feeding" on others, as in the guilt narrative. In answering Nathalie's initial question, she thus also attempts to introduce a different framing, indicating that the issue needs to be understood in a particular way. The students, however, question the idea that free trade works as an equalizer:

### Excerpt 7:5 b

- Marcina Do they believe that? G8 countries are not that many
- Sara Yes or WTO most big strong financial actors that free trade is like the way to go through free trade you solve the problem you who have read properly for the test know about absolute advantages comparative advantages, and if all then are free to trade with each other and those who are best on one thing yes they devote themselves to that and those who are less bad one one thing they devote themselves to that so to speak because then we maintain the resources in the best way
- Julia But that is how it has not become isn't it?
- Marcina But isn't you to invest before they you are to begin with the free trade?
- Merit But there are different like (inaudible)

In response to Marcina's follow up question, Sara again argues in terms of economic theory, specifically making a connection between resources and relative and comparative advantages. The formulation "you who have read properly for the test know about absolute advantages comparative advantages" implies that a preferred, or at least relevant, way to frame the problem would be

in terms of these economic concepts. This can be understood as an attempt to connect the question to the curricular content intended to be treated during the theme. The attempt at explaining how free trade can be a solution to inequalities is immediately questioned by Julia, and Marcina introduces the idea that “investment” should precede free trade. The students do not accept this answer but instead start presenting counter arguments and alternative suggestion. This is followed by Nathalie’s alternative formulation, introducing the concept “internal market”:

Excerpt 7:5 c

- Nathalie     But I mean this internal market isn't it the most important first like we (have?) free trade if they are to sell directly or if they are to be allowed to build up like we have done get to produce within our own countries first and then start trading with others
- Sara           There are also different theories about what one can see is that if you a country goes out like they have had projects with direct international trade for example where the World Bank IMF demands free trade and market orientation of the economy which tends to that when the state is forced to sell its businesses then it is not the citizens that can afford to buy but instead they come from abroad and in that way the country is almost even more exploited

Nathalie’s introduction of the concept of establishing an internal market includes a comparison between the conditions for “we” and “they”, again addressing injustices between generic “us” and poor countries. The core argument is that domestic markets should somehow be protected, as will be further discussed below. Sara’s response to this is to first describe it as relative to “different theories”, then also describing problematic consequences of policy decisions by IMF and the World Bank. The situation that Sara describes, with IMF imposing free trade as a condition for financial support, is anticipated in Nathalie’s formulation. This kind of argument has been articulated before. Sara thus agrees that there are problematic consequences associated with the free trade policy. It is, however, also important to note that she does not support the suggestion about building up “internal markets”. She continues, again referring to different theories:

## CONTEXTUALIZING INQUIRY

### Excerpt 7:5 d

- Sara        Eh but there are always different theories and it is difficult to say in general that you are first to build an internal market and then go out in world trade it is very very difficult because if we have a country that has very good conditions for growing coffee so to speak then the people cannot live out of coffee you need to trade with each other and the question is then who to trade with
- Merit        But like Uganda that has 90 per cent of its export in coffee, if the crop fails it is done for them

The reference to “different theories” in this context opens for a critique of the idea of internal markets. Sara also uses a double “very” to emphasise the difficulties with Nathalie’s suggestion. Again, Sara refers to trade relations, in line with comparative and relative advantages. This is likely another attempt to relate the discussion to the key concepts and to frame the problem in terms of economic theory.

Interestingly, Merit’s following comment points out a problem with the specialisation on raw materials implicit in Sara’s example, and can hence be understood as a critique of Sara’s refutation of Nathalie’s suggestion about internal markets. The students thus jointly try various arguments against Sara’s position. Merit points to potential problematic consequences of the specialisation resulting from the organisation of production based on the theory of absolute advantages in a free trade setting. Both the teachers, Erik and Agnes, have on other occasions referred to this type of argument. They have recognized that specialisation on the production of raw materials may be problematic (though not as an argument against free trade). The argument is probably known by several of the students and also presented in a book that several students use. Here it is articulated by Merit, as part of (a partly) shared repertoire of arguments built up during the theme.

Sara responds by relating Merit’s argument to the Swedish export situation. The students are still not satisfied with the answers, however:

### Excerpt 7:5 e

- Josefine    But how do they think like how do they think like for example imf and them when they think that free trade is the way to even out divides like how do they think because the developing countries are so badly equipped so if they enter a wild free trade with the developed world they like they have worse conditions to like produce things and have no built out own industry so they can compete

Josefine returns to the issue of the role of free trade in “evening out divides”, this time introducing a new metaphor in which trade is likened to competition, which is one of the basic metaphors used to describe trading relations. In this

particular framing, it is used to argue that the conditions in the developing countries make them unfit for “competition”, which implicitly will maintain the inequalities that free trade is supposed to eradicate. This is an example of the recurrent idea in the students’ argumentation, that before trading with (Western) countries, something has to be done to even out the injustices – (unspecified) investments or the creation of internal markets. These are also the moral implications of the guilt narrative as discussed above, suggesting that it provides an important framing for the students’ engagement with, and sense making of, the economic theories that are part of the curriculum.

In response, Sara consequently asks what the alternative to free trade would be – potentially addressing the students’ appeal for extraordinary measures. Nathalie then further develops her argumentation, supported by Josefine:

Excerpt 7:5 f

- Sara But what would be the alternative to free trade?  
 Nathalie That you build an internal market first`  
 Josefine? Yes exactly  
 Nathalie Say for example brazil they sell all their fruit abroad and we buy theirs but like with that production they do not get any for themselves, but they sell out everything to us (do not want it anyway?) and because they do not have those kind of resources that they can like plant and grow as much themselves like so then the result is that the good food they sell out instead of their own market or build up and invest in their own country first

Here, Nathalie articulates the same argument that was brought up by her in the discussion of the key concepts before the test, with probable background in the argumentation of the Attac movement, as described above. It is tried in this context, with a teacher present. Interestingly, the students’ argumentation in this part of the discussion is ended with Marcina’s statement that if all countries were alike, then free trade would be excellent. This argument is the exact opposite to Sara’s initial explanation of free trade as “the tool for resource equalization”:

Excerpt 7:5 g

- Marcina? But if all countries were alike from the beginning then free trade would be excellent  
 Flera Mm  
 Marcina But that is not the case now  
 Sara But you dont compete on the same terms, but you see the problem we have a very like political level in this to create the conditions for building up an internal market they must have political stability in the country

Sara answers by pointing to domestic political stability as a premise for building up internal markets. Thus, she consequently presents counterarguments to the theory that internal markets could be organised to solve the problem of inequalities. In this way, Sara also counteracts framing the problems in line with the guilt narrative, given the premise that domestic political stability in a country cannot be imposed from the outside. During this discussion, no student displays any signs of accepting framing the equality problem in the terms Marcina suggests.

The tension between the argumentative framing and the engagement with curricular content does not mean the students are not taking up her arguments or learn about economic theory. The point is that the guilt narrative shapes the argumentative context, and that the students jointly articulate counterarguments against many of the arguments based on economic theories of trade relations that Sara presents. Still, the students do not come up with any alternative solutions that Sara considers legitimate. The image implicit in her description is that economies are already involved in a complex web of exchange relationships, and that the extraordinary measures in line with the guilt narrative are not applicable in relation to this conception of the world economy.

## Discussion

This section presents a discussion of two themes: “Narratives in the communicative ecology” and “Developmental economics and the macroecology of narratives”.

### **Narratives in the communicative ecology**

The guilt narrative is in several ways nourished through the students’ interactions with each other. It is already actualized when the students construe questions at the beginning of the theme. In this sense, it is part of their experience, and both the questions and much of the work they are involved in during the theme can be understood as authentic in this sense. At the same time, argumentation within the framework of the narrative is something the teachers continuously address. In the three different sections of the chapter, three different ways in which the teachers relate to the students argumentation in terms of the narrative are demonstrated. In this section, these three different ways to relate will here be further discussed in relation to the institutional setting in the school and its hybrid nature of it.

In the first case, Agnes addresses a premise in the guilt narrative – that the population of (colonial) Africa the can be understood as collective victims –



introducing the concept of “power alliance”. When the students produce descriptions of colonialism within the framework of the post colonial guilt narrative, she calls their understanding “superficial”, and asks the students to go “deeper”. This can be described as an attempt to complicate the narrative, or more specifically, the agency in the narrative. That exploitation was part of colonialism is not rejected, but she introduces a more complex relationship between victims and oppressors. Through this, the normativeness of the story is also potentially changed. Who is guilty is made less clear. Agnes also ends by asking the students to question whose history they are telling, thus addressing the narrative organisation of historical descriptions.

In the second case, Erik argues with the students about how the origins or causes of the corruption of Robert Mugabe are to be understood. In this case, the corruption part in the narrative is not questioned. Nathalie, however, argues that Mugabe “does not dare anything now only because blacks are to vote for him because it is from him the blacks get their rights they have been oppressed for hundreds of year so of course he does not dare to do anything now”. Nathalie, who is then positioned as defending Mugabe, demonstrates that she “of course” does not defend him, which demonstrates that she is aware of the strongly negative agency of Mugabe in relation the local moral orders. What is at stake in this situation can be said to be the moral consequences of using the guilt narrative to frame corruption narrative, in other words the relationship between the normativeness of the two narratives.

Both these examples – but in particular the second one – can be related to the democratic mission of schools. The clarification of moral orders in a given society is one of the core tasks of schooling. In relation to this, it is relevant to note that Nathalie during an interview at the end of the theme remarks that she, when writing the discussion in her essay “felt like the worst kind of communist”. Here, it is argued that her experience can be related to the moral orders that are part of the encounters between teachers and students. In the essay, he presents a rather elaborate argumentation against the application of market economy and free trade, in many ways consistent with the analysis of the guilt narrative as presented in this chapter. Nathalie, who identifies herself with the agenda of NGOs, moves between different settings, in a “complex ecology of narrative learning” (Goodson, Biesta, Tedder & Adair 2010). In this way ecologies of persons become intertwined with curricula.

In the third case, the students ask Sara about the rationale behind the free trade policy of international financial institutions. Sara attempts to answer the questions by framing the issue of resource equalization in terms of economic

theory, which is also part of the curriculum to be dealt with during the theme. She implicitly describes the economies of African countries as involved in a web of trade relationships, using the concepts absolute and comparative advantages to describe the function of the free trade. The students on the other hand, bring up several different problems resulting from free trade, previously articulated on different occasions throughout the theme and described in the literature. Both teachers and students have brought them up, but in this situation, the students use them to argue against the validity of Sara's explanations, and frame the problems in terms of the guilt narrative. Market economy policies are in this way framed by the students in terms of the guilt narrative, as aspects of a continued oppression. The students suggest alternatives to free trade in terms of creating "internal markets". They do not recognize the web of trade relationships that is the point of departure for Sara's explanation in terms of economic theory, and she consistently rejects the alternatives. She, however, recognizes several of the problematic consequences of market economy that the students bring up. Towards the end of the exchange, she addresses the morale implicit in the guilt narrative: that extraordinary economic or political measures should be employed by former colonial countries to even out global inequalities with roots in the colonial times. Sara instead points to domestic political stability as a premise for the development of an internal market, something that cannot be imposed from outside.

The analysis made here is that Sara attempts to explain the arguments in favour of free trade policies in terms of economic theory, explicitly referring to the key concepts that the students by this time are supposed to be acquainted with. Economic theory and applications of it in terms of free trade policy are however not distinguished in the argumentation. The students, on their hand, are able to point out negative consequences. During the theme (and, in some cases, before), a set of arguments against international markets has been gathered, and in the exchange with Sara the students jointly apply them. This does not mean that all the students have similar convictions, or even that they have any consistent views. The situation is part of a discursive arena on which arguments can be tried out in practical argumentation with a teacher, a sanctioned representative of the institution. But it also actualises questions regarding the constitution of this discursive arena.

A condition of the discussion between Sara and the students is possibly that the curricular content that has been treated during the theme is not rich enough to provide a basis or common ground in the more complex argumentation that the discussion touches upon. The scientific discussion that the arguments derive

from has historically developed within the academic discipline of development economics. In this sense, the task the students take on in the theme Africa points far beyond the economic theory that is part of the economics in the formal curricular content.

A common theme in these three cases is that the teachers address assumptions, metaphors and consequences connected to the guilt narrative. From the ecological viewpoint, the narrative provides a structure for teaching and exchanges of meaning, in discursive activities that are to a significant degree driven by the students' arguments and explanations. When the guilt narrative is used as a resource in the students meaning-making, the teachers respond to it, which makes it a reference point in the coordination of meaning-making between teachers and students throughout the theme. The model for teaching is argumentative – while the activities are organized in a way that opens up for, allows and even promotes argumentation, both teachers and students needs to argue for points of view.

The students, then, have multiple opportunities to try arguments in discussions with teachers. In this way, their framing of the content becomes available to, and available for response from the teachers, who become resources in the evaluation of reasoning. This is possibly a fundamental function in the educational process, and some examples of such processes have been described above. There is however other significant processes related to the students' participation taking place. The case study demonstrates that the argumentative setting does not simply involve problems of understanding, but also the students on a personal level. A form of participation is invited to, in which personal viewpoints and identity become involved and potentially put at stake. To Nathalie in particular, the guilt narrative seems to be of great personal relevance for Nathalie. It becomes the target of counter arguments and alternative viewpoints in the argumentation with the teachers. In this sense it is also a very "authentic" activity.

An alternative reading of Nathalie's comment "I felt like the worst kind of communist" during the writing of the discussion in her essay can be made in these terms. The comment can be understood as a reflection of a process during which her reasoning becomes visible to herself in a news setting and thereby open to reflection. Bruner describes the argumentative rather than "objective" framing as a premise for "reaching of a higher ground":

I think it follows from what I have said that the language of education, if it is to be an invitation to reflection and culture creating, cannot be the so-called uncontaminated language of fact and “objectivity.” It must express stance and must invite counter-stance and in this process leave place for reflection, for metacognition. It is this that permits one to reach a higher ground, this process of objectifying in language or image what one has thought then turning around on it and reconsidering it. (Bruner, 1986, p. 129)

Although the guilt narrative is of relevance for several of the other students’ argumentation, and shows up in various ways the essays they write in the end, Nathalie is the one that seems to be most identified with it. Amanda, for example, can be said to be testing the viewpoints of her peers in the series of excerpts where she asks whether WTO and free trade is good or bad, demonstrating a much less fixed relationship to it. In the base group discussions, narratives become a means for testing and coordinating arguments and descriptions. In the situation where they jointly re-tell the corruption narrative, views a potentially controversial issue are coordinated. In Bruner’s words:

One of the principal ways in which we work "mentally" in common, I would want to argue, is by the process of joint narrative accrual. Even our individual autobiographies, as I have argued elsewhere, depend on being placed within a continuity provided by a constructed and shared social history in which we locate our Selves and our individual continuities. It is a sense of belonging to this canonical past that permits us to form our own narratives of deviation while maintaining complicity with the canon. (Bruner, 1991 p. 20)

In this way, there are strong ties between the positioning of individual identities and the joint telling and re-telling of narratives. A further interesting tension is found between the argumentation in the joint settings and the individual writing of the essay – the students do not need to be jointly responsible for the product of the theme, as the essay allows for a personal take on the potentially controversial issues. There is room to articulate arguments in a different way in the individual texts than it may be in the group setting. In relation to this it can be noted that Amanda, in the interview in the end of the theme says that she was worried that the group would not be able to agree due to the difference in opinions, but that it turned out to be an example of group work that worked very well.

### **Developmental economics and the macroecology of narratives**

A conclusion which could be drawn from the analysis in this chapter is that narrative understanding is something that hinders the learning of the students, and that it should be replaced by formal models and more complex

argumentation. This is not the interpretation made here. Rather, the point of departure is Bruner's idea that we are embedded in narratives like fish in water, and narrative understanding is part of science as well as mundane settings.

Entering into a scientific discourse may mean replacing, developing or specifying narratives that are overly generalizing in relation to empirical results, formal models or concepts. A short historical comment of the students' involvement with the guilt narrative is therefore of relevance here. During the 1950s, a tradition referred to as dependence theory in the literature of developmental economics started to develop, encompassing a broad range of thinking with liberal, Marxist and systems theoretical roots (Ferraro, 2008). The common denominator of dependence theories is the role prescribed to "external forces", shaping poor countries living standards: "According to these theorists, rich countries are able to exploit developing countries by using their political power to take advantage of the developing countries' resources, as was the case during colonialism" (Secondi, 2008, p. 6). This description of the core theme in dependence theory is a short version of the guilt narrative. Dependence theory has had a profound influence outside the scientific field, not least in radical NGOs like Attac.

Many problems with dependency theory have been identified (see Krueger, 2008), but Secondi notes that "there is no doubt that dependency theories played a role in helping development economics broaden its scope and focus more on issues of inequality and especially on the role of historical and political factors in explaining development" (Secondi, 2006, p. 6). This highlights the authenticity of the students' positioning and argumentation in the classroom setting.



## CHAPTER 8

### DISCURSIVE TOOLS AND REASONING IN THE ORGANIZATION OF TEXT PRODUCTION

The students on the program encounter different kinds of examination formats and means of assessment, as they move through the different themes. During the theme Africa, they have already participated in oral exams as well as a written test, as described in previous chapters. The format of the main examination in the theme Africa is however essay writing, or more specifically, writing an expository essay with the title "Why are some countries poor and others rich?". It is supposed to be a rather extensive text, and towards the end of the theme, it is given more and more attention from students and teachers.

In the essay, the students are supposed to describe the causes of the economic situation in Africa, but they are also supposed to include explanations of the key concepts found on the theme document (concepts that have already been partly examined through a written test). Furthermore, they are supposed to end the essay with suggestions for solutions to the problems in Africa, or come up with other personal conclusions. In the essay, the students are thus supposed to demonstrate integration of meaning developed during previous activities in the theme. In the terminology of Prior (2009), the essay it is part of a "productive chain of discourse", or "multimodal chains of genre" with many potential connections in the socio-semiotic ecology the students are part of.

In instructional literature on project work, it is often suggested that varying types of examinations should be used. The relationship between the means of examination and the other elements of project work is, however, often left quite undiscussed, and there are few studies that analyse it. Åberg, Mäkitalo and Säljö (2010) is one exception. In this study, the authors analyse work in a student project in which the final examination is a panel debate. The authors demonstrate how the students, long before the actual debate, anticipate the debate format of the examination. In the preceding work, an argumentative dimension becomes prominent. The students consider whether particular information will strengthen their cause or not, and thus also anticipate potential counterarguments.

The aim of this chapter is to investigate how the student approach and set up the work of writing the essay, to scrutinize the tools and resources they use, and describe how this shapes their meaning-making process in relation to the issues that they are to write about. The empirical material involves the teachers' instructions to the students and interviews conducted during the writing process. Writing is, in line with Prior's (2009) discussion, subsequently not conceived as "frozen" or "otherworldly", somehow divorced from oral communication, but as an activity intertwined with talk about content and the essay as a task.

The concepts *genre* and *discursive tools* are of particular relevance to this analysis. In the perspective adopted by Bazerman (2009), there are close connections between thinking, problem-solving and the appropriation of genres, including specific concepts and discursive tools:

Students learn how to produce the kinds of thoughts appropriate to the assigned genres, using the concepts and discursive tools expected in the genres, and they learn how to locate their findings, analysis, and thought within the communal project of academic learning. [...] genres identify a problem space for the developing writer to work in as well as provide the form of the solution the writer seeks and particular tools useful in the solution. Taking up the challenge of a genre casts you into the problem space and the typified structures and practices of the genre provide the means of solution. (Bazerman 2009, p. 291)

The idea here is thus that the essay regarded as a genre is not simply a set of conventions for reporting the results of an inquiry, but a sophisticated cultural resource for dealing with the problems involved in selecting, relating and coherently presenting material as part of institutional communicative procedures (including assessment). Through the task, the students are expected to demonstrate their grasp and understanding of both the content that has been dealt with during the theme, and the essay as a genre.

The material analysed here consists of field notes, recordings of the students' group discussions and interviews. In the interviews, the eight students in the base group were asked about how they worked with the essays, as well as the structure and organisation of their texts. They were conducted during the final days of work with the essay and contain rather elaborate stories about the writing process. They also brought the texts they were working on. In this chapter, selected excerpts from three interviews as well as one series of excerpts from the students' preparations for essay writing are presented. The analysis attempts to throw light on how the students describe work in the problem space that the genre provides, and the concepts and terminology they use.

A methodological assumption made is that the way the students talk about their writing is related to their appropriation of the genre. The interest here is therefore not so much whether the students descriptions give a "true"



representation of their work, as what they emphasise, and how they present it. The concepts and perspectives they use are part of their repertoire of conceptual and discursive tools. It is assumed that the way they are able to formulate themselves about their writing will have consequences for their actual process of writing.

## Introducing the essay

The teachers Agnes and Martha formally introduce the essay through a whole-class lecture. During their presentations, a set of recommendations and instructions are given. On the whiteboard, Agnes writes three general sections that the students are to include in the essay: Introduction, exposition, and ending. In the further instructions for the writing, a several points regarding the disposition of the text are emphasised. A document describing the expository essay is handed out, and the students are also recommended to reflect on their dispositions together. Agnes and Martha particularly stress the asking of questions and the organisation of answers. The title of the essay is supposed to be the question “why are some people rich while others are poor”? Agnes gives a series of examples of sub-questions relevant treat in the essay:

many countries are highly indebted in Africa (.) how can these debts be explained?  
 why did they come about? when did they come about? why have the countries not  
 managed to come from these debts? how have the debts affected their development?  
 how did they influence wether they became rich or poor? these are tremendously  
 important questions to ask

The asking of questions is hence introduced as the point of departure for the writing, and as a key to the work with the essay. In a wider perspective, the asking of questions is a recurring theme in the students’ activity on the program, not just in essay writing, but other kinds of tasks and situations, notably in the brain storming sessions at the beginning of the themes. While questions have a central role in the educational ideology influencing the general pedagogical deign of the program, they are also interesting as resources that potentially structure discourse. A question generally needs to be followed by an answer, and the point of asking questions in an essay is to set up a track for a reader to follow. Questions in the expository essay can in the words of Bazerman (2009), consequently be said to be a means to “identify a problem space for the developing writer”.

The form of the answer to the question then becomes of importance. In Agnes’s and Martha’s introduction to the essay writing, Agnes describes models for structuring answers. She describes a model based on what she refers to as

“problem fields” as relevant to the particular essay in the theme Africa. She explains:

before we leave the debt issue, we can consider that it also has historical explanations  
(.) there are economic, political explanations to this (.) therefore it is better to identify  
a problem because then you weave together both political maybe religious and  
economic aspects and this debt issue probably then become such a problem field of  
course

Here, Agnes describes how the students preferably are to structure their answers. She suggests the use of what is referred to as “problem fields” rather than structuring it in terms of academic subjects. Such instructions on how to structure the text are simultaneously instructions on how to organise ways of presenting material and lines of reasoning. Agnes’s instructions become more specific via the use of examples:

Another field you can look at when it comes to analysis here that could be interesting  
to look at is maintenance (.) what do maintenance look like in Tanzania? Why does  
maintenance look like that? And in what way do the maintenance contribute to the  
economic problems of the country? And then you have already shown in part on the  
test that you can show that some countries are producing raw material to a high  
degree and products to low degree (.) and this is connected to the colonial era  
imperialism history again you can bring in here

Through this example of a “problem field”, specific questions and their answers are outlined. Given the role of questions and answers in structuring the presentation of material in the essay, such examples can also be keys to the types and levels of reasoning relevant to the essay as educational task, potentially providing “the form of the solution the writer seeks”, as Bazerman (2009) formulates it. Given the length of the essay (no less than five pages), instructions like these potentially give a frame for how much material can be fitted into the text, and the type of reasoning that is relevant.

Finally, Agnes describes how use the theories and concepts:

and then you can show what maintenance look like in this country you look now we  
have Tanzania as an example what do maintenance look like? Why does it look like  
that and why is it difficult to get out of the problems with this type of maintenance? (.)  
what you are able to do is to use many economic theories concepts it becomes natural  
to reconnect this to maintenance.

The instructions on how to structure the text are simultaneously instructions on how to organise ways of presenting material and lines of reasoning. The writing is thus not separable from how the students deal with the material in the theme Africa, as will be demonstrated in the analysis below.

