

ROSA 14

# Creating multimodal texts in language education

Anna-Lena Godhe



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Institutet för svenska som andraspråk

Institutionen för svenska språket

Göteborgs universitet

Box 200, 405 30 GÖTEBORG

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## Sammanfattning

I denna licentiatuppsats undersöks gymnasieelevers skapande av digitala berättelser i svenska eller svenska som andraspråk i en skolpraktik. Analysen grundas på videoupptagningar av par eller mindre grupper under deras arbete med sina multimodala texter. I uppsatsen presenteras två par studenter och deras interaktion i två fallstudier. Paret har valts ut för att på olika sätt belysa mångfald, dels utifrån elevers olika språkliga bakgrund, dels vad gäller de olika uttryckssätt de arbetar med i sitt multimodala textskapande. Hur eleverna positionerar sig i förhållande till varandra och till den skolmiljö de befinner sig i fokuseras liksom hur berättelserna skapas i interaktionen mellan eleverna. För att relatera interaktionen till det institutionella sammanhang i vilket den är situerad används aktivitetsteori som ett analysverktyg. I den ena fallstudien är en elev andraspråkstalare av svenska, vilket visar sig påverka samarbetet då eleverna förhandlar om hur de ska uttrycka sig språkligt i sin multimodala text. Andraspråkstalaren ges inte samma möjlighet att komma med förslag på lösningar till språkliga problem och får heller ingen respons på sina förslag, även om de är språkligt korrekta. När eleverna förhandlar om sin berättelses innehåll undviker de meningsskiljaktigheter genom att återgå till det gemensamma projektet att fullfölja en skoluppgift. I den andra fallstudien skapar eleverna sin multimodala text genom att olika uttryckssätt konstrueras samtidigt och därmed tillåts påverka varandra. Då multimodala texter är vanligt förekommande i praktiker utanför skolan, kan texten ses som ett gränsöverskridande objekt, vilket bidrar till att eleverna kan använda sig av kunskaper förvärvade också utanför skolkontexten för att positionera sig som kompetenta användare av informations- och kommunikationsteknik (IKT) i skolsituationen.

*Keywords:* collaborative writing, ICT, positioning, framing, emerging practice, interaction analysis, activity theory, boundary objects

## Acknowledgements

The last two and a half years have been an educational journey in many different aspects. It has been a privilege, as a practicing teacher, to be able to do research within the field of education. This was made possible through the project called “Läraryftet” initiated by the Swedish Ministry of Education and Research. When I was accepted to the doctoral school of language and learning in a multicultural perspective (Forskarskolan SLIM, Språk och Lärande I Mångfaldsperspektiv) and saw the list of senior researchers associated with it, I was in awe. These were people whom I have read books by and listened to at seminars, and now I was going to meet them and work with them. It has been a true pleasure, and an educational journey in its own right, to receive advice and comments from such prominent and knowledgeable senior researchers. I would like to express my gratitude to all of you, but in particular, of course, to my supervisors Marie Carlson and Berner Lindström. Your wise comments and thorough readings of innumerable drafts of the text have been invaluable. Thank you for always being there and for all your encouragement!

Within the doctoral school I have also had the privilege to learn to know my fellow-students in SLIM. We may be widespread geographically but you have always felt close, and the ties have grown pretty strong as we have gone through ups and downs together. I will miss you! But there is always Facebook...

Thank you Pernilla, Emma and Frida for letting me into your classrooms! Without you and your fantastic students this study would, of course, have been impossible.

And last but not least, a big thank you for the support and encouragement given by family and friends. Shelley, you are my language saviour! Cisse, without you as a stand-in caretaker I would not have been able to go through with my studies. Kahsay, thanks for always being there with your loving support and encouragement. And Ioannis, thanks for having patience with an absent-minded mum. Nothing compares to you!

Malmö and Gothenburg 27 January 2011

Anna-Lena Godhe

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# 1. Introduction

The origins of the questions asked in the following study stem from my experiences as a language teacher at the upper-secondary school level. My students were, generally, good at speaking and telling stories, but as soon as I gave them pen and paper and asked them to write, their stories and their willingness to tell them disappeared. To read books and write pages of text did not appeal to them, but if we went to the computer lab where they were able to venture out on the Internet, they seemed to forget their aversion to the written word. They enjoyed watching films and other images online and film was something they seemed to consume in abundance outside of school. When I came in contact with Digital Storytelling this appeared to me to be a way of telling stories which could appeal to my students, as they enjoyed working with computers and also seemed to be partial to films rather than books. Making digital stories myself I found the working process to be enjoyable and the resulting films, though short and simple, were easily shared with others. After taking part in the process of producing the films, it was fun and interesting to watch films made by others, and discovering how they chose to tell their stories.

During a period of eighteen months, I took part in a research circle led by a university researcher. A group of teachers met regularly while at the same time the teachers conducted research in their own schools, and I was able to continue with my inquiries into what student activities were involved, when making digital stories within language education. When the possibility arose for teachers to do research within a project initiated by the Swedish government (“Lärarlyftet”) I decided to apply to be able to further investigate the creation of multimodal texts within upper-secondary school education. The following study is thus the result of my journey from solving practical issues in the classroom, to the conducting of scientific research within the field of educational science.

The students who have taken part in this study are of course different from the students I used to have in my class. Some of them enjoy creating texts with pen and paper as well as with other means, others are not as keen. They all belong to a generation which is growing up in a

society where contact with other people, to some extent, is done through the use of different technological devices. They communicate by mobile phones, including SMS and MMS, e-mail, blogs, chats, games etc. To some this may seem strange, but for many people of varying ages it is difficult to imagine a world without these devices. These methods of communication may be seen as limiting and isolating people since the personal encounters may diminish, but the abundance of ways of communicating may also be seen as opening up the world in a way previously unthinkable. To what extent, and how, the technical devices and the possibilities of communication affect human beings and their way of living and making meaning of their lives, is yet difficult to say. Effects may be noticed or hinted at but what they may imply in the long-run, is yet to be revealed. In the following study what students do when creating digital stories in language education is further explored. An exploration which aims to shed light on the practice as such, as well as adding insight as to what the usage of Information and Communication Technologies, ICT, in language education may involve.

## **1.2. Background**

When dealing with the creation of multimodal texts during language lessons in