## Approaching writing

The various written tasks during the theme Africa, including the essay, are causes of much concern for the students. In the following excerpt, the students are discussing the writing of the essay. This happens during a working session during which they are mainly preparing themselves for an oral exam in religion and the natural sciences. No teacher is present. Just before the excerpt begins, Julia reports that the teacher Erik has told her that they are supposed not to include their “own opinions” in the main part of the essay, but instead include them in the end of the text. All students are not hearing this, which leads to Amanda’s first statement:

Excerpt 8:1 a

- |          |  |
|----------|--|
| Amanda   | What do you mean opinions you are to have those in the end first it has to be like objective   |
| Flera    | Yeess  |
| Marcin   | That was   |
| Julia    | That was precisely what i said   |
| Amanda   | Yes okay   |
| Nathalie | But what is like objective (.) you do not know   |
| Flera    | Yeah   |
| Marcina  | It is really difficult because you can like  |
| Julia    | Have we done it the way they think   |
| Marcina  | But it is so difficult cause you can like this is what has made them poor then you bring forth lots what you think yourself and then it is not objective |

Nathalie’s response on Amanda and the others changes the focus of the discussion through her questioning of the distinction objective text versus own views, which up until then has been an unquestioned distinction in the conversation. Julia has reported what the teacher Erik has said, and Nathalie’s response can be seen as a questioning of the frames for this particular task, but also as a more encompassing epistemological question. Marcin’s comments support and develops Nathalie’s question further by presenting an example: “this is what has made them poor then you bring forth lots what you think yourself and then it is not objective”, which is directly related to the main question supposed to be dealt with in the essay. The question also shows how the essay as a genre becomes a problem for the students. They need to consider different sources and kinds of material, and in this form some kind of judgement that can be more or less grounded, and in some way position themselves in relation to it:

## CONTEXTUALIZING INQUIRY

### Excerpt 8:1 b

- Nina But then you write like this you can believe (.) or there are people who claim or some interests
- Marcina Yes but (.) like some think that
- Amanda Or other means that
- Nina Or as we read in and then a nifty little reference so bla bla bla
- Marcina Bla bla bla (imitating voice)
- Flera (laughter)
- Nina So you can say the but most important of all I think nothing (ironic voice)
- Amanda (laugh) but most important of everything (.) I am impartial
- Marcina But it is so easy to lean against it to bring forth all the errors of the one side

In this excerpt, six different suggestions of formulations that can be used to present and refer to arguments or statements are mentioned. They are all discursive means, or resources, for distancing oneself from the view that is presented, common in argumentative or expository text genres. Nina, Amanda and Marcina are filling in each other's statements, which suggests they share or have similar experiences of working with this kind of problems.

Nina's tone of voice is ironic. Marcina imitates Nina ("bla bla bla") in a somewhat annoyed voice. Possibly, Marcina reacts towards Nina's ironic take on a problem that Marcina finds genuinely difficult. Nina, however, does this in a rather elegant way, and the exchange can be said to reflect a developed ability to manage and relate to material with different agendas.

After this, Nina changes her voice again, and confirms Marcina's formulation of another difficulty in the writing:

### Excerpt 8:1 c

- Nina Yes
- Amanda But Erik did say when he was here just now that you are to make this obligatory own views-ending
- Nina I never come to any conclusion there because i sit or it is these you can also yes
- Marcina That is what I do too
- Amanda Ha ha I always end my essays like this
- Nina Like with a question
- Amanda Yes! (laugh) the truth is out there
- Josefine Yes!

Nina is continuing (in a non-ironic voice) by saying that she never "comes to any conclusion", a theme Marcina, Josefine and Amanda also take part in developing (this continues after the end of the excerpt). Most students in the base group

take part in the joint discussion and description of how the question of objectivity can be managed and the excerpts demonstrate practical work with objectivity, as a matter to be handled within the students' activity.

In the excerpt, the students portray that they may not reach any clear-cut conclusion as a problem. It could be argued, however, that many more complex issues has precisely this multi-faceted character and cannot be "resolved". Interestingly, the essay task seems to be set up in a way that reflects this. What is here referred to as "objectivity" can be understood as a demand to present all relevant material and considerations according to one's own judgement. Then there is room for "personal conclusions", which can be written on other premises. This distinction is crucial to mastering academic genres, and in the discussion above indicates how the students struggle to relate to it in their writing process. It can be described as elements in an on-going training in presenting and explaining complex issues that develop throughout the program. Similar themes are also recurring in the interviews with the students, which are analysed in the following sections.

## Structuring the presentation

Nina's description of her work contains several aspects that recur in the other interviews. She begins by describing how she takes on the problems of Africa:

Excerpt 8:2 a

- |        |  |
|--------|--|
| Patrik | Can you tell just a little about what the content looks like what you have written how you plan to organise it like what are your thoughts about it? and what have you chosen to include and to exclude? |
| Nina   | Yes  |
| Patrik | What have you planned for the structure and so   |
| Nina   | For my part I organise it so that I identify the different problems there are, like it's a major problem that the developing countries do not come out of being producers of raw materials               |
| Patrik | Mm   |
| Nina   | So I write the background like all the way from the colonial era like how the pattern was laid down then and then that it lives on and that they   |

Nina "identifies" the production of raw materials as a problem, with background in the colonial times that developing countries do not come out of. Agnes's instructions for the essay, in which she presented the identification of "problem fields" is reflected in this description. Nina's description is hence in line with the teachers recommended approach. Nina's description of her writing process, however, soon comes to problems:

## CONTEXTUALIZING INQUIRY

### Excerpt 8:2 b

Nina It is so difficult with this theme because everything it is impossible to begin somewhere to explain something you have to like everything depends on everything and it is all connected and then I try to pull out the historical causes and then (.) that it lives on now and then that they don't have enough money to get out of the debt crisis everything comes in

Nina describes it as difficult to “begin somewhere”, since all is “connected”. Nina here refers to the relations between phenomena described in the different subjects: history, economy etc.<sup>2</sup>. Nina describes how she struggles with organising the text in the way suggested by the teachers, or perhaps rather how she attempts to apply the general instructions given to the specific task at hand. The general directions regarding the structure of need to be applied to the particular issues that the students choose to discuss, and work has to be done to organise the presentation to something coherent in which particular conditions, events and their consequences are described and presented to the reader.

Nina continues about the content in her essay:

### Excerpt 8:2 c

Nina But at least that is what I am trying to do anyway like I identify the different problems there are and then take in social science and like historical aspects and if there are religious I take them in

Patrik Mm

Nina And then discuss around it and try to come up with a solution or what to say that is what I have planned to do (.) so far I have written about that they only produce raw material and then a little about that they cannot enter the world market and so and with all the tolls and such that there are

Patrik Mm

Nina And then I wrote about something more but I forgot what it was (laugh) but I have like not tied it together in any way yet it is not an essay like it is just loose sections yet with like facts it does not have the form of an essay so far

Nina here talks about how she “identifies problems”, “discusses” and attempts to bring in different “aspects” in terms of different subjects. Such words, that describe discursive properties of the text, are common in the students talk about their writing. Many of them, for example “explaining” are also common in talk in other situations on the program. Many of them would qualify as what Olson

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<sup>2</sup> The academic subjects that form the curriculum on the program are to be interconnected, but they are still understood and assessed as separate subjects.

and Astington calls “words for thinking with” (Olson & Astington, 1990, p. 717), as they provide metalinguistic tools for reasoning.

In the last turn, Nina explains that the text does not yet have the form of an essay, since it is not yet consists of loose sections with “facts”, in need of being “tied together”. Facts are thus contrasted with another quality in the text – the “form of an essay”.<sup>3</sup> Taken together, these descriptions and distinctions point to how the teachers’ instructions and the essay, as text genre, become resources as well as objects of concern in the students’ writing. It is here argued that this demonstrates how the students are in the process of appropriating perspectives that belong to the genre, and the concepts that accompany them.

Nina’s story about her writing, however, also contains other problems related to the instructions. The teachers emphasise the importance of using the keywords in the essays. Moreover, the students describe that they are required to write so that “anyone”, or a student in the first year of the program, can understand the text. This means that they have to explain the meaning of keywords; other terminology; theories; and presuppositions supposedly unknown to a reader unversed in the subjects described the essay. Some students express frustration over this demand and say that it breaks up the flow in the text. Others simply describe it as a matter of going more into detail as compared to if they would have written for more initiated reader. Nina presents it as a problem:

Excerpt 8:2 d

- |        |   |
|--------|---|
| Patrik | Have you had any particular problems which you have run into or has it  |
| Nina   | No it is I am stuck with like to explain one thing you need to explain another and to explain that you need to explain a third thing, so all the time you like get into little tracks away (.) and then include all keywords that preferably are to be in the essay |

To the extent that the students respond to the requirement to explain every unknown element in the text, they also need to be able to judge when it is adequate to quit describing. In Nina’s story, the explanations may easily end up in potentially endless descriptions. Another student says that a whole essay could be written about each and every one of the keywords in the theme Africa. Nina describes how she needs to use the teachers in this phase: “I need to talk to a

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<sup>3</sup> This demonstrates how the concept *facts* is often used by the students, referring to material gathered during the theme, in need to be developed or worked with.

teacher because I have to like hear how I where I am to draw my line how much explaining is to be done and when I am to go on”.

The teachers requirement that the students are to explain things in this way can be set in relation to several motives: the students are to be able to describe and demonstrate knowledge (for pedagogical and assessment purposes), but also to ensure that they do not simply copy text from books or electronic sources. In any case, it has potentially large consequences for students work with the essay. This entails work of presenting the matter for an audience in an intelligible way. Moreover, the keywords make sure that the students treat material relevant to the curriculum.

Taken together, the students are concerned with solving several problems in the work related to the overall structure of the essay. Nina’s descriptions of her way of structuring the text reflect basic aspects of the expository essay as a genre. Moreover, the intellectual activities referred to by Nina during the interview, parallel many activities generally encouraged and promoted on the program: the asking and answering of questions, the refining and explaining of concepts and issues, argumentation and the drawing of conclusions.

## Dealing with arguments and drawing conclusions

To these students, working with writing and organising text in the form of an expository essay means that there are requirements of coherence, which means that they to some degree need to manage and relate different perspectives and arguments. As Nina indicates above, there is a big difference between “loose sections” with facts and text in “the form of an essay”. Arguments and perspectives that have not necessarily been related previously in the “productive chain of discourse” during the theme need to be somehow connected in the problem space provided by the genre, in Prior’s (2009) terminology.

During the interview with Amanda, she expresses much concern over issues relating to issues regarding *objectivity*. She says that a recurring problem for her is to present what she finds regarding controversial subjects in a limited amount of text. More specifically, she mentions free trade and the debt crisis as two themes that are difficult to present in this particular essay, due to the many different views and positions that can be found. Starting with free trade, Amanda describes the situation: “you could write an entire essay about just free trade if you because there is so much material on that”. She also mentions a couple of sources she is using:



## Excerpt 8:3

- Amanda Like if you read all the arguments on frihandel.nu if it was like that it would be great and then you check the Africa Groups, but there the divides increase and the whole lot so like then it is very bad so it comes to like what do you think yourself so it is really hard (laugh) to take a stand
- Patrik It is hard!
- Amanda Yes it is really hard and then in the end it becomes like what am I to think really it is good if it were like that but you have to think one step further like is it possible and why is it not possible

Amanda here describes how she, on the one hand, takes part of information from both frihandel.nu and Africa Groups. On the other hand, she tries to distance herself from the various statements – to “think one step further”: “if it were like that”, “is it possible”. She presents herself as being in the process of considering consequences and arguments presented by the two organisations.

Her comments concern thoughts regarding a newspaper article containing a debate between a representative of the organisation Attac and a politician representing a different viewpoint on the debt crisis in Africa: “they know what they talk about and they think completely differently and both have good arguments so that is the most difficult thing to find an own view like or write in the end what you really think”. She here he describes the two persons in the article as both knowledgeable and convincing.

Amanda further elaborates on how this leads to a situation in which she tries to capture and explain such controversies, emphasising how they can easily to get too long for her essays. She reports that she will include material that the teachers may think is irrelevant when she shows them her work in progress. It clearly takes a lot of work for Amanda to make sense of and use the material she is referring to. She also stresses that such work is also a recurring element on the program.

Lina takes up another issue regarding transformation and production of text, in response to a quite different question:

## CONTEXTUALIZING INQUIRY

### Excerpt 8:4 a

- Patrik Are you aware of what it takes to get the grade you want?
- Lina The thing is that they want you to fit in all the facts but if you only line up a lot of facts it can seem like you do not understand so they want you to get it to like an essay you can round up and make a living introduction and so you really show that you understand it
- Patrik Mm
- Lina So even though you write maybe more facts than this maybe it does not show that you understand but only that you have read and written from the books like even more

In response to a question regarding requirements for grades, Lina uses the term “understanding”. The issue she raises is not simply about understanding the text, but rather to “show that you understand” through the way you write. She thus addresses (at least partly) different aspects of text construction than Amanda does above. She goes as far as suggesting that making the text longer by bringing in more matter than what she has used in this case is not necessarily going to make it better in relation to the assessment criteria. She suggests that a long text may be taken as a sign that the author does *not* understand, in the sense that material has not been worked through in relevant ways. Rather, through the proper construction of a text, she is showing the teachers that the subject matter has been worked through in ways relevant to the task or assessment criteria.

### Excerpt 8:4 b

- Patrik You mentioned before that it is about showing the teachers that you understand in some way (.) in what way do you show that when you write?
- Lina That I understand?
- Patrik Yes
- Lina It is that I draw quite a lot of my own conclusions and that I take eh other people that are very well read on the topic that maybe have written a book on it that I take their pros and cons and such and like discuss them against contradicting views
- Patrik Mm
- Lina So in that way I can discuss and draw conclusions from what others have arrived at and so
- Patrik Mm
- Patrik Right so you try to find different lines of reasoning that can be found in different parts of the text and weigh them against each other and so maybe
- Lina Yes exactly in that way you like find your own meaning like when you read what others write both pro and con like it is then you find a way of your own
- Patrik Right

The initial question to Lina re-actualises the word “understanding”. When it was first introduced earlier in the interview, she said that it is necessary to show the teachers that you “understand” and not just reproduce text. When asked to elaborate, Lina describes how she draws her own conclusions using “pros and cons” presented by more initiated people, to find her “own way”.

The way of reasoning (or, rather, the description of reasoning) presented by Lina in this excerpt potentially solves several of the problems mentioned by the other students above. First, a main feature is how something new, “a way of your own” is construed out of the conclusions of others. She thus leaves a personal trace in her text. Second, rather than describing the struggle with taking a stance or making up her mind in the complex issues, she describes how she uses “other peoples views” and “discuss them against contradicting views” to construe a text which still displays her contribution.

The point here is not that Lina necessarily has a better grasp than any other student in the base group of the issues, concepts or information the students are to work with in the theme. The point, rather, is that Lina, a successful student, portrays a way of approaching writing that reflects an appropriation of the essay as genre. This not only includes the ability to communicate information about subject matter presented in other texts, but also an ability to make sense of and order complex issues for a reader. Through this rather elegant description, she displays a highly developed literacy. The description also reflects a socialisation into a relativistic and in many ways academic way of approaching material.

The process of appropriation may, of course, be rather different for different students. It depends on a variety of things: the timing of instructions and feedback, as well as differing interest and engagement. Nonetheless, this chapter shows how the students are made accountable of solving writing tasks that require and/or potentially lead to the appropriation of discursive resources and genres by which they can manage the complex issues at hand. The students display concern with these issues, and report struggles to solve problems related to these requirements.

## Discussion

In the interviews, the students describe considerations relating to more general properties of the essay as a genre (asking questions, being “objective” and in finding or communicating an own position or meaning), as well as local, task specific considerations (explaining the key words of the theme, objectivity). This demonstrates how the students are in the process of appropriating this genre, in relation to the particular contents dealt with in the theme Africa. The teachers’

instructions and the demands particular to the task in this setting form a problem space, reflected in the students' descriptions. Through the interplay between the various discursive resources and local considerations, a framework for "closing" lines of reasoning is provided.

As noted in the analysis of Nina's description of how she structures her text, there are several parallels between the discursive activities involved in writing and discussing the essay and other activities encouraged and promoted on the program, for example the asking and answering of questions, the explaining of concepts and issues, argumentation and drawing of conclusions. In this sense, there are connections between work with the essay and the wider socio-semiotic ecology of the program. A discursive space is provided, in which it becomes meaningful and relevant to ask particular questions and present certain arguments. Particular ways of reasoning is encouraged through larger configurations of resources, or "multimodal chains of genre" as Bazerman (2009) refers to them. The expository essay with its long tradition in schooling and academic education is here positioned into the setting with group inquiry and use of digital information.

In the base group discussion, the students refer to previous essays and writing tasks, and they present experience from similar situations, appearing well acquainted with discursive resources used to manage the presentation of material representing different voices. By describing or suggesting ways of managing the problem and sharing experiences, they make strategies explicit and can potentially learn from each other. Against this background it is interesting to compare Amanda's and Lina's different descriptions of how to deal with arguments and conclusions. Amanda presents herself as concerned with the argumentation and attempting to take a stand, while Lina includes the view of the teacher as part of the particular communicative situation (assessment) in her description. Both of these perspectives are likely necessary for the appropriation of the genre.

From a slightly different point of view, the expository essay is in many ways a strong carrier of the tradition of schools as promoters of literacy (Olson, 2009). Reading and production of texts are traditionally core activities in education, and the genres used, as well as other institutional resources relating to- and supporting reading and writing have been established for a long time. The use of new media and changes in work forms provide new setting and use of these older genres, but they also have a strong influence on the socio—semiotic ecology. In Biesta's (2010) terminology, they entail a particular form of *complexity reduction* (Biesta, 2010). This means that generally literate ways of dealing with

issues during the themes are promoted by the means of assessment and encouraged in communication, while other ways of dealing with experiences are not.

Olson (2009) argues that familiarity with literate language practices varies with previous discursive socialization, which in turn means that success with such tasks in school tends to vary with the level of literacy in children's families (Olson, 2009). The students in the base group investigated here represent a rather high level of mastery of these literate practices. The wider ecologies of which the students are part, and the discursive socialisation that takes place, in this way become part of the premises for the educational activities in the educational program.

In a historical perspective, the premises for teaching in Sweden have changed considerably during the last decades. Between the years 1938 and 1991, Sweden had a national agency with the mission of inspecting and approving the content of textbooks. In 1974, the publication of a textbook series was stopped by this agency. One reason for this was that booklet no 14 in the series, titled *International Politics*, contained a presentation that was not judged as objective by the inspector Jörgen Westerståhl. He wrote:

Behind the entire presentation lies the thesis that the poverty and difficult problems of the developing countries are caused by previous and still actual sins from the developed countries or at least particular developed countries, and that these last mentioned countries hence have a "debt" to pay here. From an impartial point of view, this thesis is equal to its antithesis, namely for example that everything that the developing countries have when it comes to science, medicine and technology, they have the developed countries to "thank" for. I am well aware that the first mentioned moralizing position nowadays quite often is present in the debate, but expression of the latter were common in the beginning of this century. As moralizing statements neither belong in a textbook and to be substantiated with facts both presuppose simplifications and distortions of reality. (Inspection report presented in Johnsson Harrie, 2009, p. 190, translated by the author)

What the inspector describes as the central problem here is, quite remarkably, the organisation of content in the booklet in terms of what has here been referred to as the post colonial guilt narrative, discussed in chapter 7. The publisher needed to re-write the textbook series to get permission to publish it, which was finally done in 1978. What is clear is that what was not accepted as content in a textbook during the 1970s is at the centre of the interactions between the students and teachers in the case analysed in this study. Students of today face a situation in which they are to compose texts partly using material from the internet, sometimes written for political purposes. In the process of writing, the students are required to judge what can be regarded as objective, and

## CONTEXTUALIZING INQUIRY

also how to integrate different opinions and points of view it in their text. Such practices, in which text production and inquiry are intertwined, are arguably creating a rather different set of demands on their developing literacies.

## CHAPTER 9

### DIRECTING PROJECT WORK IN THE INTERSECTION OF SCHOOL AND COMMUNITY

The question of the directing of learning and inquiry was of fundamental importance in the formulation of the classical educational ideals of John Dewey. In the same spirit, the ideal to somehow remove the walls separating the school from the rest of society is cherished by many educators. In the various traditions of educational project work this aspect has been emphasized, often in relation to the democratic agenda of schooling and education (Knoll 1997). A common idea is that authenticity in learning can be achieved by connections to information sources and people in environments outside school. Erstad, for example, describes how authenticity can be achieved by using information technology to link projects in schools to “fascinating activities in the outside world“ (Erstad 2005, p. 234). Bishop and Bruce (2008), discuss “community inquiry” as a way of fostering literacy development.

In contemporary guides for inquiry based teaching methods, such as project work and problem based learning, the teachers are often referred to as facilitators, guides or resources, responsible for directing the work of students. In tasks where the students are supposed to cross the borders to the surrounding society, the nature of this direction becomes crucial.

In this chapter, the study object is students’ work on a theme and a task that has been explicitly designed for the students to move outside school to gather material and interact with actors involved in city planning. The students are to design a housing area and then present it in the form of an exhibition. The analysis follows the students from their early ideas, through the design of the proposal to a first presentation, and the comments from the teachers. The theme City Planning involves several of the core characteristics of advanced project work, and it is placed in the last year of the program. The aim of this chapter is to describe how the activity of the students is directed in a complex task of this kind.

The role of the teacher has been an often hotly debated topic in the history of progressivist and constructivist education, as found in the historical overview

in chapter 2. Several contemporary researchers points out the crucial role of the teachers in guiding project work (for example, Rasmussen, 2005; Lundh 2011). Littleton, Scanlon and Sharples (2012) suggest the notion "orchestration", which in many ways is a productive conceptualization of the teachers' role in teaching methods building on principles of inquiry.

The term "directing" will be used here, rather than guiding or orchestrating. The latter concepts are of fundamental relevance in their emphasis of the agency and intentionality of the teacher. The analysis here, by contrast, attempts to also address how different elements of the environment become part of the directing of students' work, and how these elements interact with the agency of the teachers'. Dewey also uses the concept of directing in a generic definition of inquiry as the "controlled or directed transformation of an indeterminate situation" – (Dewey, 1938/1991, p. 108; see chapter 1 for full quotation). A further reason to use this concept is thus to point to the work of the students in the directing of the inquiry process in which they participate.

## Introducing the theme City Planning

The theme City Planning is the first theme of the autumn semester in the third year of the program. At this point, the students have passed through the main part of their upper secondary school education. During the theme, which lasts for seven weeks, the students work in somewhat larger groups than usual. One base group has been followed. The students are Nina, Marcina, Samuel, Jesper, Frida, Therese, Petra, Jenny, Sabah and Sandra. The teacher, Agnes, is the supervisor of the group.

The teachers describe the theme as special in several ways. They point out that the students are expected to take on a higher level of "responsibility" than they have done previously in the program. Moreover, the theme is described as "practically" oriented, as the main task in the theme is the creation and presentation of a plan for a new housing area. Agnes particularly stresses that the theme requires the students to "build knowledge from the foundation", skills that are emphasized during the third year of the program. The teacher Erik explains that the students need to "go out" to understand the central procedures involved in city planning, and the theme is therefore oriented "outwards". The plan is hence that the students are to find various stakeholders outside school, and gather relevant information from them. The main task is to design new buildings in an area that is presently used for a sports arena. Through statements like these, particular ideas about how to approach the task, how it differs from previous themes, and what may become challenges are communicated. The task



is introduced in a way which requires a particular kind of participation, and it has a certain significance and meaning in relation to the progression of tasks and themes on the program.

After the brainstorming and other introductory activities, Agnes gives a more elaborate introduction to the theme. She describes how the students are to “form a commission” and present a plan for a new housing area on exhibition screens. The particular area the students are supposed to work with is actual planning in the city. She says that the students are to gather “all” points of view on the future plans for the area, not just a few. This means, “simply forming a commission the way it is done in the municipality”. Moreover, she says that the task is “very advanced”. They are supposed to study an authentic exhibition, and use it as a model. They are also to “gather tips and ideas”, and through study visits, they will learn to “interpret a lot of information”.

In this way the students are positioned as capable and expected to participate in the joint formulation of a shared object as well as producing a concrete outcome. The instructions call for a particular mode of participation, in which they are expected to contribute to the shaping of a shared object. In this way, a stage is prepared for student initiative and decision-making during the theme City Planning, through the framing of the task and positioning of the students as “city planners”.

This also needs to be understood against the background that the students have developed a repertoire of methods of working together in various base group constellations. They have a shared history of relevant activities, which provide important resources for their inquiry. Through their previous activities in the program, the students have been trained to use collaborative methods for brainstorming and formulating questions. They have participated in recurring work of seeking, evaluating and presenting information, planning the practical aspects of work with various tasks as well as discussing, debating, agreeing and reaching conclusions (some examples of these processes have been described in the preceding empirical chapters). These methods all involve the positioning of the students as responsible for initiative and meaning-making and they are expected to use this repertoire of competences in work during the theme.

The next base group meeting is a week later. The students start discussing possible stakeholders to interview, but several of them claim that they do not feel ready, and that they need to know more to do this. Therese means that they need to “really” go through the keywords on the theme document. Nina says that the theories listed in the same document are not applicable in this case. Marcina suggests that they keep reading articles and on home pages so they will

“know what they talk about”. Agnes, the supervisor, suggests that the group takes on a more long-term planning. The students, however, want to wait until relevant lectures have been given, and also until they have read more. They agree to make the “real” planning a week later.

## Introducing stakeholder models

A couple of weeks after the introduction, a working session is arranged, especially devoted to the students’ production of lists of stakeholders to interview.

Martha draws two different models on two of the whiteboards by the desk. The first model (which Martha draws on the left whiteboard) has “projects in city planning” at the centre and lists “economic interests”, “public services”, “environmental interests”, and “interests of residents”, all connected to the centre. The second model (which Martha draws on the right whiteboard) has “project” in the centre and lists “affected” (companies, land owners, households, public sector and societal activities), “planner” and “building contractors”. These two formal models represent two different points of view of city planning, but are both representing stakeholders. They illustrate the different perspectives and points of view, which become relevant in a city-planning project.

When the students are back again, after the lunch break, Martha concludes the lecture. She says that it is “important” that the students sit down in the base groups to make plans after the lecture has ended. The formulation of the task (in which interviewing actors is an important part), in combination with the presentation of the models, is designed to direct the students towards identifying relevant actors, and their perspectives in the plan process. In the end of the session, lists are handed out, on which each base group is to write down which actors they want to interview. This procedure is explained as necessary since the groups need to coordinate their study visits, so that the same stakeholders do not need to meet several base groups at separate times. All base groups present in the big room start discussing which interviews they want to do, and in the end the lists from all base groups are put on the wall. In this way, the students are also made accountable for the decision-making during the session and they are obliged to agree on which stakeholders to write on the list.

The initiative by the teachers to organize the working session in this way needs to be understood as a response to the state of the students’ activity. After a few weeks, they have not succeeded in coming up with a plan for the interviews. By handing out lists, the teachers introduce premises that set an agenda for the session, communicating that the students need to do this today.

For the task to work out, the students need to take this step. On this occasion, however, the teachers do not just alter the premises for the form of the students' work. The introduction of the models is of significant consequence for the content of the project. Formal models are part of the curriculum for the theme City Planning, and by presenting models of interests the way Martha does, she provides the students with a resource for the planning as well as further work. The models provide a conceptual resource; a framework for reasoning is implicit in the listing of relevant stakeholders. By taking the point of view of the different stakeholders, the students can organize their planning for the interviews, at the same time, as it demands particular ways of reasoning. Considered as a meditational means, the model both constrains and affords action (Wertsch, 1998). How the models are taken up and what the consequences for planning are will be further analysed in the next section.

### Planning for interviews

After Martha's presentation ends, the students sit down in the base group. They immediately start discussing the models, different possibilities and try to decide who would be the most relevant to talk to. This is the first session in which extended planning for the interviews takes place. Two sets of excerpts will be analysed in detail. They both provide examples of how personal and mediated experiences become involved in the students' argumentation for different suggestions of stakeholders to interview

The first exchange occurs in a discussion about whether sports clubs will be affected by the tearing down of the present sports arena, and hence will be relevant candidates for the interviews. The background is that Nina and Therese claim that a new arena is going to be built in a new location, some distance away:

Excerpt 9:1 a

Therese: It will probably be better out there as well I think

Nina: It's not that far because I read some article where the foremost argument was that the tiny audience in that there is in football in division three will be lost if they have to go all the way out there

Sabah: What's that they do not need any bloody audience (laugh)

Nina: Yeah I thought that was silly

Sabah: What do they need audience for, they are only going to play right?

In response to Therese's statement that it probably "will be better" at the new location, Nina retells what she calls an "argument" from a newspaper article. The argument is that the move to the new location may lead to the loss of the audience of the football club that has its home field in the arena. This is

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potentially an argument against tearing down the arena. Before telling this story, however, Nina states that it is “not that far”, implying that the argument is less relevant. Sabah responds to this through stating that the football club does not need any audience, which can be understood either as a joke or potentially as a way of ridiculing the interests of the club. Nina agrees with Sabah, and the argument first introduced by Nina is further dismissed.

In response, Therese, in a rather emotional tone, takes an opposing point of view:

Excerpt 9:1 b

Frida: Yes but they have to

Therese: Yes but don't you understand it's an income money and such it's damn important for them!

Nina: But it's not that much it's not that much audience

Therese: Nu but I mean it's a really important income for the clubs

Nina responds by downplaying the financial importance of the audience in this particular case, but Therese persists, talking about “clubs” in general. Through the exchange, the aspect that the audience of clubs may be an important income is articulated and strongly emphasised by Therese. This also involves a topical shift from the situation of the specific club to a more general theme of the financial role of audiences in sports.

In this excerpt the students are re-contextualizing voices from the discussion in the local press in a way that is also relevant to the task. This is partly done through the re-telling of the argument from the article, which is part of the joint telling of what can be referred to as a small story about the football club. In the argumentative activity, personal points of view as well as descriptions and information from interest groups in the city are reflected in the discussion.

The students are negotiating whether these experiences – articulated in the small stories – are of importance and of relevance to the task, or something that can be dismissed. In this way, they involve their personal experiences in working with the task through the telling of stories. They also, however, are negotiating what points of view are relevant. This further connects to questions about democracy in city planning. Which voices are to be heard? The teachers ask the students to “consider all points of view” – and this exchange can be read as dealing with what this means in practice.

The students' considerations during the working session later moves into economics and financing. The topical shift to these issues happens as part of the students' attempts to identify which stakeholders that can be relevant to

interview. Nina brings up the question whether banks should be included on the list:

Excerpt 9:1 c

- Nina Does the municipality like are we to talk to banks or will like (.) will loans be needed and so or like
- Therese Yes precisely is it only our tax money how much such things (.) you can ask the municipality (.) they should know about that
- Nina It said that a new ice-skating hall and that it would not (.) the political parties did not think it was to be taken from tax money
- Jenny Who said that
- Nina Like building a new ice-skating hall and such but they thought the basis should come from the private (.) finance eh the local business (.) but then it will surely cost tax money as well
- Jenny What
- Therese Yes but the thing is that (.) they will surely get sponsoring from companies but not to the amount like (.) as many millions as that costs
- Petra But with what money is it to be paid with?
- Sabah Are we like ready with this?

Nina's initial question is followed up by Therese, who introduces the category "tax money", and suggests that the municipality could be asked about financing. Nina then refers to information from political parties (without stating the source), introducing opinions expressed in relation to another case – the building of a new ice-skating hall. This relates to the category "tax money" which was introduced by Therese, and Nina contrasts it with finance from private business.

The point with Nina's example can be understood as providing a similar case for reference, to help finding out what could be reasonable in this case. Therese, however, claims that the cost is too great for private interests to take on such a great part. Petra then explicitly asks the question "with what money is it to be paid?" This exchange leads to a passage in which small stories, which further expand the frames of reference, are told:

Excerpt 9:1 d

- Jesper But isn't it like in (.) for example Karlstad and Jönköping that companies gets advertising spaces everybody gets so to speak sponsor (omitted turns)
- Jesper Like for example compare with the Kinnarpsarena it was Karlstad Löfbergs Lila (.) so it is i guess thy took a large part
- Therese Mm
- Nina How much money do you pay for it then you cannot pay for the whole building or?
- Jesper The main part of it in any case i think

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- Nina       Aha?
- Therese   Löfbergs Lila have probably provided a lot of money (laugh)
- Jesper    Mm a little (.) but it is like brutally much publicity for them
- Flera      Yes
- Therese   In Karlstad they have a icehockey arena that is sponsored by Löfbergs  
            Lila you see

In a series of utterances, Jesper makes a comparison with the Swedish towns Jönköping and Karlstad, where ice rinks have been named after the companies Kinnarps AB and Löfbergs Lila. He claims, or “believes”, that the main part of the financing comes from these companies. This is one of few occasions during the theme when Jesper contributes to the discussion. This discussion seems to touch upon domains of his personal knowledge and interests. In the last turn, Therese mimics the dialect associated with Karlstad, as she more explicitly tells the story that Jesper is referring to, addressing group members that potentially do not know about the arena. The students in this way draw on personal experience in the task-related work.

The small stories become parts in the development of a shared web of reality descriptions and arguments. This development is not ordered in any linear progression - a manifold of issues and points of view are dealt with throughout the theme. These become a resource and a shared memory in the group work. Moreover, through the various positions taken by the students, and the ideas they articulate, they gradually become involved and engaged in the production of a plan for their work for the exhibition.

During the session, the students in the group call for the teacher, Martha. When asked about the differences between two real estate companies, she is providing relevant terminology and information regarding ownership. In this way, she provides material that can contribute to the group’s solution of the particular task at hand as well as to the development of knowledge relevant to the theme in general. At the same time, however, she avoids answering direct and indirect requests for help in the decision-making of the base groups. Through this she contributes to the problem-solving of the groups, while refraining from participating in the decision-making about which stakeholders to interview. While contributing to setting up situations like the one described above, the teachers can be said to participate in setting the stage for initiatives and decision-making. The agency of the teachers is in this sense multi-layered, both contributing to setting the stage for decision-making, providing conceptual tools (such as the interest models) and in other ways enabling the work as well as directing the agency of the students.

After about half an hour of talk (470 turns) then, the group has produced a list of stakeholders to interview. The result is: the chair of the city council, the local track and field club, the real estate companies Lakeside and City Housing, the city architect, the city planning office, the environmental committee and the building board.

## Encountering problems

The production of the lists is not the end of the students' problems with their planning for their project, in spite of their successful completion of this task. On a working session the following day, the students have trouble getting started with their work. Marcina comments that it feels like they are "in a forest", and that she does not know where to begin with the work. On this particular occasion, no ordinary teacher is present. Instead, Olle, who is a student teacher, is in the big room with the student groups. The base group calls for his attention, and when he arrives, the students describe their situation to him:

Excerpt 9:2 a

- Therese But Olle we have a problem we don't know how to continue cause we have like no basis to continue with  
 Sabah We are like stuck  
 Olle On city planning  
 Therese Yes  
 Olle What have you done then?

Olle is not part of the team of teachers that organize the theme. He is placed at the school as part of his teacher education. In response to the students' request, he asks what they "have done", which leads them to producing a joint formulation of the procedure of their work so far:

Excerpt 9:2 b

- Marcina We have read in the geography book and then we have read like some articles  
 Olle Yes  
 Nina And read the key concepts that those that are to be found  
 Marcina Yes  
 Therese (laughs)  
 Marcina Then we have listened to the lectures  
 Olle Mm  
 Therese And then we tried to find facts on the sports ground and like how they  
 Marcina but it didn't work  
 Olle Mm

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Therese Yes (.) there is like nothing sensible (.) except like that labour argue for and conservatives against (.) remains to

Marcina But should we start thinking about what we want there then

In this passage, main resources that are a recurring part of themes are listed: the textbook and articles (the articles mentioned here probably refer to newspaper articles), the key concepts found in the theme document, lectures held by teachers and invited guests, and results of information seeking on the Internet. This list, which also can be read as a temporal narrative about the work, is jointly produced by Marcina, Therese and Nina. Marcina even fills in and ends Therese's description about facts "on the sports ground".

While this on one level is an account of what has been done so far, it can also be understood as an account of the students' situation, implicitly stating that they have made the effort which can be expected of them, and that they need help to move on. They have been attempting to reach an understanding of the problem they are asked to solve as city planners by attending to the resources which have been sufficient during previous themes: textbooks as well as other literature, key concepts and lectures. Still, they do not feel "clued up" as Nina expressed it earlier.

This joint narration describes a set of resources and activities the students, through their history of participation in institutional practices, have developed as habits (Biesta, 2009). This cumulative experience of participating in work with various themes, and the elements that are included in them, is likely a very important resource and ground for learning. It is the ability of coordinating methods of joint work, supported by various resources, which makes it possible to engage in the various tasks that they encounter throughout the program.

In the theme City Planning, however, the students find themselves in a situation in which resources they have encountered previously are not sufficient, since the premises are different. The setup they are used to, with keywords, literature and references to material and other resources, involves a logic that differs from the one inherent in the City Planning task. They need to do something differently – to contact stakeholders to gain access to relevant material and perspectives. At this point, they are not even sure what to ask for. The shared object is not at this point clear enough to allow the smooth coordination of action.

The point is not that the City Planning task is inherently problematic, but rather that it presents a challenge to the students' habits. They need to do something different this time, use different methods than in previous situations they have encountered, and in the end of the exchange Therese points to an opening. In the following turn, she mentions "a process", referring to the plan



process involved in city planning, which is also listed as a main learning goal on the theme document, “Yes it like still feels that we would surely be able to find something more on how a process like this works”.

Therese points specifically to the process of planning, which they at the moment believe to be a key in understanding what to ask during the interviews. She argues that it could be possible to find out more about it after all. She wants to go and visit the city planning office to get more information, which she and Sabah later the same day does. Therese, who is a very active group member often taking charge, at several times takes an opposing position in relation to the other base group members.

By asking the questions above, the students’ attempt to get on with the task. To resolve the situation is not just a matter of knowing how to do (the method), but also understanding what needs to be known (the object). The teachers have given extensive instructions on how to organize work, but it becomes clear here that to resolve the situation, they need understanding of particular issues, or how to get the material they need for that. In this way, form and content are intrinsically connected in a learning process.

During the next base group meeting, Agnes says that it is important that they start thinking about what they want the exhibition to look like, and what they want to highlight – “start seeing images before you”. Jenny answers that she thought they were supposed to build “like houses”. Several students agree. Therese asks what kind of plan they are supposed to display – detail or overview. Agnes answers that it is supposed to be “more like an overview”, but that “some little model” could be used as an example. The students, however, still has a hard time starting their planning and work.

A few days later, during a working session, the students talk to the teacher Erik, and tell him that it is difficult getting started. Erik says, “you can start sketching the area”. He also says they can start thinking about what to include, and that they later on “fill up with the interviews”. Sabah says that “it feels like you have a hundred threads, but don’t know where to start”. During the session, the group starts discussing the design of the area. Sandra says she wants a hotel-like park in the middle, and high, fresh houses. Sabah says she wants small flats. After a while they ask the teacher Erik if they are at the level of detail in the planning they have now come into. He answers “absolutely”, and says that this is the fun part in planning – imagining what it will look like.

The teacher Martha hands out an actual plan for the area, and the group starts relating the map to own experiences of the area. Erik says the group will need help calculating how many flats that is reasonable to build, and suggest they

“talk to people” about this. Towards the end of the session Therese says to the other students: “but do they mean that we are to go into the minute details and look up the ground water, or what the heck?”. Sabah answers, “they can’t mean that!”. During the work session, a somewhat clearer idea about what the exhibition may look like is worked out.

## Producing ideas

Erik starts the next working session. He says to the classes that the base groups have started out very differently, and it is difficult to judge where they are in their work. He says that they need to find out what they are to work with. He describes the task: “what you have been assigned, is to fill the area with housing”. He says that they are to use knowledge when they talk to different stakeholders. Their plan is to be realistic and plain and clear. They are to contact the municipality, county administration, building companies, architects and residents. It is important that they sit in the base groups and discuss what to do. Nina asks whether they are to draw houses or just outlines on the sketch. Erik leaves this open. Therese asks whether they are to discuss water supply. Erik asks that he does not think so, but height and distance between houses. After this introduction, a lot happens in the group discussions. The members suggest and discuss a number of aspects of the area: size and shape of the houses, shops and equipment for the yard. Many ideas are discussed during the following working sessions. A couple of days later, the groups receive instructions for the preliminary, “half-time” presentation that is to take place in two weeks. The groups are to present a sketch, but they do not need to draw anything in detail. They can present a plan for their interviews, if they want to.

During the following weeks, the students start conducting interviews, and they also start discussing their plan for the housing area. Several of the students become highly engaged in the production of ideas for the project and seem, at times, to be very amused by this. A multitude of suggestions and ideas come up, many of which have to do with the visual appearance, aesthetics and the experience of being in the area. The students talk about things like building parking houses, using the names of famous citizens for the different buildings, taking pictures of other houses in the city for inspiration, creating a colour scale for the area, and planting apple trees in the yard.

Most likely, a certain amount of time needs to be spent on this kind of idea generating activity, for several reasons. The students need to articulate a plan of some degree of specificity – this is a basic premise for the task. There is also a certain social momentum in the design activity, the possibility to create

something together, which is also encouraged by the teachers. In the task it is, however, also expected that the students provide a rationale for their plan beyond what they find practical or aesthetically pleasing. The task as a whole is designed in a sequence, which includes interviews and gathering relevant knowledge, so that, in some way, this can inform the production of the specific plan. How to make the connection between the plan and the interviews, though, is largely left to the students to work out. The series of excerpts below contains a discussion sequence in which this issue comes to the fore.

In the first excerpt, which is taken from a working session, Marcina raises questions in relation to the on-going design activity. The group has been talking about planting fruit trees in the yard, and at this point, Marcina objects:

Excerpt 9:3 a

- Marcina It is easy that you like dream away we are gonna have an apple tree but  
 Therese (laughs)  
 Marcina But is it okay to have an apple tree and who is going to take care of the  
 apple tree and does it cost a lot  
 Samuel City and garden  
 Nina Yes  
 Therese Yes hopefully if City Housing and the municipality does this together  
 then it is city and garden.  
 Marcina It is  
 Therese It has to be  
 Frida Yes but is it  
 Marcina Is the municipaliy ready to have this then (?) this extra apple tree

In immediate response to Marcina's questions about whether it is "okay to have an apple tree", Samuel answers "City gardener", which is the gardening company owned by the municipality. This is in line with the (at this point) shared idea that the municipality is going to be responsible for the housing area. This is what Therese relates to when she follows up, pointing out that City Housing is a company owned by the municipality (which also implies that there are different actors within the municipality). This is, however, a response to just one of the questions asked by Marcina ("who is going to take care of the apple tree?"). She also asked, "is it okay to have an apple tree", and "does it cost a lot", questions which are more general. In the first turn, she also uses the formulation "dream away", indicating that her point is more general. In the last turn, she formulates a follow up question about the municipality and whether they would be ready to have the tree, indirectly pointing to that they do not know how the municipality would reason in this case.

Marcina's questions can be understood as aimed at the situation in which the students attempt to design elements of the plan without considering whether it is realistic or not. The teachers have on several occasions pointed out that the plan is supposed to be realistic and that they need to motivate their design. By her question, Marcina can be said to address the shared object of the activity. The object of this educational activity is not simply the accomplishment of a specific plan. It needs to be done in a particular way, corresponding to educational goals.

However, the other students respond to the questions as if they were specifically about the apple tree, which she uses as an example. They start joking about scrumping apples and Frida suggests that "students can earn some extra money" taking care of the trees. Petra then more seriously, though somewhat harshly, questions Marcina's agenda:

Excerpt 9:3 b

- Petra But what there are apple trees everywhere damnit  
 Marcina No but cause I mean we will  
 Therese I see what you mean  
 Petra yes  
 Marcina That's the kind of questions we want answers to  
 Therese Yes very good Marcina you are to analyse the situation (alters her voice)

In response to the other students joking and Petra's direct question, Therese here confirms the validity of the issue Marcina has raised (although Therese also laughs and alters her voice in the last turn in a way that can be heard as ironic). She uses the expression "analyse the situation" which can be contrasted to Marcina's expression to "dream away". They are likely referring to the distinction between producing a plan and explicitly relating it to a relevant rationale or information.

This is not to say, in any simple sense, that Marcina is more advanced or capable. Possibly, in this case, Petra's point may have been that this particular issue is not the kind of issue that needs any further motivation. Although the teachers instruct the students to "motivate the design at all times", it may actually well be necessary for them to be less concerned with the rationale and motivations behind the plan at certain points in the creative process. Still, the question how to connect the two aspects of the task, producing a specific plan and to be able to argue for it with a relevant rationale, remains. Marcina's questions need to be understood against this background, and her comment "that's the kind of questions we want answers to" alludes to this. The point here is that discursive work and negotiations about how to make this connection

between design and rationale is needed, and it turns out that Petra's objection is rather fruitful in this respect:

Excerpt 9:3c

- Therese But look here if it is a private company say that eh Lakeside would pay for this (.) then Lakeside has to pay someone who does this
- Nina Then they have caretakers right
- Frida Yes exactly caretakers
- Therese Either they have caretakers or maybe they hire City gardener to do this
- Petra But like what take care of the apple trees what is it that needs to be done
- Therese But then they take care of the park and
- Frida yes precisely
- Therese Mows the lawn and
- Marcina I mean the whole of that labyrinth all lawns all lawns all other bushes

Therese makes a comparison with a private company, which leads Nina to introduce the concept "caretakers". This, in turn, makes Petra again ask about what needs to be done with the apple trees. At this point, Therese connects the particular question of apple trees with the wider questions that Marcina have raised by answering "then they take care of the park", "mows the lawn", while Frida affirms. In the final turn, Marcina continues by also mentioning "that labyrinth" (which previously has been proposed), lawns and bushes. Here the topic shifts to the caretaking of all green areas rather than a particular apple tree.

With this joint clarification, initiated by Therese, the students manage to clarify the issue raised by Marcina. This leads to an exchange that provides the students with potentially relevant arguments for their plan. However, the exchange also demonstrates how the students jointly both identify relevant factors or aspects in relation to the apple tree example and clarify that all green areas in the plan can also be understood in this light. Probably, at least elements of this are already known to some of the students, but it is now explicitly made part of a developing argumentation.

The series of excerpts demonstrates a process of enquiry, in which a specific issue is raised and locally resolved. This leads to the uncovering or clarification of processes and relationships in the city. This involves taking a particular perspective, or asking the right "kind of questions" as Marcina describes it. Through this, the shared object is addressed simultaneously. The task formulation requires that the students produce a suggestion and argue for it. The task in this way makes it necessary to bring together school rationales with joint reasoning about housing areas and actors, relationships and democratic processes in the city

## Documenting, grounding and agreeing

The excerpts analysed in this section are taken from a working session the day before the students will make a preliminary demonstration of the plan in front of the whole class. At this point, all details have not yet been documented, and the students are in a process of discussing and writing them down. The base group is thus going through what they have come up with so far, and they are in the process of preparing for the demonstration. The students are using the interest model described above, going through material relating to the different interests represented in the model.

One of them is economy, and during the session Therese on several occasions hints, or suggests, that they need to discuss this. The other students are involved in other discussions, but below the group finally gather around the theme. Nina is writing up the notes:

Excerpt 9:4 a

- Therese How do you think when it comes to financial interests then (laugh)
- Marcina I can I have be sitting and thinking about it really long but I cannot come up
- Nina Whose economic interests like those who live there or those who builds
- Marcina Yes
- Therese I wrote profits depending on involved companies Lakeside they are aiming for profit in the long run
- Nina Yes
- Therese City Housing wanted to make profit immediately (.) and who brings in money who finances this (.) is it the municipality or is it private companies

Therese raises the issue in the form of a question. The laughter signifies that she, unsuccessfully, has attempted to do this on several occasions before. Marcina's answer, which contains an account of why she has not responded before ("I have been sitting and thinking about it really long"), needs to be understood against this background. Nina then follows up by questioning "whose interests" - the inhabitants or the responsible for the building. In this way she points out the need to specify what is meant with financial interests in the model of stakeholders they are using. Therese answers this by referring to her notes about the two companies Lakeside and City Housing (both of which the students also have been interviewing), and their differing models for making profit. Therese further introduces the distinction between the municipality and private companies, which can be understood as an underlying issue, since Lakeside and City Housing represents each. Through this, Nina's question about whose

interests they are to consider is (implicitly) answered, and the options for interpretation narrowed down. The general model is connected to the specific issues the students have been discussing in the work with the model. The question about financial interests is in this way opened up and jointly specified. In the last turn, Therese is interrupted by an overlapping comment by Sabah:

Excerpt 9:4 b

- Sabah if it is City Housing that builds it is the municipality right  
 Therese Yes (.) or is it like only private companies  
 Sabah But isn't it good that the private builds but then maybe it gets more expensive to live there  
 Nina Yes  
 Therese then it often becomes cooperative apartments  
 Nina if a company can paint the whole façade with its name they will be able to pay (laughing)  
 Jesper Haha

In her question, Sabah picks up the distinction between private and municipal interests, which Therese introduced. Therese affirms that City Housing belongs to the municipality. This theme is further developed by Sabah through her question whether it is “good” that private companies build, thereby introducing evaluative terms. In the same turn, she also questions whether it would become more expensive to live there. Therese answers this by introducing yet another term, “cooperative apartments”, implying that this is probably what a private company would like. In this way, a connection is made between the economic conditions for living in the apartments and the ownership of the buildings, which is a link in an argumentative chain which the students need agree about to ground and be able to argue for their plan. Nina (overlapping) jokes about how a private company could paint the façade, after which Therese continues on the theme cooperative apartments compared to rented flats:

Excerpt 9:4 c

- Therese We like want rented flats we don't want any owned flats, right  
 Sabah mm  
 Therese Then you maybe have to look at who primarily builds rented flats  
 Nina City Housing  
 Sabah Then it is City Housing  
 Nina Or?  
 Sabah And then it is the municipality that does the financing  
 Nina Then it is taxes  
 Sabah So then we have arrived at that it is the municipality that will finance the building

Therese here, in the first turn, states that “we” want rented housing rather than owned housing. The Swedish “ju” (here translated as “right”) that Therese uses is an affirmative expression, which in this context is used to indicate or stress that this is something which has already been agreed upon. Consequently, she argues that they have to look at who builds rented housing, implying that City Housing is the company that they would prefer to build in the area. Therese, however, never articulates this. She also uses a “maybe” and “primarily” which has migratory functions. Sabah and Nina instead fill in, and become part of the process of jointly grounding the decision. Nina further articulates that “taxes” will be the financing since the municipality owns City Housing. Sabah ends by concluding, “we have arrived at that it is the municipality that will finance the building”.

By stating premises and referring to what the students already have agreed upon (that they want rented housing), Therese manages to include Sabah and Nina in the articulation of the argumentative chain, thereby making them active in the process of grounding these aspects of the plan in the group, and simultaneously connecting to considerations regarding economic interests, as represented on the generic model. The model in this way also becomes a practical resource for organizing decision-making and planning.

A brief comment regarding the connection the students make between financing through taxes and the company City Housing needs to be made here. There is more to the question of financing in companies owned by the municipality. Many real estate companies owned by Swedish municipalities generate profits and capital based on rent paid by tenants. The role ascribed to tax money by the students in this case is thus rather simplified, making it an example of one issue of many the students have to deal with which potentially can be considerably expanded and complicated.

In conclusion, during the documenting of the plan, a process of grounding the takes place, in which the arguments for the suggested design are jointly articulated in the group. Through this, the students develop a rationale and prepare to argue for their choices, anticipating the coming presentation and the assessment procedures (Åberg, Mäkitalo & Säljö, 2010)

In this process, Therese’s role is quite interesting. She never explicitly presents a personal opinion, but still strongly contributes to the structuring of the joint decision-making. This is done by first introducing financial interests as a decision-making point. After this, she connects the issues concerning financial interests to financing of the building of the houses. This is an interpretation and specification of “financial interests” in the generic model of stakeholders. The



interpretation relates to the specific concerns regarding financing that the students have been discussing.

In the next step, Therese introduces the distinction between public and private interests. Furthermore, she relates the distinction to the specific question of what kind of apartments the base groups would prefer – owned or rented flats. When she argues in favour of rented flats, she does this by referring to agreement reached in the group previously. In this way, actors, their preferences and perspectives are related. This investigation, in several steps, ties information and design considerations made in the group together, resulting in an argumentative chain that is jointly articulated. Therese uses various discursive strategies to prepare for decision-making as well as agreement.

### Intermediate presentation and responses from teachers

On a Tuesday, it is time for the “half time”, preliminary presentation. The classes are gathered in the large room where they spend most of the time. The teachers Martha, Erik and Agnes are present. Agnes says that “we are all gathered here today”, and that it has to be very silent so they can “take in the presentations of the other base groups”. Martha presents the occasion as a moment of learning and examination, and says that the supervisors will give “feedback” to the groups afterwards. After this introduction, the teachers sit down in a row of chairs, and the base groups present their plans to them and the rest of the students.

The base group followed here is the second group out. They walk up to the whiteboard beside the desk in front of the large room, on which they have sketched the map of their housing area. Therese says that they do not know who in the group is to say what. Petra starts by pointing to the sketch on the whiteboard, showing a parking house for bikes. Marcina points to a house for students. Therese says that they build for everyone, to reduce moving in and out of the area. Nina says they want a mix of different kinds of people. Therese says they have mixed “Martha’s models”, referring to the interest models. Petra also mentions plans for schools and day care, and Marcina talks about traffic and parking. She says they are planning for 0.8 parking lots per apartment, a figure they have received from the interviews. To reduce noise from surrounding traffic, a wall is suggested as a possible solution, but Jesper says it would not look very good. Therese says that the bedrooms will be placed towards the yard, and the bathrooms towards the streets outside the area. Frida says that the municipality, or “we taxpayers”, are to finance the houses. The flats will be

rented. Moreover, they will follow the environmental code, and Jesper says they will build a recycling station. Marcina talks about plans for track and field clubs.

Frida says their plan is realistic, with an exception regarding the costs for the special design of the houses, which they have drawn in rounded shapes. A student in the audience asks if the parking spaces planned will be enough. They answer that they have not yet controlled that. Therese says they are thinking about what to do with the open water in the area, and whether it needs to be secluded with a fence. Moreover, she says that they want the street towards to the city centre to be “lively”, with shops and day care, so it looks “cosy”.

Another student in the audience asks if the round shapes of the houses will make them difficult to furnish. Marcina answers that the rooms are not supposed to be round. Sandra compares it to a well-known hotel in the neighboring city. Other questions from the audience concern the cycling distance to schools for students, elevators and possible problems with mixing students and old people in the same area.

After the rest of the presentations and a break, it is time for a base group meeting. Samuel is appointed chairman. Marcina says that they need to plan everything that needs to be done. Agnes says that she has comments from the teachers on the presentation, and this becomes the first item on the agenda.

Agnes begins by saying that all teachers thought the sketch was well thought out, and that the group has treated essential issues. However, she says that the seminar is to be regarded as a step on the way, and that some “pieces of the puzzle” are still lacking for the groups to “reach the goals of this theme”. The first item she brings up is that the students’ use of the interest models needs to be further clarified, which causes some discussion. Agnes then turns to more specific issues. The first relates to the financial basis for different services for the inhabitants of the imagined area:

Excerpt 9:5 a

Agnes: Then you also need think about if you look at this area which basis is there for example for grocery shop day care and so on (.) how much is required how many households are required to have day care?

Marcin: How many what did you say?

Agnes: How many households are required for a day care unit to be built and how much some groups were into this with shops and so on? what’s it like with shops in this area is something to think about (.) and its about the services what services are there (.) and then one can imagine that you go in and interview some store someone who is storekeeper (.) ehm and what are the plans for day care from the municipality how do you think when it comes to day care?

## CHAPTER 9. DIRECTING PROJECT WORK

Therese: But things like this or it's difficult to ask the municipality about specifically this because they have no plans for it what so ever so do you then mean like in general when it comes to day care?

Agnes: Yes in principle so then you can show that you think in these lines because then you place your little in the large so to speak (.) but then there may be no particular calculation for this area but the principles

The presentation of the group included plans for shops and day care. Here, Agnes responds to that by asking the group to further investigate the financial basis, and suggests that the students do further interviews to find out how to “think” about them. Therese responds by pointing out that there are presently no real plans for day care in the area, which makes it “difficult” to learn about such things through interviews. She then asks if Agnes means “in general” when it comes to this. Agnes responds by affirming this, and further emphasizes “the principles”. She also uses the metaphor to “place your little in the large”.

After this, Agnes brings up another financial aspect – how the building project will be financed, possible environmental issues, and finally the relation of the base groups plans and project overview. She also says that they are to leave the “really technical things” aside. To sum up the feedback, Agnes returns to talking about principles:

Excerpt 9:5 b

Agnes: But we think you have come a good part of the way here but now it's about taking the next step and lifting this area (.) and lifting the issues you have made the basis so now it's the next step here (.) you understand the principle behind these questions? because this kind of questions you are to ask yourself as a social scientist in becoming. you are on the way here (.) and then this is an example, you can see the area as an example of how you handle societal issues

In her feedback, Agnes several times mentions “principles” and points out that the area the students work with is an example.

After the feedback from Agnes, the students go through the questions they got from other students in the classes. They start to discuss a parking house – how many floors? Above or under the ground? They also discuss the yard – how to place trees, and where bikes are to be parked, and other quite specific issues. In a sense, the task invites this kind of imagining, and the students have been encouraged to go into such details. Some students are very active in such discussions throughout the theme, while others from time to time also bring in other aspects. In this case, for example, Nina says “do we need to be this detailed?”. Therese quickly follows up, and says “no, I think it is better that we concentrate on what Agnes said now.” Agnes, who is present, but has remained

silent after the feedback, responds to this by saying that “then you lift your study to a higher level and then you can get a higher grade”.

A fundamental tension inherent in the shared object is, in a concise form, contained in this exchange. The students both need to wrestle with local, sometimes rather detailed considerations, and address more generic issues related to the interest models as well as other conceptual issues, in an iterative process. In this case, it is clear that some of the students are more concerned with the objectives, and others more involved in the specific details of the plan. On the one hand, the teachers are central in communicating the nature of the object of the task. On the other, if the response from Agnes to the presentation would not have been preceded by this work in this case, the points related to the generic models and considerations raised by Agnes would not be contextualized in relation to the students’ previous activity. The teachers work in response to both what the students do, and their perception of the shared object of the students.

After this exchange with Agnes, the group makes a plan for the following weeks of work, and various tasks that need to be completed are divided between the members of the base group. In the end of the base group meeting, Therese asks Agnes what she thinks. Agnes answers that she thinks that it sounds as if they are on the way of bringing it to safe territory, and that she finds it very positive that they have divided the tasks. She also says that the group seems to be on the way to presenting a realistic plan. Therese says that they are going to make a “damn good exhibition”. Afterwards, Agnes says that she found the base group meeting “extra good”.

After the feedback session, the discussions, with the whole base group gathered, are replaced by work in smaller constellations. The character changes from planning and discussion about the task, to the carrying out of remaining tasks. The “half time”-presentation thus appears as a critical point, after which the character of work changes. The uncertainty that has been a recurring theme up until this point disappears.

## Discussion

The analysis here demonstrates how the directing of the students work is not just an aspect of the teachers’ instruction, but a considerably more complex process, involving a number of elements of the design of the pedagogical environment. The pedagogical design of the environment is of consequence for the students’ reasoning and what content is dealt with. Moreover, the direction

given by the teachers – on multiple levels – cannot be fully understood unless these aspects are taken in account.

The analysis demonstrates how the students jointly develop work with the task in ways that the teachers often have very limited insight into. The students develop meanings, which over time become elaborated and complex through extensive group discussions, involving thousands of turns in total.

An important premise is that the City Planning task is given at the beginning of the third year of the upper secondary school program. The base groups also contain up to 12 students, which is considerably more than usual. In the task – where the students are supposed to move around between the library and computer rooms within the school building, as well as outside in the city – it is impossible for the teachers to follow the group. Furthermore, the group discussions can be difficult to follow, due to the often quick and distributed nature of turn taking. For the participant observer, it was at times difficult to follow all events even when present at the same table as the students throughout most of the group discussions. Also, the students only document a very limited amount of their ideas and reasoning, which means that it is not available either in the presentation or any other documentation.

While the results is in agreement with the findings of Viilo, Seitamaa-Hakkarainen and Hakkarainen (2012), Rasmussen (2005) and others – that the role of the teacher is vital in the unfolding of the work of the students – the teachers in this case have minimal opportunities to follow and direct the process continuously. How does the directing of students work under these circumstances? Here, it is argued that several processes in the environment are significant. Below, some of these are described:

*The problem space of the City Planning task*

The task in a wide sense, including the goal formulations on the theme document as well as the interest models and other conceptual resources, is not simply suggesting content from which the students' project can emerge under the guidance of teachers. Rather, it points out a problem space, which the students need to address in their work. The students need to demonstrate that they have been addressing issues within this problem space. What can be described as a framework for direction is provided by the formulation and continuous specifications of the task.

In the response after the preliminary presentation, for example, the teachers make it clear that they want to see how the students have used the interest models, and they ask for additional financial calculations and observation of laws and regulations. These are all examples of requests for the application of general

models and rules. Not just any ideas and considerations will do. In the case of the theme City Planning, the way the students show that they understand is thus by demonstrating that they are capable of contextualizing general models and rules, exemplifying their application in relevant ways within their work with the specific plan. In this way they show that they have asked questions like “social scientists”, which the teachers ask for. In this sense, the students are expected to be able to recognize the problem space indicated by the task, and coordinate their work in such a way that they address the relevant issues.

#### *Developing a shared object*

The task presupposes a gradual process of unfolding, in which the content of the project is specified. This process of specification involves the negotiation of a shared object in the base group. The shared object does neither equal the content of the project, in terms of specific design details of the housing area, nor the specific considerations made using the generic models. Rather, the shared object is what allows the students to coordinate and direct joint work. Being an educational task, the object is not the same as in actual city planning, but continuously shaped in interaction with the teachers, who responds to the actions and temporary products of the students work. The shared object of the base group needs to develop in such a way that coordination of action within the problem space indicated by the task is achieved.

It is essential to point out that the individual students’ understanding of the task and the concepts involved may differ significantly, and that the shared object is not a stable entity. One of the essential communicative processes during the theme is to align the shared object of the base group and the problem space of the theme. This involves negotiations between students as well as between teachers and students. In the sections “Producing ideas”, as well as “Half time presentation and response from teachers” several examples of such negotiations are described.

#### *The format of assessment*

Another kind of direction inherent in the task is described in the section “Documenting: grounding and agreeing”, where it is demonstrated how the discussion is conditioned by the format of the presentation and assessment, which is thus anticipated by the students (Åberg, Mäkitalo & Säljö, 2010). The students are also continuously advised to “argue” for their decisions by the teachers. Moreover, the constraints imposed by the group format makes the process of grounding necessary, thereby creating a need to explicate the steps in the reasoning behind specific suggestions in the plan. Van Oers (1998) argues,

based on a review of literature, that “reflections on argumentative structures, evaluation of solutions, and the formation and joint coordination of goals and actions” all provide examples of constraints on meaning-making in group work (Van Oers, 1998, p. 484). What is often loosely described as “group work” on one level, involves the directing of the students’ inquiry through inherent constraining of possibilities for meaning-making.

*The temporal logic of the task*

One specific aspect of the City Planning task, which is crucial in this regard, is the *temporal organization*. The students need to first plan for their interviews and then perform them, in order to get information that can be used in their design of their own plan. To organize this, they need to discuss what considerations are relevant, as well as which are relevant actors and points of view. In this way, the students’ planning is directed forward, affecting the premises of their own future agency in the way that they need to enter particular kinds of reasoning. The form of City Planning task is thus consequential for the content of the students’ work, making it an integral part of a complex web of resources which both create certain degrees of freedom and directs the content of the students’ activity in the theme City Planning.

The task is formulated in a way, which makes particular kinds of reasoning and perspective taking necessary. At the same time, it is open enough for personal experiences to be highly relevant parts of this process. The issues the students are discussing are not presented in textbooks or other material available to them. In the process of agreeing on whom to interview, they need to draw upon their own experiences, as well as distinctions and terminology like “tax money”, to judge what may be reasonable arguments and points of view. In this sense, the task addresses the borderland between school and society in which the students are required to create relevant connections.

*The agency of the teachers*

To discuss the role of the teachers’ instruction in directing, it is relevant to recapitulate the different methods they use at different times of the theme. At the beginning, the teachers set the stage for student initiative and decision-making by positioning work. Through describing the students’ role as “city planners” and by presenting the different responsibilities they have during the theme, particular expectations are articulated, but a certain free space for the students’ upcoming actions is also opened.

Somewhat later, during the planning for the interviews, the interest models are introduced in combination with an arrangement with lists to be filled out

with stakeholders to interview. This sets up for, or enables, the planning activity of the students in a situation when they had problems construing a shared object and coordinating action. By altering the premises of the subtask, they “indirectly direct” the actions of the students, to paraphrase Dewey (1902). When it comes to the actual decision-making regarding which stakeholders to interview, however, the teachers keep out and leave it to the students. In this phase, they thus strongly contribute to the setting up of a situation, which makes decision-making possible, but only indirectly contribute to the content of the argumentation.

This contrasts with the teachers’ response to the students after the preliminary presentation. In this later phase in the theme, Agnes is providing examples of considerations that the students need to make in the continued work, directly addressing the specific content of the students’ plan. Urging the students to ask questions like social scientists, she also brings up issues that lead to a negotiation of the shared object in the base group. During these conditions, projects require something fundamentally different from the students than methods where such needs for interpretation and negotiation are not present. The students continuously and jointly address questions such as: What are relevant considerations? What knowledge is needed to make a particular decision? How can the relevant information be accessed? These kinds of questions are mirroring a critical stance on behalf of the students, which is something that they should develop according to the curriculum.



## CHAPTER 10

### CONCLUDING DISCUSSION

In this section the results of the four analyses presented in chapters 6-9 are summarized and discussed in relation to the research questions posed. Each research question is related to one of the empirical chapters. This is followed by thematic discussions that attempt to draw more integrative conclusions.

#### Summary of results

The first research question is how tensions in the students' formation of shared objects are managed. The question will here be discussed in relation to the findings in chapter 6, which will first be summarised.

In the literature on inquiry and project work reviewed in chapter 2, conflicting institutional rationales are found in several studies of contemporary educational settings. These are often associated with the use of digital technologies. Copy and paste strategies, in particular, are discussed in several cases (Rasmussen 2005; Furberg, 2009). Chapter 6 deals with conflicting rationales related to the use of copy and paste strategies in a common and general aspect of inquiry in education, the joint answering of questions. It describes the students' discussions about how to take on "the envelope task" with each other as well as a teacher.

The background to the events analysed is that the students in the program often approach similar tasks by sharing questions and then seek information individually. The information is generally presented to the group in the form of printouts of documents, often created using copy and paste strategies. With the envelope task, the teachers deliberately attempt to design a task in a way that makes the students answer the questions through group discussions rather than individual information seeking. Thus, the task challenges the students' previous experience. The questions in the envelope task was originally formulated by the students themselves in the beginning of the theme, and have been arranged together with relevant material in envelopes named after African countries. The teachers' intention is that they are to answer the questions in group discussions.

In the group negotiations about how to take on the task, it is found that the students on the one hand agree that working in groups is better for learning. On the other hand, there are also arguments for individual work. For example, it is claimed that that it will be impossible to work in groups for several reasons, including the time limits, the information the group have available and the complexity of the questions. In the analysis, this situation is explained as a consequence of a tension between two different rationales, referred to as the local and the integrative. The students need to manage the envelope task at the same time as they consider the progress in the theme including other subtasks.

The tension between the rationales becomes a problem for the students to manage, causing a temporal breakdown in their activity. Conversely, it is concluded that there are productive aspects to this situation. In the discussions between the students and one of the teachers, the premises of the task and the form for joint activities become the object of negotiation. In this, a meta-language of learning is used, involving distinctions like “deep knowledge” contra “facts”. Moreover, experiences from previous work with similar tasks are shared between students and the teacher, who also provides instructions regarding how to approach and answer the questions in the envelope task. It is argued that this kind of discussions, involving what Schatzki (1995) refers to as conflicting interpretations of practice, over time contributes to the development of repertoires for approaching and reasoning in educational tasks.

The productive aspects are not the result of the envelope task, or the principles of inquiry *per se*, but rather the conflict between the two different educational rationales. The students are on the one hand put in a situation in which they need to find ways to manage both rationales, which is done in discussions with the teacher. The resulting practical solution in is a compromise, in which the students are to seek information in pairs and then present the results orally to the rest of the base group. Through this organization, the students are included in the realization of the pedagogy, and also in the management of conflicts in an ecology of negotiation.

The second question deals with how students argue for diverse viewpoints, and how teachers respond. A key in education aspiring to authenticity is to create room for involving students’ experiences and personal meaning making. At the same time, the teachers have an agenda and a curriculum to relate to. As discussed in chapter 2, this tension is a theme addressed already by Dewey (1902) and has been discussed throughout the history of education during the 20<sup>th</sup> century and after, notably by Petraglia (1997). Argumentation is interesting from this point of view, since it is a communicative activity in which alternative

viewpoints can be expressed and responded to. Argumentation is also a core element in scientific reasoning, and learning to use proper arguments and lines of argumentation in inquiry is a learning process in itself.

In the analysis presented in chapter 7, students' discussions and development of argumentation over extended periods of time were investigated, as well as the teachers' ways of responding. In theme Africa, the students took part of online material from NGO's and other non-educational organizations (Lilja & Mäkitalo, 2009). Material gathered from these sources received a constitutive role in the joint activity. What is referred to as the "post colonial guilt narrative" became a resource in the students' argumentation, with each other as well as with the teachers. The students as well as the teachers argued for their points of view, and the students introduced various examples and information, in line with what Bruner (1991) refers to as normativeness of narratives. The guilt narrative became instrumental in the formation of the discursive space in which the concepts and theories – part of the learning objectives of theme Africa – was contextualized.

The activities are arranged in a way which includes both teachers and students in the argumentative exchanges. Moreover, participation was invited in which personal viewpoints and identity became involved. In some of the students, who held a personal interest and a significant out-of-school engagement in international politics, this process became intertwined with their articulations of identity, potentially contributing to the authenticity of the school task. The guilt narrative, which is of great personal relevance for some of the students, becomes target for counter arguments and alternative viewpoints in the argumentation with the teachers. The argumentative activities are authentic in this sense.

The teachers' work can largely be understood as attempts to qualify the students' argumentation in relation to the ways of arguing and concepts relevant in international economics. This was done by addressing assumptions, metaphors and consequences connected to the guilt narrative, and instead demonstrating reasoning and argumentation in terms of international economics. The students are, on the other hand, simultaneously investigating alternative ways of arguing. As noted in the end, the different narratives involved in the argumentation analyzed in chapter 7 are reflected in the historical process in the scientific discipline Development Economics. The argumentation the students and teachers are involved in can thus be understood as reflecting a historical process of inquiry in the discipline, highlighting the authenticity of the local positioning and argumentation.

The third research question addresses how writing shapes students' work and reasoning. The role of documentation and writing in inquiry is a main concern in several of the studies of contemporary educational environments reviewed in chapter 2 (Boström, 2011, Rasmussen, 2005). Both the process of documentation and use of digital tools are found to be the cause of difficulties for the students. One of the main challenges for students described by Furberg (2009) is to make their reasoning visible in text.

Chapter 8 investigates the organization of text production during the writing of an essay in the theme Africa. The teachers' instructions as well as the students' process in which the students approached and set up the work was followed, and interviews about the writing process was conducted. It was found that the organisation of writing was not possible to separate from how the students dealt with the content of the theme. In writing the essay, the students needed to explain concepts from economy, history and religion as well as to organize and present lines of reasoning regarding the origin and development of poverty in Africa.

In the terminology of Prior (2009), the essay became an integrated part of a productive chain of discourse in the theme, interlinked with other tasks and processes. Moreover, the essay was the final examination of the theme, and assessment aspects became integrated in the work. The teachers, for example, instructed the students to identify what was referred to as "problem fields" and how to organize their presentations based on that. In this way, instructions on how to write the essay simultaneously became instructions regarding how to organize and relate content from the various subjects included theme Africa, as well as regarding how to reason and draw conclusions. The writing task was also practically arranged so that the students, in case they needed help, could turn to a teacher and receive feedback on a preliminary version of their essay.

The essay – the discursive resources it involves as well as the task specific instructions (like explaining key concepts) and the assessment criteria relating to it – makes up a set of resources through which the student can document and close lines of reasoning. Bazerman (2009) argues that genres "identify a problem space for the developing writer". In this setting, the problem space identified through the essay writing becomes a problem space for work in the theme in a wider sense. The writing becomes a resource for the students, potentially providing means for structuring material and ideas gathered throughout the theme and presenting complex argumentation.

Theme Africa takes place in the end of the second year of the program, and essays have been part of earlier themes. This recurrence makes it possible for the

students to gradually appropriate discursive tools related to writing in order to document inquiry, a process that according to the analysis of Boström (2011) involves several qualitative transformations. Essay writing is a genre with a long history in schooling, which in this setting is receiving a partly new role. As digital tools for information seeking and text production are integrated in the themes, documentation also becomes a way of structuring and presenting material. This potentially leads to the development of qualified literacy.

The last research question regards how the students' actions are directed. The question will here be discussed in relation to a summary of the findings in chapter 9. Several recent studies in primary school settings show that teachers' guidance and orchestration of inquiry are crucial for the results (Viilo, Seitamaa-Hakkarainen and Hakkarainen, 2012; Littleton, Scanlon and Sharples, 2012). In the analysis in chapter 9, attention is paid to the material and social arrangements, which are part of the organization of the program, and their role in what Dewey (1938/1991), refers to as the directing of inquiry. These arrangements are largely part of what Engeström (1998) describe as the middle level of the organization. This means that the grouping of students, the design of the task, the format of assessment and the relationship with the surrounding community are part of the object of analysis. In the analysis, directing is understood as something more than the actions of the teacher. It also involves the interaction between the students and different elements of the environment.

In chapter 9, a base group of students' activities in the theme City Planning is analyzed. Their work with a complex task in which they are involved in producing a plan for a hypothetical housing area is followed during seven weeks. The City Planning task both involves producing a plan and arguing for the design. The case is an example of advanced project work in which the students are supposed to move outside school as part of their work. This is of particular interest is that the task is set up for the students to meet actual stakeholders and gather information which is otherwise not available. This intersection with the city is part of the organization of theme City Planning. The teachers are involved in the project, but have minimal opportunities to follow the process continuously, not least since the students move out in the city for study visits and to meet different stakeholders. In the analysis, joint discussions in planning, idea production and documentation are examined. The chapter ends with a description of a presentation by the base group of work in progress and the teachers' responses.

The project starts out as an open problem, but as the work unfolds it becomes gradually specified. In the analysis of different aspects involved in the

directing of this process, some stand out as particularly significant. The first is what is referred to as the problem space of the City Planning task. The City Planning task is in on the one hand formulated by the teachers in terms of that the students are to form a city planning commission. On the other, the assessment and conceptual tools introduced by the teachers make particular kinds of reasoning and perspective taking necessary to complete the task. This means that the direction involved is not just about the process of the students. Rather, the application of particular perspectives and concepts are made into a central part of the inquiry.

The emphasis on conceptual knowledge is further augmented by the temporal logic of the City Planning task. In the task, the students need to plan which stakeholders to interview, and what to ask them, before they go out to meet them. At the same time, however, this creates an opening for the experiences of the students and their knowledge about the community to judge what may be reasonable arguments and points of view. “Small stories” are introduced as part of this process. The task in this way addresses the borderland between school and society. This is explored in an inquiry process in which the students become required to explore find connections between considerations of stakeholders in the city, democratic decision making, the specific model of the housing area and conceptual reasoning. In conclusion, the resources and the organization of the theme is part of a process in which the process as well as reasoning and contextualization of experiences are directed.

### Integrative themes

The last part of this chapter is a thematic discussion of the results.

#### **An ecology of negotiation**

The two themes analysed in this study, Africa and City Planning, are very disparate in content, yet similar in the structure and organization. One fundamental similarity is that both themes are designed to reach outside the walls of the school. The students are expected to gather material and experiences from what has been referred to as “bigger types of collectivity” (Haggis, 2009), outside the school practice.

Both themes investigated in this study involved processes through which the agendas of schooling – including the learning of particular concepts, application of perspectives and use of theories – were interwoven with the treatment of material, points of view and experiences of actors outside the walls of the school.

They students are also invited to take a personal stand in complex questions, and to involve their own experiences in working with the tasks.

These features of the educational program can be discussed in relation to Petraglia's (1998) conclusion regarding the design of authentic learning environments. Activities in institutional educational settings are always arranged for some learning objectives. There are, in this sense, tensions within the very idea of authenticity. In response to this situation, Petraglia suggests an approach that "acknowledges that teachers and educational institutions have objectives, but learners have real worlds that may be an obstacle in achieving them" (Petraglia, 1997, p. 163). Authenticity can only be maintained in a dialogic exchange. This leads to questions regarding how the activities on the educational program is organized to weave together personal experiences, disciplinary concepts, theories and perspectives, and the voices and from outside the walls of the school.

The argument, which will be developed here, is that this weaving together is made possible by what here will be referred to as a communicative ecology of negotiation. It is referred to in terms of an ecology since it consists of a systemic relationship between elements which all contribute to create an environment with particular characteristics. It cannot be reduced to the specific effects any particular task or format. The most significant elements of the ecology investigated in the studies, are the following:

- Elements from PBL and project work
- The nature of the collaborative tasks
- The multi level agency of the teachers
- The temporal organisation.

Each of these will be discussed in the following sections.

#### *Elements from PBL and project work*

There are a number of recurring elements in the themes, adapted from- or influenced by the traditions of problem based learning (PBL) as well as project work. These include *the base group format* in which students are grouped together in work groups over the course of themes; formalized meeting procedures with chair and secretary (which are roles that the students are to take on and rotate in the base group); and the *brainstorming and formulation of questions* in the beginning of the themes. Together these elements contribute to create a discursive space for negotiations and argumentative exchanges, in which a number of issues can be addressed, such as planning of joint work, learning objectives and content as well as the premises of the tasks. Details of such processes have been described in all the empirical chapters in this study. An inherent aspect in these elements is

that the students are positioned (Harré & van Langenhove, 1999) in a particular way – they need to take collective responsibility for planning, organizing and performing joint activities. This means that they (at least to some degree) need to participate in negotiations – discussing, debating, agreeing and reaching conclusions.

#### *The nature of the collaborative tasks*

In addition to the elements described above, adapted from problem based learning and project work, the students are given various tasks to solve collaboratively. These tasks introduce objectives as well as constraints in work with the themes, and tend to have particular characteristics. In this study, collaborative tasks are exemplified by the envelope task analysed in chapter 6 and the City Planning task analysed in chapter 9. Both became object of considerable interpretation and coordination to be turned into practical work. Particularly the City Planning task can be characterized in terms of a multi-dimensional problem, rather than a closed task with well-defined “answers”. It requires interpretation and specification to be turned into practical work and meaning-making, and is to result in a practical solution. It can thus take many different directions and demands creative initiatives, but the students still need to live up to certain standards. To achieve this involves continuous and extended negotiation, as demonstrated in chapter 9.

#### *The multi level agency of the teachers*

The teachers are involved in extensive work with planning the themes as well as preparing tasks. When the theme Africa starts, the teachers are in this way participating in setting the stage for student initiative and decision-making, as in the introduction of the City Planning task (see chapter 9). The students were then positioned as “City planners”, and received specifications of what they needed to do during the theme. The teachers also act in ways that maintains the initiative of the students, for example by providing relevant knowledge and distinctions but refraining from participating in the decision-making process of the base groups.

Another central aspect of the teachers’ agency is *the enabling function*. This may involve modifying the premises for tasks, or discussing how to take them on with the students. This can include *instructions and help in organizing work*, as in the students’ with the teacher Erik exchange about the envelope task. It can also include the *introduction of constraints*, which reduces complexity and directs the students’ work in relevant aspects. An example of this is when the teachers



assign a working session to the planning of interviews in the City Planning task, providing resources as well as local goals.

The enabling function is of particular importance in relation to a third aspect of teacher agency – *responding to student work, assessing and providing instructions for further work*. As described, the tasks in the program generally require interpretation and specification. The students mainly perform this work. This is an integral aspect of the environment – if the students do not produce work, the teachers will not have anything to respond to or to assess. It is therefore necessary to also enable the students' work when it runs into problems of various kinds.

### *The temporal organization*

The tasks given in both themes, investigated in these studies, demand interpretation and specification to be turned into practical work. It is hence necessary for the students to have sufficient time available to go through these processes, and for the teachers to respond or enable the students' work. The tasks need to unfold through negotiation, and such unfolding can only take place if sufficient time is available (Lemke, 2000). An organization of school-work, where much of the students' scheduled time during several consecutive weeks is allocated for theme work, is therefore necessary.

On an even longer time scale, the very organization of the themes is negotiated. This is exemplified in the discussions with the student teacher Olle in chapter 9. The students jointly produce a temporal narrative about their work so far in theme city planning. The narrative reflects the students' cumulative experience of participating in work in various previous themes, and the rationales for how the resources in them were arranged. Given a particular set of resources – textbooks as well as other literature, as well as key concepts and lectures – the students used to be able to solve their tasks. This is not the case in the theme City Planning. Here it is demanded that the students gather material outside the school. In the analysis, it was concluded that this difference in logic made shared object construction and hence coordination of action temporally problematic. These difficulties were later resolved, but the episode demonstrates how the relationship between actions and tools in themes are negotiated.

The students are not simply trained in the use of a given set of methods or inquiry processes. Rather, there are variations in what is expected of them, which they discover as work with the tasks unfolds. This way of organizing education leads to recurring negotiations of practice as part of practice. Based on the observations in the empirical chapters, it is here argued that they are of

considerable importance for the learning and development of generic and inquiry-related competences.

### **Integration of discursive resources, direction and assessment**

In Lemke's (2000) theorizing on ecosocial systems, a basic tenet is that processes in such systems take place on different time scales. In education, great emphasis is often placed on the quality of local arrangements like the set up of particular experiments or performance in lectures and presentations. Lemke, however, asks, "how could events on the timescale of a conversation or an experiment or reading a story even contribute to identity development?" (Lemke, 2000, p. 278) While identity development per se has not been analysed in this study, the same question can be asked in relation to the development of qualified and complex abilities like literacy and critical thinking. In this section, the use of discursive resources, which are part of work in the theme Africa and the Theme City Planning, will be reconsidered in relation to Lemke's question. Of particular interest here is the expository essay in the theme Africa and the interest models in the theme City Planning.

To begin with the essay writing in the theme Africa, the process in which the students approached and set up the work was analysed in chapter 8. The writing and how it shaped the engagement with the issues in the theme Africa was described, as well as the students' on-going appropriation of the expository essay as a genre. It was found that the writing process was not separable from how the students dealt with the content of the theme. In writing the essay, the students needed to explain concepts from economy, history and religion as well as to organize and present "lines of reasoning" regarding the origin and development of poverty in Africa.

In the writing process, and in the discussions about it, the students also come to deal with more generic issues, like the discursive resources involved in dealing with different positions, and the conditions for objectivity. These complex competences are developing over a much longer time scale than the course of the theme – at least over the course of the whole program, and probably beyond. Literacy instruction and discursive socialization in academic standards, such as being able to deal with different opinions and points of view, become intertwined with work with subject-matter content. Moreover, in the discussion about objectivity between the students, analysed in chapter 8, the students refer to experiences from tasks involving writing in previous themes. Writing is a recurring part of the organization of themes, and the expository essay is part of a

series of recurring writing tasks, through which the students to different degrees can appropriate academic genres and associated reasoning abilities.

Framed in another way, the essay in the theme Africa has several intertwined functions that can be further clarified when viewed as part of the organization of the theme and the program. Work with the essay is simultaneously an integral part of work with content and instruction in the theme Africa, the assessment practices, the teachers' instruction regarding writing genres and the students' appropriation of them. From an ecological viewpoint, the function of the essay writing needs to be understood in terms of what Lemke (2000) refers to as a heterochronic relationship – in which processes of learning and development, taking place on two different time scales, are interwoven.

A parallel analysis can be applied to the stakeholder models in the theme City Planning. Although the models are discursive resources of a rather different kind than writing genres, some rather similar functions can be pointed out when they are regarded as parts of the practice and ecology on the program. As demonstrated in chapter 9, the students were instructed to apply the stakeholder models in their work with producing a plan for a housing area. They were introduced by the teachers at a point in the theme City Planning when the students needed to plan for interviews. The models list certain types of stakeholders and interests involved in city planning processes.

The analysis in chapter 9 demonstrates how the models became a point of departure in the students' planning of interviews, as well as later on when documenting material for the preliminary presentation. By listing interests and stakeholders, the models both provided a structure for reasoning, and suggested particular perspectives and points of view to be used as points of departure. In this way, they became instrumental in directing the students' inquiry in city planning on the local and theme time scales.

After the half time presentation, the teachers responded to the students. During the assessment of the preliminary plan, the students were instructed to "ask questions like social scientists". The specific details of the students plan were not commented at all at this point. Rather, the students were urged to apply and clarify their use of the interest models, as well as other general models and rules, in their further work with the plan. In this way, the problem space the students needed to operate within to live up to the assessment criteria was indicated.

When integrated in the work of the base group, the models then both become a resource for organizing joint work, and a means for introducing particular perspectives. In this way the role of the models in the group work is

similar to the function of the essay; both become means to direct inquiry, in group work or individually. The instructions regarding how to ask questions during the response to the preliminary plan, are also addressing particular kinds of reasoning. The ability to distinguish questions about specific details in the work of producing the plan from generic types of reasoning, is part of the repertoire the students are expected to appropriate.

The stakeholder models illustrate generic types of reasoning. The work with the models can in this way be understood as part of the development of particular kinds of reasoning and appropriation of “tools to think with” (Olson, 1990). These are taking place on longer, theme over arching time scales. At the same time, the stakeholder models provide resources for the local direction of inquiry. Thus, on a shorter time scale, they become an integral part of instruction and assessment practices. As in the case with the essay in the theme Africa, these processes are interwoven. Assessment is in this way integrated in the ecology and potentially contributes to the long-term developmental processes, as well as short-term inquiry and learning.

As argued above, the environment can be described in terms of *an ecology of negotiation*. This communicative ecology both demands and creates space for students’ negotiations, argumentation and meaning-making. The premises and conditions for realising inquiry in institutional education is thus not simply found in a particular format or process, but also in the sometimes complex relationship between different elements adapted to fit together on different time scales in a local world. Living in such a world leads to the development of far more than disciplinary knowledge.

## SWEDISH SUMMARY

### **Kontextualisering av inquirybegreppet** **Förhandlingar av uppgifter, redskap och handling på ett** **gymnasieprogram**

I sammanfattningen nedan ges en kapitelvis redogörelse över innehållet i de olika kapitlen.

#### **Kapitel 1. Introduktion**

Under de senaste decennierna har förändringar i arbetslivet, organisationsformer, media och vår användning av informationsteknologier förändrat villkoren för demokrati och deltagande i samhället, lokalt såväl som globalt (Castells, 1996; Giddens, 1991). Vad dessa förändringar innebär för skola och utbildning är en fråga som ägnats mycket uppmärksamhet inom utbildningsforskning såväl som i politiska sammanhang. Dagens studenter förväntas inte bara lära sig kunskaper och färdigheter inom olika ämnesområden. De förväntas också utveckla generiska och komplexa kompetenser och dispositioner, såsom kritiskt tänkande och demokratiska värderingar. De ska också förberedas för livslångt lärande.

Hur kan utbildning arrangeras för att möta alla dessa krav? Ett svar är att utveckla utbildningsmetoder som bygger på *inquiry*. Detta begrepp, som inte har någon svensk motsvarighet, har en lång historik inom utbildning, med ursprung i progressivistiska och konstruktivistiska traditioner. Rötterna finns i John Deweys arbeten (se exempelvis Dewey, 1910). I dagligt tal avser begreppet att undersöka något eller att ställa frågor, men i detta sammanhang avses den teoretiska innebörden. Dewey beskrev *inquiry* som en grundläggande process i vetenskap, problemlösning och intelligent handlande mer allmänt, och inte enbart som en utbildningsmetod. I en samtida tolkning menar Bishop och Bruce (2009) att *inquiry* som process i utbildning involverar fem huvudelement: att ställa frågor, att genomföra undersökningar, att skapa en produkt, att diskutera, samt att reflektera. Under de senaste decennierna har idén om *inquiry* i utbildning fått ny uppmärksamhet, både teoretiskt och i ett praktikperspektiv.

Användningen av metoder baserade på *inquiry* i utbildning och undervisning motiveras med flera olika argument. Tre argument är av särskild relevans för denna studie:

a) *Inquiry som modell för att lära vetenskaplig metod och problemlösning.* Edelson, Gordin and Pea (1999) menar att arbete enligt inquiry-principer kan bidra till utvecklingen av generella kompetenser i undersökning och problemlösning, specifika metodkunskaper samt förståelse av vetenskapliga begrepp. En vanlig tanke är att man genom format som bland annat projektarbete kan lära sig denna typ av kunskaper och färdigheter inom ramen för individuellt eller kollektivt organiserade undersökningsprocesser. Littleton, Sharples and Scanlon (2012) pekar på att arbete i enlighet med inquiry-principer kan leda till utvecklingen av komplexa tankeförmågor.

b) *Inquiry som väg till autentiska lärprocesser i institutionell utbildning.* En gemensam aspekt hos utbildningsmetoder som bygger på inquiry är att de syftar till att skapa möjligheter för att ställa frågor i ett sammanhang och använda kunskap för praktiska ändamål, snarare än att isolera och presentera ett givet kunskapsinnehåll. I detta perspektiv är poängen med inquiry att skapa förutsättningar för praktiska kontexter, i vilket kunskaper blir relevanta och meningsfulla. Bruce och Bishop (2008) menar att realiserandet av inquiry kräver aktivt lärande i autentiska kontexter. I deras framställning innebär detta i sin tur att elever, lärare och personer från det omgivande samhället samverkar i en gemensam process.

c) *Inquiry som metod att skapa kopplingar mellan skolaktiviteter och det omgivande samhället.* Att inom utbildning skapa länkar mellan individ och samhälle samt mellan formellt lärande och levande erfarenhet är enligt Bruce och Bishop (2008) ett grundproblem för utbildning. Inquiry föreslås i litteraturen som modell att skapa sådana kopplingar (Erstad, 2005). Thomas och Brown (2011) menar att tillgången till det digitala informationsnätverket, liksom den konstanta förändring som blivit ett kännetecken för dagens samhälle, radikalt har ändrat förutsättningarna för skola och utbildning. Thomas och Brown förespråkar att dagens elever ska ”följa sin passion” (s. 79) i inquiry-processer, samtidigt som de i en avgränsad miljö kan ta del av digitala resurser som finns tillgängliga i dagens samhälle.

Syftet med denna avhandling är att teoretiskt och empiriskt undersöka hur inquiry-principer integreras, eller kontextualiseras, i samtida utbildning, samt vilka konsekvenser detta får för klassrumsaktiviteter, lärande och utveckling. I avhandlingen görs en serie delstudier i en utbildningsmiljö, samhällsprogrammet på en Svensk gymnasieskola, som i detta perspektiv är intressant på flera sätt.

Miljön innehåller element både från projektarbete och problembaserat lärande (PBL), vilka båda är pedagogiska modeller som är tydligt inspirerade av inquiry-principer. Mål som att utveckla sociala färdigheter såväl som informationskompetenser lyfts fram i beskrivningar av programmet. Miljön är samtidigt under utveckling, och lärare och elever kan beskrivas som i färd med att förändra formerna för undervisning och skolarbete.

## **Kapitel 2. Progressivism, autenticitet och inquiry: Historisk bakgrund och forskningsöversikt.**

För att ge en vidare bakgrund till de empiriska studierna ges i kapitel 2 kapitel en historisk bakgrund till projektarbete som det utövas idag. Vidare ges en selektiv översikt av empirisk forskning om projektarbete. Dessutom belyses ett antal begreppsliga och praktiska problem som är av betydelse för realiserandet av inquiry i utbildning.

Den historiska bakgrunden såväl som forskningsöversikten utgår från diskussionen kring, och tillämpningen av, projektarbete. Projektmetoder av olika slag tillhör de tillämpningar av inquiry-principer som fått störst utbredning och i detta kapitel utgör de en lins genom vilket diskussionen kring inquiry kan framträda.

Projektarbete tas inte sällan för ett nytt, innovativt eller till och med radikalt utbildningsformat. Projektarbete och idén om autenticitet (Petraglia, 1997) har dock en lång historia inom skolan och utbildningsvärlden (Waks, 1997; Knoll, 1997). Efter att först ha uppträtt inom akademisk yrkesutbildning redan under slutet av 1500-talet har man i olika tider sett olika pedagogiska möjligheter i projektet som form. Genom att betrakta hur man i olika sammanhang historiskt försökt realisera av projektarbete kan man lära sig mycket om både 1900-talets pedagogiska tänkande såväl som om samhällsutvecklingen i betydligt vidare bemärkelse. I kapitel 2 refereras den tidiga amerikanska diskussionen kring Kilpatricks version av projektmetoden. Vidare diskuteras influenserna från Piaget på europeisk utbildningspolitik och de barncentrerade rörelsernas framväxt under efterkrigstiden. I ett samtida perspektiv kan det noteras att projektarbete, i olika former införts i samband med satsningar på informations- och kommunikationsteknologier i skolor i många olika länder (Erstad, 2005). I ett Svenskt perspektiv kan pedagogiska upplägg i projektform sägas blivit ”gräsrotssvar” på många av de nya krav som samhällsförändringen ställer på utbildningssystem (Åberg, Mäkitalo & Säljö, 2010).

Av betydelse för denna studie är även de teoretiska diskussioner kring dilemman och paradoxer som återkommande diskuterats sedan 1900-talets början i samband med progressivistiska och konstruktivistiska metoder mer

allmänt. Redan 1902 pekade Dewey på den föreställda motsättningen ”barnet mot läroplanen”. Tanken på detta som en dikotomi – eller ett antingen-eller förhållande – lämnar endast två alternativ: att lämna barnet till dess spontanitet eller att vägleda det utifrån. Redan genom att ställa upp frågan det på detta vis skapas enligt Dewey teoretiska problem, som inte går att lösa. Han menar att problemet inte skall betraktas som teoretiskt, utan som ett praktiskt sådant, som löses i interaktion.

Autenticitetsbegreppet diskuteras utförligt av Petraglia (1997; 1998), vars arbeten är en av de centrala utgångspunkterna för denna studie. I mer allmän bemärkelse är föreställningen om autenticitet i utbildning, det vill säga korrespondensen eller kopplingen mellan utbildning och verkligheten utanför skolan, en mycket betydelsefull aspekt av samtidens utbildningsteori och -retorik. Petraglia (1997) visar hur detta ideal legat till grund för olika riktningar inom den konstruktivistiska rörelsen under 1900-talet. Samtidigt pekar han på dess problematiska, snarast paradoxala drag, då han menar att man genom tanken på autenticitet försöker förena demokratiseringsprojekt med den traditionella bildningens elitistiska ideal.

I genomgången av empirisk forskning fokuseras studier av projektarbete och näraliggande pedagogiska upplägg som på olika sätt inkluderar inquiry-principer. Dessa är utförda i Svenska och Norska grundskolor och gymnasier. I den internationella forskningen på området återfinns i övrigt tämligen få kvalificerade empiriska studier av undervisning i projektform (Polman, 2005; Helle et al, 2006). I översikten pekas tre teman ut. För det första beskrivs i flera av studierna parallella men olika konceptioner av skolarbete. Dessa involverar ibland olika rationaler som kan komma i konflikt (Lundh, 2011; Rasmussen, 2005; Furberg, 2009). För det andra utmanas etablerade normer och regler i praktikerna av elevers användning av digitala teknologier (Rasmussen, 2005, Furberg, 2009). För det tredje ges i litteraturen flera exempel på kvalificerade samtal och avancerat arbete återfinns i litteraturen (Rasmussen, 2005; Furberg, 2009; Boström 2011; Jakobsson, Mäkitalo and Säljö, 2009; Säljö et al, 2011). I diskussionen av dessa fynd pekas frågan om former för dokumentation av projekt ut som underanalyserad.

### **Kapitel 3. Teoretisk inramning**

I avhandlingens tredje kapitel ges en övergripande teoretisk inramning till delstudierna. Objektet i den empiriska studien är ett gymnasieprogram som har speciella drag. Det kännetecknas av försök att utveckla och omorganisera praktiken, förändra former för elevers deltagande såväl som relationen mellan



lärarna, samverka över traditionella ämnesgränser samt skapa utrymmen för användning av digitala teknologier. I analysen hanteras frågor kring agens, relationen mellan individ, kontext och redskap, såväl som spänningsförhållanden mellan stabila och föränderliga aspekter i miljön. I kapitlet analyseras litteratur som berör dessa frågor i en diskussion av ett antal delvis relaterade teoretiska traditioner under fem teman:

*a) Agens, mediering och aktivitet*

Olika typer av redskap och resurser, materiella såväl som semiotiska och begreppsliga, är centrala aspekter inom utbildningspraktiker såväl som mänskliga praktiker mer allmänt. Analys av användning av redskap i praktiken är också en central aspekt i denna studie. Under detta tema diskuteras centrala begrepp från sociokulturell teori (Wertsch, 1998; Cole & Wertsch, 1994) och verksamhetsteori Kaptelinin (1996). Här diskuteras också Olsons (2009) perspektiv på skriftspråkliga förmågor, enligt vilket genrer och andra begrepp förstås som redskap för tänkande och institutionell kommunikation.

*b) Praktiker, aktiviteter och handlingar*

I olika teoretiska traditioner där praktikbegreppet diskuteras skiljer man ofta på olika nivåer. Särskilt uttalat är detta inom verksamhetsteori (Kaptelinin and Nardi, 2006). I detta avsnitt diskuteras praktikbegreppet och det relationella perspektiv som är utgångspunkten för bland annat Lave och Wengers (1991) inflytelserika diskussion. Den kritiska diskussion, som förts inom sociologisk litteratur, beskrivs också (Schatski, Knorr-Cetina och von Savigny, 2001; Barnes, 2001).

*c) Tidsskalor och utveckling*

När elevers arbete organiseras i form av projekt som sträcker sig över längre tidsperioder förändras villkoren för meningskapande och problemlösning. Detta tema diskuteras inom komplex systemteori (Lemke, 2000) Med utgångspunkt i Linell (1998) diskuteras även meningskapande och interaktion i dialogiska perspektiv. Mot denna bakgrund diskuteras emergens och hur mening skapas och utvecklas över tid i reflexiv relation till olika kontexter.

*d) Förändring, stabilitet och motsättningar i handling och verksamhetsystem*

En och samma utbildningspraktik kan inrymma parallella och potentiellt konflikterande förväntningar och förståelser av lärande, inte minst under pågående förändringsprocesser. Detta tema är framträdande inom verksamhetsteori (Engeström, 2010; Kaptelinin och Nardi, 2008) men i detta sammanhang är också pågående teoriutveckling inom systemteori (Lemke och Sabielli, 2008) och komplexitetsteori (Haggis, 2009) av intresse.

*e) Relationer mellan mikro- och makroekologier*

När institutionella utbildnings praktiker förändras för att skapa nya kopplingar till det omgivande samhället, och för att ge utrymme för elevers kunskaper och erfarenheter, förändras relationerna mellan lokala sociala och kommunikativa ekologier, och de vidare ekologier av vilka dessa är delar. Begreppet kommunikativ ekologi så som det används av Erickson (2004) diskuteras i detta avsnitt, och relateras till Nardis och O'Days analys av informationsekologier. Vidare diskuteras analyser av skola och utbildning som gjorts inom ramen för aktör-nätverksteori (McGregor, 2004).

#### **Kapitel 4. Syfte och frågeställningar**

I det fjärde kapitlet formuleras avhandlingens syfte och forskningsfrågor i relation till materialet som presenterats i de två föregående kapitlen. Studien syftar till att bidra till förståelsen av hur inquiry kontextualiseras i institutionella utbildningspraktiker. Detta sker genom att utforska konsekvenserna av tillämpning av principer för inquiry för klassrumsaktiviteter, lärande och utveckling.

I avhandlingen ställs fyra frågor som huvudsakligen, men inte uteslutande, svarar mot de fyra empiriska kapitlen (6-9).

1. Vilka spänningar finns i elevernas grupparbete och hur hanteras dessa spänningar?
2. Hur argumenterar elever för olika ståndpunkter, och hur svarar lärarna?
3. Hur formas elevernas arbete och resonering av textproduktion?
4. hur sker dirigering av elevers handlingar?

#### **Kapitel 5. Datainsamling och metod**

Avhandlingens metod har sin grund i skol- och utbildningsetnografiska traditioner (Jackson 1969; Wolcott 1999; Bergqvist 1990). Data har i enlighet med denna samlats in i en längre fältstudie. Det gymnasieprogram (sambandsprogrammet) som valts ut för datainsamling till studien tillhör en gymnasieskola i en större svensk stad. I information och reklam beskrivs programmet som utgående från helhetsperspektiv snarare än traditionella skolämnen. Arbets sättet kan beskrivas som en variant av problembaserat lärande med inslag av projektarbete och beskrivs som inriktat på att lära ut färdigheter kring hantering av information och arbete i grupp, samt utveckling av eget ansvar för lärandet. Internet och skolbibliotekets sökresurser utgör standardredskap i arbetet.

De tillgängliga lokalerna på skolan är i stor utsträckning traditionella klassrum. Utöver dessa finns det några större, öppna lokaler samt ett antal

grupprum och datasalar. Arbetet är indelat i teman som sträcker sig över ca 6-7 veckor. Dessa är huvudsakligen uppbyggda av element från samhällskunskap, historia, naturkunskap, religion och svenska. Matematik, engelska och övriga språk är inte inkluderade i det tematiska arbetssättet, och läses parallellt.

Den långa fältnärvaron innebär att centrala och återkommande aktiviteter har kunnat dokumenteras. Analysen har samtidigt inspirerats av vad Baszanger och Dodier (2004) benämner som "kombinatorisk etnografi". Tanken med detta angreppssätt är att öppna för möjligheten att fånga individers handlande i relation till exempelvis olika rationaler och resurser i en och samma verksamhet.

Huvuddelen av materialet som ligger till grund för studien har insamlats under omkring fyra månaders tid. Före det genomfördes ett par kortare pilotstudier, och senare tre intervjuer av elever i par. Under huvudinsamlingen var fältnärvaron mellan en och fyra timmar, upp till fyra dagar per vecka. Det material som är i fokus för analysen två olika basgruppers arbete och samtal dokumenterats och spelats in under två teman (det vill säga en basgrupp per tema) – tema "Afrika" och tema "Samhällsplanering". Två elever deltog i båda grupperna, som under tema "Afrika" inkluderade åtta elever, och under "Samhällsplanering" elva elever. Det empiriska materialet omfattar fältanteckningar, ljudinspelningar, intervjuer, dokument som delats ut av lärarna under arbetet, samt elevuppgifter.

I kapitel 5 beskrivs också viktiga steg i analysprocessen samt forskningsetiska överväganden. Före genomförandet av studien informerades rektorn om studiens syfte och vilken typ av material som skulle samlas in. Rektorn gav sitt samtycke till studien och därefter informerades och tillfrågades två lärarlag om de kunde ge tillstånd till fältarbetet. När även dessa givit sitt tillstånd informerades eleverna och deras vårdnadshavare om studien. De elever och basgrupper som har följts mer i detalj i denna studie har dokumenterats med fältanteckningar och ljudinspelningar under längre perioder. Dessa gav sitt tillstånd till att bli dokumenterade och inspelade och informerades om att de när som helst kunde begära att lämna studien. Ingen av eleverna utnyttjade denna möjlighet. Vissa av aktiviteterna i skolan visade sig också ha med annat än skoluppgifter att göra, vilket gjorde att de etiska aspekterna av studien plötsligt blev mer aktuella. Flera elever tillbringade exempelvis tid med att skriva privata mail och besöka sociala gemenskaper på Internet. Inget material som uppenbart inte tillhör skolarbetet har dock tagits med i analyserna.

I kapitel 6-9 presenteras de fyra delstudierna.

## **Kapitel 6. Förhandlingar av grupparbetets premisser och form**

Den första forskningsfrågan i avhandlingen adresserar vilka spänningar som finns i elevernas grupparbete och hur dessa spänningar hanteras. I litteraturen om inquiry och projektarbete som refereras i kapitel 2 återfinns flera analyser av konflikterande institutionella rationaler (Rasmussen 2005; Furberg, 2009). Dessa tillskrivs ofta införandet av digitala teknologier. I flera av studierna diskuteras klipp och klistra-metoder. Kapitel 6 behandlar spänningar mellan olika rationaler relaterade till användningen av klipp och klistra-metoder i relation till grupparbete.

Genom ”kuvertuppgiften” som här analyseras, försöker lärarna designa en uppgift på ett sätt som stöder eleverna i att svara på frågorna genom gruppdiskussioner snarare än genom individuell informationssökning och klipp och klistra-metoder. Genom uppgiften utmanas elevernas tidigare erfarenheter. I analysen framkommer en spänning mellan två specifika rationaler, här kallade den lokala och den integrativa. Eleverna måste hantera kuvertuppgiften samtidigt som de tar hänsyn till arbetet med tema Afrika som helhet, av vilket kuvertuppgiften är en del. Spänningen mellan rationalerna blir ett problem för eleverna att hantera, och aktiviteten avstannar temporärt. I slutsatserna av analysen framförs samtidigt argumentet att det finns produktiva aspekter i denna situation. I samtalen mellan eleverna och en lärare förhandlas premisserna för uppgiften förhandlas premisserna och formen för arbetet med uppgiften. I dessa förhandlingar används metaspråk för lärande, innehållande distinktioner som ”djupare kunskaper” kontra ”fakta”. Vidare delas och diskuteras erfarenheter från tidigare arbete mellan elever och lärare, som också instruerar eleverna kring hur arbetet med frågorna i kuverten kan gå till.

En central slutsats är att denna typ av diskussioner, vilka involverar vad Schatzki (1995) benämner konflikterande tolkningar av praktiken, bidrar över tid till utvecklingen av kompetenser i hantera och resonera kring uppgifter som involverar inquiry. De produktiva aspekterna av förhandlingarna är inte resultatet av kuvertuppgiften i sig, eller något inslag från inquiry-principer i sig, utan snarare spänningen mellan de två olika pedagogiska rationalerna. Eleverna inkluderas i realiserandet av pedagogiken och i hanterandet av spänningar i en förhandlingsekologi.

## **Kapitel 7. Argumentation och narrativ konstruktion**

Avhandlingens andra forskningsfråga rör hur elever argumenterar för olika ståndpunkter, och hur lärarna svarar. En nyckel i utbildning som strävar efter

autenticitet är att skapa utrymme för elevers erfarenheter och meningsskapande. Samtidigt har lärare att relatera till lärandemål och läroplaner. Denna spänning adresserades redan av Dewey (1902) och har diskuterats genom utbildningshistorien under 1900-talet och fram till idag. Argumentation är av intresse ur denna synpunkt, då olika ståndpunkter kan uttryckas och få svar. Argumentation är även ett nyckelelement i vetenskapligt resonering.

I analysen i kapitel 7 analyseras elevers diskussioner och utveckling av argumentation under längre tidsperioder, såväl som lärarnas svar på denna. I tema Afrika tog eleverna del av material från Attack och andra politiska organisationer (Lilja och Mäkitalo, 2009). Vad som kallas det ”postkoloniala skuldnarrativet” blev en resurs i elevernas argumentation (Bruner, 1991). Detta narrativ blev instrumentellt i formerandet av det diskursiva utrymme i vilka begrepp och teorier som är del av lärandemålen för tema Afrika kontextualiserades. För vissa av eleverna, med ett personligt intresse och engagemang i internationell politik, blev argumentationen sammanflätad med deras identitetsuttryck, vilket kan anses bidra till autenticiteten i uppgiften.

Lärarnas arbete kan i stort förstås som försök att kvalificera elevernas argumentation, i linje med de argumentativa traditioner och begrepp som är av relevans inom disciplinen internationell ekonomi. Detta gjordes genom att adressera skuldnarrativets antaganden, metaforer och konsekvenser samt genom att demonstrera resonemang och argumentation i internationell ekonomi. Eleverna undersöker å sin sida alternativa sätt att argumentera. I avslutningen görs en koppling till disciplinen utvecklingsekonomi, inom vilken skuldnarrativet haft en betydande historisk roll i den teoretiska utvecklingen. I detta perspektiv reflekteras den historiska utvecklingen inom disciplinen i argumentationen i klassrummet vilket kan förstås som en ytterligare aspekt av autenticiteten i uppgiften.

## **Kapitel 8. Diskursiva redskap och resonering i organiserandet av textproduktion**

Den tredje forskningsfrågan i avhandlingen rör hur elevernas arbete och resonering formas av textproduktion. I flera av studierna som refereras i forskningsöversikten i kapitel 2 är textproduktion ett huvudtema 2 (Boström, 2011; Rasmussen, 2005). Både dokumentationsprocessen och användningen av digitala redskap skapar svårigheter för studenterna i dessa studier. En av de huvudsakliga utmaningarna för eleverna i Furbergs (2009) analys är att göra resonemang synliga i text.

I det tredje empiriska kapitlet undersöks hur eleverna närmar sig och beskriver arbetet med den utredande uppsats som avslutar tema Afrika. Syftet är

att studera hur uppsatsen som genre bidrar till att forma meningsskapandet i relation till de frågor som ingår i temat. I kapitlet analyseras lärarnas instruktioner om uppsatsen, elevsamtal om skrivandet samt intervjuer med enskilda elever under skrivprocessen. Dessa relateras till Bazermans (2009) perspektiv på akademiskt skrivande, i vilket de nära kopplingarna mellan tänkande, problemlösning och appropriering av genrer lyfts fram. Analysen visar hur uppsatsen som form, och de samtal som förs kring skrivandet, bidrar till att skapa ett ramverk för att organisera och sluta beskrivningar och resonemang i anslutning till temats kunskapsområde.

I Biestas (2010) terminologi bidrar uppsatsen till komplexitetsreduktion, genom att den hjälper identifierandet av en problemrymd och både stödjer form och innehåll i elevernas arbete med temat. Tema Afrika är placerat i slutet av gymnasieprogrammets andra år, och utredande uppsatser har varit en del även i tidigare teman. Detta återkommande uppsatsskrivande gör det möjligt för eleverna att gradvis appropriera diskursiva redskap relaterade till skrivande integrerat med inquiry-processer, en process, som enligt Boströms (2011) analys involverar flera kvalitativa transformationer. Detta kan rimligen antas leda till utvecklingen av kvalificerade skriftspråkliga kompetenser.

### **Kapitel 9. Dirigering av projektarbete i skärningspunkten mellan skola och samhälle**

Avhandlingens sista forskningsfråga berör hur elevers handlingar styrs. Denna fråga diskuteras i relation till delstudien som presenteras i kapitel 9. I flera nya studier och analyser av inquiry i skola lyfts lärarens guidning och orkestrering fram (Viilo, Seitamaa-Hakkarainen and Hakkarainen, 2012; Littleton, Scanlon and Sharples, 2012). I analysen i kapitel 9 ägnas uppmärksamhet åt den materiella och sociala organisationen som är del av programmet, och utgör vad Engeström (1998) kallar en "mellannivå" i praktiken. Analysen belyser betydelsen av element i denna sociala och materiella organisation för vad Dewey (1938/1991) benämner som *directing* eller dirigerande av inquiry.

I kapitel 9 studeras en basgrupps arbete i tema samhällsplanering. Deras arbete med en komplex uppgift i vilken de ska skapa en hypotetisk plan för ett bostadsområde följs under sju veckor. Uppgiften innebär att eleverna ska samla material genom att träffa verkliga intressenter i och samla information som inte finns tillgänglig via andra källor. Denna koppling till det omgivande samhället är en del i organisationen av tema samhällsplanering. Lärarna är involverade i projektet men har inte någon möjlighet att kontinuerligt följa processen, speciellt som eleverna rör sig ut i staden för att göra studiebesök och träffa olika intressenter. I kapitlet analyseras gruppdiskussioner kring planering,

idéproduktion och dokumentation. Kapitlet avslutas med en beskrivning av en presentation och efterföljande respons från lärarna.

Genom organiserandet av bedömningen och införandet av intressentmodeller styrs elevernas utveckling av projektuppgiften mot tillämpningen av vissa perspektiv och begrepp. Denna inriktning mot vissa typer av perspektiv och resonemang förstärks ytterligare av vad som benämns den ”temporal logiken” i samhällsplaneringsuppgiften. Upplägget gör att eleverna – innan de träffar intressenterna – måste planera vilka de ska träffa och vad de ska fråga.

Genom detta uppstår samtidigt en öppning för elevernas egna erfarenheter av och kunskaper om staden och samhället. Ett sätt att förmedla dessa är små berättelser prövar de vad som kan vara relevanta argument och synpunkter. I detta prövande befinner sig eleverna i skärningspunkten mellan skolan och samhället.

### **Kapitel 10. Diskussion**

I det avslutande synteskapitlet sammanfattas de fyra empiriska kapitlen. Därefter tas teman som spänner över de fyra delanalyserna upp. Det första av dessa behandlar *förhandlingsekologin*, ett i detta arbete bärande empiriskt fynd. Bakgrunden är att i både tema Afrika och tema Samhällsplanering vävs begrepp, teorier och perspektiv samman med elevernas personliga erfarenheter samt röster och narrativer med ursprung utanför skolans väggar, något som skapar förutsättningar för de olika lärande- och utvecklingsprocesser som pekas ut i de empiriska studierna. Samtliga empiriska kapitel pekar på den centrala roll som förhandlingar av uppgifter, redskap och handlingar har i att realisera en pedagogik i enlighet med inquiry-principer. Förhandlingsekologin spelar alltså en nyckelroll i att skapa villkor för de lärande- och utvecklingsprocesser som observerats.

Ekologibegreppet åsyftar i detta sammanhang systemiska förhållanden mellan element som alla bidrar till att skapa en miljö med vissa karaktäristika. Dessa kan inte reduceras till någon specifik typ av uppgift eller utbildningsformat. Centrala element för förhandlingsekologins organisering på det här studerade programmet pekas ut i kapitel 10. Dessa utgörs av element från PBL och projektarbete, uppgifternas utformning, lärarnas agerande på flera nivåer samt den temporala organisationen av teman. En diskussion kring vart och ett av dessa utvecklas. I en avslutande diskussion lyfts Lemkes (2000) begrepp *heterokroni* fram i en analys av hur diskursiva redskap, former för bedömning, lärande och utveckling samspelar på olika tidsskalor.

## CONTEXTUALIZING INQUIRY



## REFERENCES

- Alexandersson, M., & Limberg, L. (2007). *Textflytt och sökslump: Informationssökning via skolbibliotek*. Stockholm: Myndigheten för skolutveckling.
- Arnseth, H. C., & Ludvigsen, S. (2006). Approaching institutional contexts: systemic versus dialogic research in CSCL. *International Journal of Computer-Supported Collaborative Learning*, 1(2), 167–185. doi:10.1007/s11412-006-8874-3
- Arnseth, H. C., & Säljö, R. (2007). Making sense of epistemic categories: Analysing students' use of categories of progressive inquiry in computer mediated collaborative activities. *Journal of Computer Assisted Learning*, 23(5), 425–439. doi: 10.1111/j.1365-2729.2007.00225.x
- Baszanger, I. & Dodier, N. (2004). Ethnography: relating the part to the whole. In Silverman (Ed.) *Qualitative Research - theory, method and practice*. London: SAGE.
- Baran, P. (1994). On the roots of backwardness. In R. K. Kanth (Ed.), *Paradigms in economic development: Classic perspectives, critiques and reflection*. New York: M.E. Sharpe.
- Barnes, B. (2001). Practice as collective action. In T.R. Schatzki, K. Knorr-Cetina, E. von Savigny, (Eds.), *The practice turn in contemporary theory*. New York: Routledge
- Bazerman, C. (2009). Genre and cognitive development: Beyond writing to learn. In C. Bazerman, A. Bonini, & D. Figueiredo (Eds.), *Genre in a changing world*. Fort Collins, Colo: WAC Clearinghouse.
- Bergqvist, K. (1990). *Doing schoolwork: Task premises and joint activity in the comprehensive classroom*. (Diss.) Tema, Linköping: Linköpings Universitet.
- Bergqvist, K., & Säljö, R. (2004). Learning to plan. A study of reflexivity and discipline in modern pedagogy. In J. Van der Linden, & P. Renshaw (Eds), *Dialogic learning: Shifting perspectives to learning, instruction and teaching*. Dordrecht: Kluwer Academic Publishers.
- Berthelsen, J., Illeris, K., & Poulsen, S. C. (1979). *Projektarbete: Erfarenheter och praktisk handledning*. Stockholm: Wahlström & Widstrand.
- Barrows, H., & Tamblyn, R. M. (1980). *Problem-based learning: An approach to medical education*. New York: Springer.
- Bateson, G. (1979). *Mind and nature: a necessary unity*. New York: Bantam Books
- Biesta, G. (2006). *Beyond learning: Democratic education for a human future*. Boulder: Paradigm Publishers.
- Biesta, G. (2009). Pragmatism's contribution to understanding learning-in-context. In R. Edwards, G. Biesta, & Thorpe, M. (Eds.), *Rethinking contexts for learning: Communities, activities and networks*. New York: Routledge.
- Biesta, G. (2010). Five theses on complexity reduction and its politics. In D. Osberg & G. Biesta (Eds.), *Complexity theory and the politics of education*. Rotterdam: Sense Publishers.
- Billig, M., Condor, S., Edwards, D., Gane, M., Middleton, D., & Radley, A.R. (1988). *Ideological dilemmas: A social psychology of everyday thinking*. London: Sage Publications.
- Blomhøj, M., & Hoff Kjeldsen, T. (2009). Project organised science studies at university level: Exemplarity and interdisciplinarity. *ZDM*, 41(1-2), 183–198. doi:10.1007/s11858-008-0102-3
- Blumer, H. (1954). What is wrong with social theory? *American Sociological Review*, 19(1), 3–10.
- Boström, E. (2011). Projektarbete i gymnasiet: Samtal, skrivande och institutionella förväntningar. (Unpublished licentiate thesis.) Forskarskolan Slim: Gothenburg.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated learning and the culture of education. *Educational Researcher*, 18(1), 32–42.

## CONTEXTUALIZING INQUIRY

- Bruce, B. C., & Bishop, A. P. (2008). New literacies and community inquiry. In J. Coiro, M. Knobel, C. Lankshear, & D. Leu (Eds.), *Handbook of research in new literacies*. Hillsdale, NJ: LEA.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, Mass: Harvard University Press.
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18(1), 1–21.
- Bruner, J. (1996). *The culture of education*. Cambridge: Harvard University Press.
- Capaldi, N., & Lloyd, G. (2011). *The two narratives of political economy*. New York: John Wiley & Sons.
- Castells, M. (1996). *The rise of the network society*. Oxford: Blackwell Publishers.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, Mass: Harvard University Press.
- Cole, M. & Wertsch, J. V. (1994). *Beyond the individual-social antimony in discussions of Piaget and Vygotsky*. Retrieved from <http://www.massey.ac.nz/~alock/virtual/colevyg.htm>
- Cuban, L. (1986). *Teachers and machines: The classroom use of technology since 1920*. New York: Teachers College Press.
- Crawford, C. S. (2005). Actor network theory. In G. Ritzer (Ed.) *Encyclopedia of social theory*. Thousand Oaks, CA: Sage Publications.
- Dewey, J. (1902). *The Child and the Curriculum*. Chicago: University of Chicago Press.
- Dewey, J. (1910). *How we think*. Boston: D.C. Heath & Co.
- Dewey, J. (1916/1966). *Democracy and education: An introduction to the philosophy of education*. New York: The Free Press.
- Dewey, J. (1938/1991). Logic: The theory of inquiry. In J. A. Boydston (Ed.), *John Dewey: The later works, 1925—1953: 1938, Vol. 12*. Carbondale: Southern Illinois University Press.
- Donald, M. (1991). *Origins of the modern mind. Three stages in the evolution of culture and cognition*. Cambridge: Harvard University Press.
- Donald, M. (2002). *A mind so rare: The evolution of human consciousness*. New York: Norton & Co.
- Edelson, D. C., Gordin, D. N., & Pea, R. D. (1999). Addressing the challenges of inquiry-based learning through technology and curriculum design. *Journal of the Learning Sciences*, 8(3-4), 391–450.
- Edwards, D., & Mercer, N. (1987). *Common knowledge: The development of understanding in the classroom*. London: Methuen.
- Engeström, Y. (1998). Reorganizing the motivational sphere of classroom culture: An activity theoretical analysis of planning in a teacher team. In F. Seeger, J. Voight, & U. Waschescio (Eds.), *The culture of the mathematics classroom* (pp. 76–103). New York: Cambridge University Press.
- Engeström, Yrjö, & Sannino, Annalisa. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5(1), 1-24.
- Erickson, F. (2004). *Talk and social theory: Ecologies of speaking and listening in everyday life*. Cambridge: Polity Press.
- Erickson, F (2006): Definition and analysis of data from videotape: some research procedures and their rationales. In Green, J., Camilli, G., & Elmore, P. (Eds.), *Complementary Methods for Research in Education*. Mahwah, NJ: Lawrence Erlbaum & Associates
- Erstad, O. (2002). 'Handlingsrummet som öppnar sig': Berättelser från ett multimedialt praxisfält. In R. Säljö and J. Linderöth (Eds.), *Utm@ningar och e-frestelser: IT och skolans lärkultur*. Stockholm: Prisma.
- Erstad, O. (2005). Expanding possibilities: Project work using ICT. *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments*, 1(2), 109–245. Retrieved from <http://www.humantechnology.jyu.fi/archives/october05.html>
- Erstad, O. (2007). Conceiving digital literacies in schools: Norwegian experiences. *Paper for the 3<sup>rd</sup> International workshop on Digital Literacy, 17<sup>th</sup>–20<sup>th</sup> September 2007, Crete, Greece*.

## REFERENCES

- Ferraro, V. (2008). Dependence theory: An introduction. In G. Secondi (Ed.), *The development economics reader* (pp. 58–64). New York: Routledge.
- Foot, K. A. (2002). Pursuing an evolving object: A case study in object formation and identification. *Mind, Culture, and Activity* 9(2), 132–149.
- Furberg, A. (2010). *Scientific inquiry in web-based learning environments: Exploring technological, epistemic and institutional aspects of students' meaning-making*. (Diss.) Faculty of Education: University of Oslo.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford, Calif: Stanford University Press.
- Goodson, I., Biesta, G., Tedder, M., & Adair, N. (2010). *Narrative learning*. New York: Routledge.
- Goodwin, C., & Goodwin, M. H. (1992). Context, activity and participation. In A. Di Luzio, & P. Auer (Eds.), *The contextualization of language* (pp. 77–99). Amsterdam: John Benjamins.
- Greeno, J., Collins, A., & Resnick, L. B. (1996). Cognition and learning. In R. Calfee & D. Berliner (Eds.), *Handbook of educational psychology*. New York: Macmillan.
- Greiffenhagen, C. (2008). Unpacking tasks: The fusion of new technology with instructional work. *Computer Supported Cooperative Work*, 17(1), 35–62.
- Guribye, F. (2005). *Infrastructures for learning: Ethnographic inquiries into the social and technical conditions of education and training*. Universitet i Bergen: Bergen.
- Habermas, J. (1992). *Postmetaphysical thinking: Philosophical essays*. Cambridge: Polity Press.
- Hakkarainen, K. P. J. (1998). *Epistemology of scientific inquiry and computer-supported collaborative learning*. (Diss.) University of Toronto.
- Haggis, T. (2009). Beyond 'mutual constitution': Looking at learning and context from the perspective of complexity theory. In R. Edwards, G. Biesta, & Thorpe, M. (Eds.), *Rethinking contexts for learning: Communities, activities and networks* (pp. 44–60). New York: Routledge.
- Harré, Rom & Luk van Langenhove (eds) 1999. *Positioning Theory*. Oxford: Blackwell.
- Heath, C., & Luff, P. (2000). *Technology in action*. Cambridge, UK: Cambridge University Press.
- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education: Theory, practice and rubber sling shots. *Higher Education*, 51(2), 287–314. doi:10.1007/s10734-004-6386-5
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235–266.
- Honneth, A. (2004). Organized self-realization: Some paradoxes of individualization. *European Journal of Social Theory*, 7(4), 463–478.
- Högberg, R. (2009). *Motstånd och konformitet: om manliga yrkeslevers liv och identitetsskapande i relation till kärnämnen*. (Diss.) Linköping: Linköpings Universitet.
- Illeris, K. (1974). *Problemorientering og deltagerstyring: Oplæg til en alternativ didaktik*. København: Munksgaard.
- Illeris, K. (1981). *Modkvalificeringens pædagogik: Problemorientering, deltagerstyring og eksemplarisk indlæring*. København: Unge Pædagoger.
- Jackson, P. (1969). *Ljfe in classrooms*. Columbia university, New York: Teacher's college press.
- Jakobsson, A., Mäkitalo, Å., & Säljö, R. (2009). Conceptions of knowledge in research on students' understanding of the greenhouse effect: Methodological positions and their consequences for representations of knowing. *Science Education*, 93(6), 978–995.
- Jarning, H. (2009). Reform pedagogy as a national innovation system: Early twentieth century educational entrepreneurs in Norway. *Paedagogica Historica*, 45(4-5), 469–484. doi:10.1080/00309230903100874

## CONTEXTUALIZING INQUIRY

- Jenkins, H. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century*. Cambridge, MA: The MIT Press.
- Johnsson Harrie, A. (2009). *Staten och läromedlen: En studie av den svenska statliga förbandsgranskningen av läromedel 1938–1991*. (Diss.) Linköping: Linköpings Universitet.
- Jones, C., Dirckinck-Holmfeld, L. & Lindström, B. (2006). A relational, indirect, meso-level approach to CSCL design in the next decade. *International Journal of Computer Supported Collaborative Learning*, 1(1), 35–56.
- Kaptelinin, V. (1996). Computer-media activity: Functional organs in social and developmental contexts. In B. A. Nardi, (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (pp. 45–68). Cambridge: MIT Press.
- Kaptelinin, V., and Nardi, B. (2006). *Acting with technology: Activity theory and interaction design*. Cambridge: MIT Press.
- Knoll, M. (1995). The project method: Its origin and international influence. In V. Lenhart and H. Röhrs (Eds.), *Progressive education across the continents: A handbook* (pp. 307–318). Frankfurt am Main: Peter Lang.
- Knoll, M. (1997). The project method: Its vocational education origin and international development. *Journal of Industrial Teacher Education*, 34(3).
- Krueger, A. O. (2008). Why trade liberalisation is good for growth. In G. Secondi (Ed.), *The development economics reader*. New York: Routledge.
- Labaree, D. F. (2005). Progressivism, schools and schools of education: An American romance. *Paedagogica Historica*, 41(1-2), 275–288.
- Lave, J. (1988). *Cognition in practice: mind, mathematics and culture in everyday life*. Cambridge: Cambridge Univ. Press.
- Lave, J. & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge Univ. Press.
- Latour, B. (1993) *We have never been modern*. Cambridge, MA: Harvard University Press.
- Lemke, J. L. (2000). Across the scales of time: Artifacts, activities, and meanings in ecosocial systems. *Mind, Culture, and Activity*, 7(4), 273–290.
- Lemke, J. L., & Sabelli, N. H. (2008). Complex systems and educational change: Towards a new research agenda. *Educational Philosophy and Theory*, 40(1), 118–129. doi:10.1111/j.1469-5812.2007.00401.x
- Lilja, P. & Lindström, B. (2002). "Vad ska man ha den till då?": Om konstruktionistisk teknologi och lärande i skolans värld. In R. Säljö & J. Linderöth (Eds.), *Utm@ningar och e-frestelser: IT och skolans lärkultur*. Stockholm: Prisma.
- Lilja, P., & Mäkitalo, Å. (2009). Wrestling with globalisation and international justice in the classroom. Discursive challenges for students and teachers when bringing in arguments from the world wide web. *Fostering Communities of Learners: 13<sup>th</sup> Biennial Conference for Research on Learning and Instruction, August 25<sup>th</sup>–29<sup>th</sup>, 2009*, Amsterdam.
- Liljestränd, J. (2007). Elevecentrerade undervisningsfilosofier som pedagogisk paradox. *Utbildning & Demokrati*, 16(3), 37–52.
- Linell, P. (1995). *Approaching dialogue: talk and interaction in dialogical perspectives*. Arbetsrapport från Tema K, 1995:5. Linköping: Linköpings universitet.
- Linell, P. (1998). *Approaching dialogue: Talk, interaction and contexts in dialogical perspectives*. Amsterdam: John Benjamins.
- Littleton, K., Scanlon, E., & Shaples, M. (2012). Editorial introduction: Orchestrating inquiry learning. In K. Littleton, E. Scanlon, & M. Shaples (Eds), *Orchestrating inquiry learning*. New York: Routledge.
- Littleton, K., & Kerawalla, L. (2012). Trajectories of inquiry learning. In K. Littleton, E. Scanlon, & M. Shaples (Eds), *Orchestrating inquiry learning*. New York: Routledge.
- Luckmann, T. (1997). *The moral order of modern societies, moral communication and indirect moralising*. Collegium Budapest: Budapest.

## REFERENCES

- Lundh, A. (2011). *Doing research in primary school: Information activities in project-based learning*. Borås: Valfrid. Retrieved from <http://hdl.handle.net/2320/8610>
- Luria, A. R. (1976). *Cognitive development: Its cultural and social foundations*. Cambridge, Mass: Harvard University Press.
- Lynch, M. (1995). The idylls of the academy. *Social Studies of Science*, 25(3), 582–600.
- Lynch, M. (1997). Theorizing practice. *Human Studies*, 20, 225–344.
- Manlove, S., Lazonder, A.W., & de Jong, T. (2009). Trends and issues of regulative support use during inquiry learning: patterns from three studies. *Computers in Human Behavior*, 25(4), 795–803.
- McGregor, J. (2004). Spatiality and the place of the material in schools. *Pedagogy, Culture and Society* 12(3), 347–372.
- Nardi, B. A., & O'Day, V. L. (1999). *Information ecologies: Using technology with heart*. Cambridge, Mass: MIT Press.
- National Board of Education (Skolöverstyrelsen) (1980). *Läroplan för grundskolan: Lgr 80*. Stockholm: Liber Läromedel/ Utbildningsförlaget.
- Nespor, J. (1997). *Tangled up in school: politics, space, bodies, and signs in the educational process*. Mahwah, NJ: Lawrence Erlbaum.
- Nystrand, M., & Graff, N. (2000). Report in argument's clothing: an ecological perspective on writing instruction. Retrieved from <http://www.albany.edu/cela/reports/nystrand/nystrandreport13007.pdf>
- Olson, M. (2008). *Från nationsbyggare till global marknadsnomad: om medborgarskap i svensk utbildningspolitik und 1990-talet*. (Diss.) Linköping: Linköpings universitet.
- Olson, D. R. (2009). Literacy, literacy policy, and the school. In D. Olson & N. Torrance (Eds.), *The Cambridge handbook of literacy* (pp. 566–576). Cambridge: Cambridge University Press.
- Olson, D. R., & Astington, J. W. (1990). Talking about text: How literacy contributes to thought. *Journal of Pragmatics*, 14(5), 705–721.
- Pelgrum, W. J., & Law, N. (2003). *ICT in education around the world: Trends, problems and prospects*. Unesco, International Institute for Educational Planning: Paris.
- Petraglia, J. (1997). *Reality by design: The rhetoric and technology of authenticity in education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Petraglia, J. (1998). The real world on a short leash: The (mis)application of constructivism to the design of educational technology. *Educational Technology Research and Development*, 46(3), 53–65.
- Piaget, J. (1953). *The Origin of Intelligence in the Child*. London: Routledge and Kegan Paul
- Polman, J. L. (2004). Dialogic activity structures for project-based learning environments. *Cognition and Instruction*, 22(4), 431–466.
- Popkewitz, T. S., Olsson, U., & Petersson, K. (2006). The learning society, the unfinished cosmopolitan, and governing education, public health and crime prevention at the beginning of the twenty-first century. *Educational Philosophy and Theory*, 38(4), 431–449.
- Prior, P. (1998). *Writing/disciplinary: A sociohistoric account of literate activity in the academy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Prior, P. (2009). From speech genres to mediated multimodal genre systems: Bakhtin, Voloshinov, and the question of writing. In C. Bazerman, A. Bonini, & D. Figueiredo (Eds.), *Genre in a changing world* (pp. 17–34). Fort Collins, CO: WAC Clearinghouse.
- Rasmussen, I. (2005). *Project work and ICT: Studying learning as participation trajectories*. (Diss.) Oslo: Univ. of Oslo.
- Rucht, D. (2006). Social movements challenging neoliberal globalization. In J. Keane (Ed.), *Civil society: Berlin perspectives*. New York: Berghahn Books.
- Schatzki, T. R. (1995). Objectivity and rationality. In W. Natter, T. R. Schatzki, & J. P. Jones III (Eds.), *Objectivity and its other* (pp. 137–160). New York: Guilford.

## CONTEXTUALIZING INQUIRY

- Scholte, J. A. (2004). Civil society and democratically accountable global governance. *Government & Opposition*, 39(2), 211–233.
- Secondi, G. (2008). *The development economics reader*. New York: Routledge.
- Skrovset, S. & Lund, T. (2000). *Projektarbete i skolan*. Lund: Studentlitteratur.
- SOU 1972:26. (1972) *Pre-school Part 1*. (Förskolan Del 1. Betänkande avgivet av 1968 års Barnstugeutredning.) Stockholm: Ministry of Social Affairs.
- Säljö, R. (2005). *Lärande och kulturella redskap: Om lärprocesser och det kollektiva minnet*. Stockholm: Norstedts.
- Säljö, R., Jakobsson, A., Lilja, P., Mäkitalo, Å., & Åberg, M. (2011). *Att förädla information till kunskap: Lärande och klassrumsarbete i mediasambället*. Stockholm: Norstedts.
- Thomas, D., & Brown, J. S. (2011). *A new culture of learning: Cultivating the imagination for a world of constant change*. Lexington, Ky: CreateSpace?.
- Thorne, B. (1993). *Gender play: Girls and boys in school*. New Brunswick, NJ: Rutgers University Press.
- Turner, S. P. (1994). *The social theory of practices: Tradition, tacit knowledge and presuppositions*. Oxford: Polity Press.
- Vanderberg, A. (2006). Social movement unionism and networked technology. *The International Journal of Technology, Knowledge & Society*, 1(4), 45–51.
- Van Joolingen, W. R., de Jong, T., & Dimitrakopoulou, A. (2007). Issues in computer supported inquiry learning in science. *Journal of Computer Assisted Learning*, 23(2), 111–120.
- Van Oers, B. (1998). From context to contextualizing. *Learning & Instruction*, 8(6), 473–488.
- Viilo, M., Seitamaa-Hakkarainen, P., & Hakkarainen, K. (2012). Infrastructures for technology-supported collective inquiry learning in science. In K. Littleton, E. Scanlon, & M. Shaples (Eds), *Orchestrating inquiry learning*. New York: Routledge.
- Waks, L. J. (1997). The project method in postindustrial education. *Journal of Curriculum Studies*, 29(4), 391–406.
- Wertsch, J. (1998). *Mind as action*. New York: Oxford University Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, U.K: Cambridge University Press.
- Wolcott, H. F. (1999). *Ethnography: A way of seeing*. Walnut Creek, CA: AltaMira.
- Åberg, M., Mäkitalo, Å., & Säljö, R. (2010). Knowing and arguing in a panel debate. Speaker roles and responsivity to others. In K. Littleton, & C. Howe (Eds.), *Educational dialogues: Understanding and promoting productive interaction* (pp. 13–31). London: Routledge.
- Østerud, S. (2004). *Utdanning for informasjonssamfunnet: Den tredje vei*. Oslo: Universitetsforlaget.







# APPENDIX 1

## EXCERPTS IN SWEDISH

### Excerpt 6:1

- Merit Hur har den politiska utvecklingen påverkat kolonitiden? hur ser den ut idag? hur har livssituationen förändrats från och med självständigheten? vad exporteras respektive importerats? hur har andelen utvecklats och vilken betydelse har detta fått för landet? hur ser andelen av världshandeln ut?
- Marcina Men om alla länder ser ut så här finns det inte en chans att vi kommer att hinna
- Nina Jag förstår inte hur lärarna tänker hur jävla mycket ska vi ha egentligen?
- Julia Men kan vi inte bestämma en träff och så skäller vi ut dom

### Excerpt 6:2 a

- Marcina Kan vi inte göra så att alla läser på dom olika länderna så sitter vi i en grupp och diskuterar dom här frågorna
- Merit Ja
- Marcina Och försöker komma fram gemensamt istället för att alla sitter och skriver ner en massa fakta som alla får sitta och läsa

### Excerpt 6:2 b

- Josefine Men asså det håller ju heller inte om vi skall sitta och dela upp det och göra papper på papper om varje grej
- Merit För jag kommer inte att läsa det här (.) eller jag kommer säkert att läsa men jag kommer inte att fatta allting
- Josefine Så de mycket bättre att vi liksom
- Merit Få in allting i huvet jaha
- Josefine Men asså en del frågor vi kan ju använda typ Merit har ju en massa källor och Nina du vet ju massor och Nathalie alla vet ju nånting att man liksom sitter amen hur har livet utvecklats i afrika så alla är lite pålästa så man har liksom grundläggande så kan vi sitta borde det inte vara så här så kommer man fram lösningar inom gruppen de så jag menar

## CONTEXTUALIZING INQUIRY

### Excerpt 6:3 a

- Amanda Vad ska vi göra med det då hade du tänkt att vi skall typ dela upp det då mellan oss
- Erik Nej asså det kanske vi det tycker vi egentligen inte är så bra att man gör va
- Josefine Då hinner vi ju inte
- Erik Men däremot kan man ju tänka sig att man studerar religionsfrågan som egentligen är en typ av fråga den ser på ett sätt alltså (.) där kunde man ju faktiskt dela upp det så här så att jag kan kolla lite på nu kommer jag inte ihåg jag tror algeriet är inblandad och möjligtvis nigeria kan säga det skulle man kunna jag tittar lite på Nigeria vad det är för typ av religioner som som finns där och det här med stamreligioner och sånt där om det tillämpas där och så tittar jag på algeriet då kan man dela upp det på två eller tre för det kan va vettigt och så kommer man tillbaks till gruppen och säger att ja det jag har hittat att algeriet dom har en hel del såna här stamreligioner och vad jag kan förstå så funkar det på det här sättet där och så säger någon annan likande sak med nigeria

### Excerpt 6:3 b

- Nina Men asså det där är ju så vi har gjort men grejen är att det här är liksom de som papprena som är från ett kuvert de åtta kuvert liksom (.) det blir ganska mycket att läsa in
- Josefine Ja man kan inte sitta
- Nina Och sen tillkommer liksom ren landsfakta också

### Excerpt 6:3 c

- Erik Jo just det men kan du sammanfatta det här?
- Nina Men då blir det ju ytligt då blir det plötsligt nån slags
- Erik Nej det blir inte ytligt
- Nina Det blir det visst det
- Erik Näe asså om vi tänker så här Nina du har fått fram så här jättemycket om religioner i sydafrika vi säger det eller om det är amanda kan man sammanfatta det som är kärnan i det där? för annars så ser det ju alltid väldigt mycket ut om man tar alltihopa.
- Nina? Jomen
- Erik Men de inte säkert de
- Nina Men det är ju inte direkt nån fakta om vi säger ja sydafrika har många olika stamreligioner ehm det har många andra länder i afrika också
- Several (Skratt)
- Nina Sen går vi vidare till politiken
- Josefine? Ni vill ju att vi skall gå in på djupet

## APPENDIX 1

### Excerpt 6:3 d

- Erik Nej men de jag underar då är vilka uttryck tar dom sig om du har hittat nånting om det då i algeriet eller nigeria eller sydafrika de här med stamreligionerna vad är typiskt för dom?
- Merit Men då blir det ju liksom att en människa får sitta med all religion och de ju inget man
- Josefine Lär sig nånting på
- Erik Nej men om dom som har tittat på religionerna där alltså har någon ide med sig till gruppen om sydafrika då asså finns det några särskilda uttryck för stamreligionerna i sydafrika som är annorlunda än det du har hittat i nigeria? eller stämmer dom överens ser dom lika ut? Amen då får man ju en syntes ja stamreligioner har tydligen det här är tydligen typiskt för stamreligioner dom här sakerna vissa riter det e det som är det viktiga att få ut va ingenting annat

### Excerpt 7:1a

- Agnes Julia hon sa det så fint du sa det så fint va e de som e skillnaden?
- Julia: Ne men att imperialism är bara viljan att ta över och kolonialism är att man gör det i praktisk
- Nina Jaha
- Agnes Mycket bra Julia mycket bra skillnad de precis det de handlar om vilka konsekvenser fick det här med att man tog andra ekonomier?
- Nina - Man hindrar väl deras utveckling (.) deras självständighet
- Julia? Precis
- Marcina: Man sög ut dom
- Julia? Precis

### Excerpt 7:1 b

- Agnes De ganska ytligt asså u-länderna kan man komma lite djupare in i det på vilket sätt asså hur?
- Nina- Dom fick ingen chans att bygga upp sin egen industri eller sina egna liksom
- Josefine Egen ekonomi
- Julia Man liksom utnyttjade dom och tog alla resurser själv liksom så att dom fick inget
- Nina Nu när dom är självständiga så har dom ändå ingen kunskap eller så
- Agnes Jo att de blir ju så att industrin blir enkelriktad att man tvingar dom producera vissa varor (.) va innebar det mer?

## CONTEXTUALIZING INQUIRY

### Excerpt 7:1 c

- Agnes Fanns det några afrikanska grupper som tyckte att det här var positivt?
- Julia De kan de ju inte vart va? tror ni?
- Nina De gjorde det säkert
- Julia Gjorde det?
- Nina De fanns ju säkert några rika människor som tjänade något på det
- Merit? Å dom som dom överförde till kristendomen
- Nina Några svarta kanske fick nå bra jobb som typ ledare

### Excerpt 7:1 d

- Agnes Å det där känner ni igen sen historien tillexempel när ni pratar om romarriket när dom hade mycket kolonier och provinser då såg man ju till att det fanns möjlighet att få bra tjänster så det fanns ju naturligtvis vissa grupper som tjänade på det som européerna skapade maktallianser tillsammans med (.) å det gäller ju lite å tänka på det vems historia berättar jag här?
- Julia Mm

### Excerpt 7:2 a

- Amanda Men får jag fråga nåt men om wto
- Nathalie Men WTO ska jag säga hur det är egentligen?
- Amanda Nej men får jag fråga min fråga först
- Marcina (Skrattar)
- Amanda Eftersom dom lånar ut pengar å så då är ju dom
- Nathalie Men dom har inte pengar
- Julia Inte dom
- Nina Men då är det inte wto
- Nathalie? Då är det världsbanken och imf
- Nina Och imf
- Nathalie Å imf gör det lite mer akut å världsbanken ska liksom vara en handelsbank
- Nina Lite mer långsiktigt
- Marcina WTO främjar bara frihandel liksom ser till så att
- Amanda Ja ja å ser till att de ska vara lika villkor
- flera Jaa

## APPENDIX 1

### Excerpt 7:2 b

- Amanda Men så WTO är alltid bra?  
Nathalie Nejje!  
Lina Nej!  
Marcina (Skrattar)  
Nathalie Det är bara USA japan, sverige asså typ eu dom rika länderna som bestämmer liksom u-länderna har ingen makt över huvud taget  
Marcina Nej det främjar ju u-länderna att ha tullar och wto vill ju inte ha tullar  
Amanda Så frihandeln är egentligen dålig?  
Marcin Nej den är bra i vissa fall  
Lina (Skratt) det beror ju på  
Amanda Men är frihandel ungefär som marknadsekonomi?  
Nathalie De ju samma sak väl?  
Amanda Det är det (.) bra  
Nathalie Ja  
Marcina Asså marknadsekonomi är ju liksom baserat på att man ska ha en fri handel hela vägen liksom  
Marcina? Att det ska vara liberalt å

### Excerpt 7:2 c

- Amanda Men är det bara bra för som rika länderna?  
Marcina Asså det är väl bra för u-länderna i vissa fall  
Nina Men inte om dom har nån som konkurrerar  
Marcina Nä precis  
Nathalie Sverige har en inre marknad vi har redan byggt upp vår industri då har ju liksom vi en bra stomme liksom typ så vi kan ju sälja ut också men om man tar ett land som Nicaragua som inte har nån slags inre marknad så är det jättesvårt för dom eller Filipinerna så kan dom inte sälja ut helt plötsligt å ta bort sina tullar å börja sälja jättebilligt till oss i europa för att då blir dom jättestor å liksom bönderna där har inte ens råd att äta själva (.) så tycker jag fast de bara mitt  
Marcina Jo men dom behöver ju sina tullar för att kunna  
Josefine? Ja  
Marcin Expandera  
Amanda Handelshinder alltså?  
Flera Mm  
Nathalie Tariffära

### Excerpt 7:3 a

- Erik Men allt e inte vårt fel för de mycket korruption i dom länderna  
Nathalie Ja men korruption  
Marcina Ja men de har ju uppstått ur (.) att dom är orättvist behandlade

## CONTEXTUALIZING INQUIRY

- Erik Jamen hur ska man betrakta han Mugabe asså han har ju inte uppstått på grund av att detta
- Nathalie Har han ju okej allt som han säger han vågar ju inte göra nånting nu bara för svarta skall rösta på honom för att de där de ju från honom dom svarta får sina rättigheter dom har ju varit förtryckta i hundratal år de klart att han inte vågar göra nåt nu
- Erik Jamen om man då om man då
- Nathalie Då förlorar han ju stödet

### Excerpt 7:3 b

- Marcina Men han var ju med i motståndsrörelsen till
- Erik Men det där fattar inte jag för att varför ska man försvara mugabe alltså han är ju ett lika sjukt
- Nathalie Nej det klart jag inte försvarar honom
- Erik Han är ju ett lika sjukt system asså det han gör kan man nog inte skylla på någon annan än han och hans maktfullkomlighet tycker jag idag (.) det har jag svårt att tycka liksom för att
- Marcina Men var inte han med i motståndsrörelsen på sjuttioalet på det braiga partiet
- Erik Jomen han var ju ledare för befrielseörelsen
- Marcina Var inte han motståndsrörelsen till det befrielseörelsen

### Excerpt 7:3 c

- Erik Nä han var ledare för befrielseörelsen där va å han var ledare för partiet som blev av befrielseörelsen under många många år å dom hade alltså en ekonomisk utveckling som var bra å sen får han plötsligt för sig att han ska sitta kvar och sitta kvar å de brukar alltid hamna i att landet hamnar i ekonomiskt trångmål rätt som det är för demokratin och annat stryps å de beror ofta på att det sitter en knäppskalle i ledningen å de lätt att dupera folk eller hur? de tror jag han har duperat folk alltså de tror jag inte man kan ta åt sig riktigt

### Excerpt 7:4 a

- Marcina Då vart Zimbabwe republik men Mugabe som var premiärminister tror jag
- Nina Han hade jättestor makt liksom
- Marcina A han tvingade folket till låg materiell standard för att få pengar till återuppbyggnad av landet efter kriget liksom det var väl ganska hårt åtgånget där
- Merit För att här var ju Mugabe fortfarande liksom en hyllad ledare av hela världen
- Nina Ja asså han
- Marcina Var han det?
- Merit Ja han var jättopulär bland alla såna här typ sidaorganisationer å sådär att han var en riktigt bra ledare
- Nina? Ojdå

## APPENDIX 1

- Nina Men det var ju  
Marcina Han var frihetskämpe eller?  
Nina Det var ju liksom så att han var tvungen det var ju inte sådär att han tog pengarna för folket utan det var ju liksom så att han hade höga skatter för att få pengar till att bygga upp skola och sjukvård å då fick dom inte mycket pengar över liksom så det var ju i och för sig ganska logiskt  
Marcina Ja  
Nina Så det var ju inte nån slags diktatoraktion han gjorde

### Excerpt 7:4 b

- Marcina Det står ju så här tvingade på NE och det låter ju väldigt negativt  
Nina A men det står ju inte Mugabe tvingade utan liksom åtgärderna han vidtog för att typ så tvingade folket  
Marcina Ja det är sant det gjorde det (.) aa nä för att det stod liksom (.) a men då var han populär under den här perioden då var han frihetskämpen då

### Excerpt 7:4 c

- Marcina Och 87 införde Mugabe en ny grundlag att han fick mer makt och att kvoten för dom vita i parlamentet försvann och han förkastade allt som hade med typ (.) eh å i befrielsekampen så hade han ett stort löfte att han skulle få ge tillbaka alla afrikaner all mark å jord och så från dom vita men å till de lånade han massa pengar bland annat från storbritannien men det avbröts när det upptäcktes att regeringsmedlemmarna tog den bästa av marken till sig själva  
Nina Då börjar han ju balla ur här i krokarna lite (en berättelse)  
Marcina Ja (skratt) nu vart det  
Amanda? Nu går det utför he he

### Excerpt 7:4 d

- Marcina Och dom sattes ihop och det vart ett jättemäktigt parti så det vart ingen politisk opposition alls folket hade ingen frihet liksom utan det var bara dom som bestämde och i parlamentsvalen 2000 så var det 65% som röstade och 96 så var det faktiskt bara 32%

### Excerpt 7:5 a

- Nathalie Men liksom det där är det spekulationer eller vet liksom alla G8 länder att det är så att dom liksom pratar om att vi i väst lever på dom andra  
Sara Med tanke på att asså världen det finns begränsade resurser i världen det vet vi ju, vi har ett visst antal liter sötvatten vi har ett visst antal eh liter olja det finns ett visst antal kvadratmeter odlingsbar mark så att säga, och det här ska asså det som kommer ut av det ska räcka till hela jordens befolkning och idag gör det ju inte det

## CONTEXTUALIZING INQUIRY

- Nathalie? Borde inte det vara typ en ganska stor fråga isåfall istället för kanske frihandel liksom?
- Sara Jo men grejen med frihandel är att man säger att det är verktyget för en resurstjämnings

### Excerpt 7:5 b

- Marcina Tycker dom det? G8 länderna är ju inte så många
- Sara Ja eller WTO de flesta så stora starka ekonomiska aktörer att frihandel är just liksom den väg man ska gå att genom frihandel löser man problemet ni som nu har läst på ordentligt inför den här duggan känner till det här med absoluta fördelar komparativa fördelar, och om alla då är står fritt att handla med varandra och dom som är bäst på en sak ja dom ägnar sig åt det och dom som är mindre dåliga på nåntingt ja dom ägnar sig åt det då så att säga för då hushåller vi bäst med resurserna
- Julia Men det är så det inte har blivit är det inte så?
- Marcina Men är det inte så att man ska investera först innan dom man ska börja frihandeln
- Merit Men det finns ju olika såna här (ohörbart)

### Excerpt 7:5 c

- Nathalie Men ja menar den här inre marknaden är inte den viktigast först asså va var vi frihandel om dom ska sälja direkt eller att få låta dom bygga upp som vi har gjort få producera inom våra egna länder först och sen börja handla med andra
- Sara Alltså det finns ju också olika teorier för vad man kan se är ju att om man ett land som ger sig ut asså där man då har haft projekt med en direkt utlandshandel till exempel då världsbanken IMF ställer ju krav på frihandel och en marknadsanpassning av ekonomin vilket tenderar i att när man då när staten tvingas sälja ut sina verksamheter så är det ju inte invånarna i själva landet som har råd att köpa utan då kommer man utifrån istället och på så sätt så mjölkas nästan landet ännu värre på resurser

### Excerpt 7:5 d

- Sara Eh men det finns alltid olika teorier och det är så svårt att säga generellt att man först ska bygga en inre marknad och sen ge sig ut i världshandeln det är väldigt väldigt svårt för om vi har ett land som har väldigt bra förutsättningar för kaffeodling så att säga så kan ju inte människorna leva av kaffe man måste ju byta med varandra å sen är ju frågan vem man ska byta med
- Merit Men som Uganda som har 90 procent av sin export som kaffe, slår odlingen fel så är det ju kört



## APPENDIX 1

### Excerpt 7:5 e

Josefine Men hur tänker som asså hur tänker dom här asså till exempel IMF å och dom när dom tycker att att frihandel är sättet att utjämna klyftor liksom hur tänker dom då liksom för uländerna har ju så pass dåligt rustade så om dom ger sig in i en vild frihandel med i-världen dom får ju liksom dom har ju sämre förutsättningar för att liksom producera saker och har ingen så pass utbyggd egen industri så att dom kan konkurrera liksom

### Excerpt 7:5 f

Sara Men vad är alternativet till frihandel?  
Nathalie Att man bygger upp en inre marknad först  
Josefine? Ja precis  
Nathalie Säg till exempel Brasilien dom säljer alla sina frukter utomlands och vi köper deras men liksom med den produktionen att dom inte får några själva, utan dom säljer ut allt till oss som vi inte vill ha ändå å eftersom dom inte har såna resurser så att dom kan liksom plantera och odla så mycket själva så då blir det så att den bra maten säljer dom ut istället för på sin egen marknad eller bygger upp och investerar i sitt eget land först

### Excerpt 7:5 g

Nina? Men om alla länder var lika från början så skulle ju frihandel vara ypperligt  
Flera Mm  
Marcina Men nu är det inte så  
Sara Men man tävlar inte på lika villkor, men ni ser problematiken vi har en väldigt liksom politisk nivå i detta att för att skapa förutsättningar för att bygga upp en inre marknad så måste dom ha en politisk stabilitet i landet

### Excerpt 8:1 a

Amanda Vaddå egna åsikter ska man ju ha sist först ska det ju va objektivt liksom  
Flera Jaa  
Marcin Det var ju  
Julia Det var just det jag sa  
Amanda Ja okej  
Nathalie Men vad är objektivt liksom (.) man vet inte  
Flera Jaa  
Marcina De ju jättesvårt för man kan ju liksom  
Julia Har vi gjort det där som dom tycker  
Marcina De så svårt för man kan ju liksom de här e det som har gjort dom fattiga då tar man ju fram massor vad man själv tycker å då är det ju inte objektivt

## CONTEXTUALIZING INQUIRY

### Excerpt 8:1 b

- Nina Men då skriver man så här man kan tro (.) eller det finns folk som hävdar eller vissa intressen
- Marcina Jamen (.) som typ en del tycker att
- Amanda Eller andra menar att
- Nina Eller som vi läser i och sen en snitsig liten källhänvisning så bla bla bla
- Marcina Bla bla bla (härmande tonfall)
- flera Skratt
- Nina Så kan man säga att men viktigast av allt jag tycker ingenting (tillgjord röst)
- Amanda (Skratt) men viktigast av allt (.) jag är opartisk
- Marcina Men det är ju så lätt att luta det mot att ta fram den ena sidans alla fel

### Excerpt 8:1 c

- Nina Ja
- Amanda Men Erik sa ju när han var här nyss att man ska göra den här obligatoriska egna synpunktersavslutningen
- Nina Jag kommer aldrig fram till nånting på det där för jag sitter eller så är det de här man kan ju också ja
- Marcina Så gör jag med
- Amanda Ha ha jag slutar typ alltid mina uppsatser så här
- Nina Med en fråga liksom
- Amanda Ja! (skratt) the truth is out there
- Josefine Ja!

### Excerpt 8:2 a

- Patrik Kan du berätta lite kort bara om hur ser innehållet ut det du har skrivit hur tänker du lägga upp det hela vad har du för tankar kring det liksom? Alltså vad har du valt att ta med vad har du valt bort?
- Nina Ja
- Patrik Hur har du tänkt kring struktur å så där
- Nina Alltså min jag lägger ju upp det så att jag identifierar de olika problem som finns liksom att det är ett stort problem att uländerna inte till synes kommer ur det här att vara råvaruproducenter liksom
- Patrik Mm
- Nina Så skriver jag liksom bakgrunden till det liksom ända från kolonialperioden liksom hur mönstret lades då å så å sen så att det lever kvar å att dom

## APPENDIX 1

### Excerpt 8:2 b

Nina De ju så svårt det här temat eftersom allting det går egentligen inte att börja nån stans för att förklara en sak måste man liksom för att allt beror ju på allting liksom å allt hänger ihop så att då försöker jag dra ut de historiska orsakerna å då så (.) att det lever kvar nu å sen att de inte har tillräckligt med pengar för att ta sig ur å så å skuldkrisen allting kommer ju in

### Excerpt 8:2 c

Nina Men det är så jag försöker göra i alla fall liksom att jag identifierar de olika problem som finns å sen tar med samhällskunskap å liksom historiska aspekter å om det finns religiösa då tar jag ju dom å sådär

Patrik Mm

Nina Å sen diskutera runt om sen å försöka komma på en lösning eller va man ska säga det är så jag har tänkt göra (.) å än så länge så har jag skrivit om just att de bara producerar råvaror å så å sen lite om att de inte kommer in på världsmarknaden å sådär i och med alla dom här tullarna å så då som finns

Patrik Mm

Nina Å sen så jag hade skrivit om nåt mer men jag har glömt bort vad det var (skratt) men jag har liksom inte knutit ihop det på nåt sätt än det är inte en uppsats liksom det är bara liksom lösryckta stycken än så länge med liksom fakta det har inte formen av en uppsats än så länge

### Excerpt 8:2 d

Patrik Har du haft några speciella problem då som du har stött på eller har det

Nina Nä det är ju det jag har kört fast med liksom för att förklara en sak måste man förklara en annan sak å för att förklara den måste man förklara en tredje sak, så man kommer hela tiden in på små stigar iväg liksom. Å så har vi ju alla nyckelbegrepp också som gärna ska va med i uppsatsen

### Excerpt 8:3

Amanda Liksom om man läser alla argument på www frihandel nu så om det skulle va så så skulle det va jättebra å så kollar man på afrikagrupperna ba men klyftorna ökar och hela det köret så liksom ba då är det ju jättedåligt så blir det liksom vad tycker man själv så är det jättesvårt (skratt) att ta ställning till

Patrik De ju svårt!

Amanda Ja det är jättesvårt å då blir det så i slutet att va ska jag tycka egentligen det är ju bra om det vore så men måste man ju tänka ett steg längre liksom är det möjligt och varför är det inte möjligt

## CONTEXTUALIZING INQUIRY

### Excerpt 8:4 a

- Patrik Är du medveten om vad som krävs för att få det betyg du vill ha?
- Lina Alltså grejen är ju att dom vill ju att man ska få med all fakta men bara man rabblar en massa fakta så kan det ju verka som man inte förstår det utan dom vill ju att man ska få det till en sån här uppsats som man kan avrunda och göra en levande inledning och så så att man verkligen visar att man förstår det
- Patrik Mm
- Lina Så även fast man skriver kanske mer fakta än det här så kanske det inte visar på att man förstår utan bara att man har läst och skrivit av böckerna ännu mer liksom

### Excerpt 8:4 b

- Patrik Du nämnde innan att det gäller att visa för lärarna att man förstår på nåt sätt (.) hur visar du det när du skriver liksom?
- Lina Att jag förstår?
- Patrik Ja
- Lina De väl att jag drar ganska mycket egna slutsatser och att jag tar eh andra människor som är väldigt pålästa om det som kanske har skrivit en bok om det att jag tar deras åsikter å så och diskuterar dom med motsägande åsikter liksom.
- Patrik Mm
- Lina Så att jag på så sätt kan diskutera å dra slutsatser utifrån vad andra har kommit fram till å så
- Patrik Mm
- Patrik Just det så du försöker hitta resonemang som finns på olika ställen i texten och väga dem mot varandra å sådär kanske
- Lina Ja precis på så sätt liksom och då hittar man ju ofta en egen mening liksom när man läser vad andra skrivit både för å emot liksom de då man hittar sin egen väg
- Patrik Just det

### Excerpt 9:1 a

- Therese: Det kommer ju antagligen bli bättre där ute också tror jag
- Nina: Så långt e de ju inte för ja läste nån artikel där det främsta argumentet var att den lilla publik fotbollspublik som fotboll i division tre har kommer gå förlorad om dom får ta sig ända ut dit
- Sabah?: Vad är det dom behöver väl ingen jävla publik (skrattar)
- Nina: Ja jag tyckte det var töntigt
- Sabah: vad ska dom ha publik till dom ska väl bara spela ändå?

### Excerpt 9:1 b

- Frida: Ja men dom måste ju
- Therese: Ja men du fattar väl att de intäkter pengar å sådär de ju skitviktigt för dom

## APPENDIX 1

Nina: Fast de ju inte mycket de ju inte mycket publik  
Therese: Nä men ja menar de ju en jätteviktig inkomst för föreningarna

### Excerpt 9:1 c

Nina Måste kommunen asså ska man prata med banker eller får kommer alltså (.) kommer det behövas lån och sånt här eller liksom  
Therese A precis är det bara våra skattepengar hur mycke sånt liksom (.) de kan man ju fråga kommunen (.) de borde dom ha koll på  
Nina Det stod att en ny ishall å de skulle (.) skulle inte: (.) partierna tyckte inte att det skulle dras på skattepengar  
Jenny Vem sa det  
Nina Asså bygga ny ishall å sånt där utan dom tyckte att grundplåten skulle komma från privata: (.) finans eh det lokala näringslivet (.) men sen kommer det ju säkert kosta skattepengar också  
Jenny Vad  
Therese Jo men grejen är att (.) dom kommer säkert att få företag och sponsra men inte i sådana mängder liksom (.) såna många miljoner som det där kostar alltså  
Petra Men vilka pengar skall det betalas med?  
Sabah Ar vi typ klara med det här

### Excerpt 9:1 d

Jesper Men det är väl som i (.) till exempel va heter det Karlstad och Jönköping att företag får reklamplats alla får sin så att säga sponsors (omitted turns)  
Jesper Som tillexempel jämför med kinnarpsarenan de va Karlstad Löfbergs Lila (.) så de väl jag tror de tog stor plats  
Therese Mm  
Nina Hur mycket pengar betalar man för det då man kan ju inte betala hela byggnationen eller?  
Jesper Större delen av det i alla fall tror jag  
Nina Jaha?  
Therese Löfbergs Lila lär ju gått in med mycket pengar (skratt)  
Jesper Mm lite (.) men de ju grymt mycket reklam för dom asså  
Flera Ja  
Therese I Karlstad har dom en hall som är sponsrad av Löfbergs Lila förstår ni

### Excerpt 9:2 a

Therese Men Olle vi har ett problem vi vet inte hur vi ska gå vidare för vi har liksom inget underlag att gå vidare på  
Sabah Vi har som fastna:t  
Olle På samhällsplanering  
Therese Ja  
Olle Va har ni gjort då?

## CONTEXTUALIZING INQUIRY

### Excerpt 9:2 b

- Marcina Vi har läst in oss i geografiboken å så har vi typ läst lite artiklar  
Olle Ja  
Nina Å läst nyckelbegreppen som dom finns å hitta  
Marcina Ja  
Therese (Skratt)  
Marcina Sen har vi lyssnat på föreläsningarna  
Olle Mm  
Therese Å så liksom skulle vi försöka hitta fakta om sportvallen å sådär hur dom  
Marcina Men de gick inte  
Olle Mm  
Therese Ja (.) de finns ju liksom inget vettigt (.) förutom att socialdemokraterna argumenterar fö:r och moderaterna mot typ (.) återstår att a:  
Marcina men ska vi börja fundera på vad vi vill ha där då

### Excerpt 9:3 a

- Marcina Det är ju lätt att man typ drömmer iväg vi ska ha ett äppelträd men  
Therese (skratt)  
Marcina Men är det okej att ha ett äppelträd å vem kommer att sköta om det äppelträdet å kostar det massor  
Samuel Stad och trädgård  
Nina Ja  
Therese Ja förhoppningsvis om och kommunen liksom gör det här ihop då är det ju Stad och trädgård  
Marcina Det är det  
Therese Det måste det ju va  
Frida Jo men det är det  
Marcina Är kommunen redo att ha det här då? (.) det här extra äppelträdet

### Excerpt 9:3 b

- Petra Men vaddå det står ju äppelträd överallt för fan  
Marcina Nämen jag för jag menar vi kommer  
Therese Ja jag förstår vad du menar  
Petra Ja  
Marcina De ju såna frågor vi vill ha svar på  
Therese Ja jättebra Marcina man skall analysera situationen (gör till rösten)

### Excerpt 9:3c

- Therese Amen kolla här om det är ett privatägt bolag säg att eh Sjöängen skulle stå för det här (.) då måste ju Sjöängen hyra in någon som gör det här

## APPENDIX 1

Nina        Då har väl dom fastighetsskötare  
Frida        Ja precis fastighetsskötare  
Therese     Antingen så har dom fastighetsskötare eller så kanske dom hyr så att gator och grönt gör det här  
Petra        Men asså vaddå sköta äppelträden vad är det som behövs göras  
Therese     Men så sköter dom parken å  
Frida        A precis  
Therese     Klipper gräset å  
Marcina     Menar jag häcken hela den där häcklabyrinten alla gräsmattor alla gräsmattor

### Excerpt 9:4 a

Therese     Hur tänker ni när ni tänker på ekonomiska intressen då (skratt)  
Marcina     Jag kan ju jag har suttit och tänkt på det jättelänge men jag kommer inte på  
Nina        Alltså vems ekonomiska intressen liksom dom som bor dom som bygger?  
Marcina     Ja  
Therese     Jag skrev vinst beroende på inblandade företag Sjöängen dom satsar på vinst på sikt  
Ja  
Therese     Kommunbostäder ville ha vinst direkt liksom (.) å vilka går in med pengar vilka finansierar det här (.) är det kommunen eller är det privata företag

### Excerpt 9:4 b

Sabah        Om det är som bygger är det väl kommunen  
Therese     Ja (.) eller är det liksom bara privata företag  
Sabah        Men är det inte bra att dom privata bygger fast då kanske det blir dyrare att bo där  
Nina        Ja  
Therese     Då blir det oftast bostadsrätter  
Nina        Om ett företag får måla hela fasaden med sitt namn kommer dom kunna betala (skrattande)  
Jesper      Haha

### Excerpt 9:4 c

Therese     Vi vill ju liksom ha hyresrätter vi vill ju inte ha några bostadstätter  
Sabah        Mm  
Therese     Då måste man kanske se till vem bygger främst hyresrätter  
Nina        Kommunbostäder  
Sabah        Då blir det Kommunbostäder  
Nina        Eller?  
Sabah        Å då blir det kommunen som finansierar

## CONTEXTUALIZING INQUIRY

- Nina        Då är det skatter  
Sabah       Så då har vi kommit fram till att det är kommunen som kommer finansiera vårt bygge

### Excerpt 9:5 a

- Agnes        Sen så är det ni måste också fundera på om man tittar på det här bostadsområdet vilket underlag finns det för till exempel livsmedelsaffär dagis å så vidare (.) hur mycket krävs det hur många hushåll krävs det för att man ska ha dagis?
- Marcin       Hur många vad sa du?
- Agnes        Hur många hushåll krävs det för att det skall byggas ett dagis och hur mycket det var ju några grupper som var inne på det här med affärer och så vidare? Hur ser det ut med affärer i det här området är det något som man ska tänka på (.) å det handlar ju om servicen vilken service det finns (.) å där kan man ju tänka sig att man intervjuar går in och intervjuar nån affär nån som är affärsinnehavare (.) ehm å vilka planer har då kommunen för dagis hur tänker man när det gäller dagis?
- Therese      Men sånt här är ju liksom eller a det är ju svårt att fråga kommunen om just det här för dom har ju inga planer om det här över huvud taget menar du då som generellt när det gäller dagis?
- Agnes        Ja som princip så man då kan visa att ni även tänker i dom här banorna för då sätter ni ert lilla i det stora så att säga (.) då lyfter ni (.) men sen är det ju inte säkert att det finns nån speciell beräkning för just det här området men själva principerna

### Excerpt 9:5 b

- Agnes:        Men vi tycker alltså att ni har hunnit en bra bit på vägen här men nu gäller det att ta nästa steg att att lyfta det här området (.) å lyfta frågorna ni har ju gjort själva grunden så nu är det nästa steg här (.) ni förstår själva principen bakom dom här frågorna? för att såna här frågor skall man ju ställa sig som blivande samhällsvetare. ni är ju på väg dit här (.) å det här är ju ett exempel man kan ju se området som ett exempel på hur man hanterar samhällsplaneringsfrågor



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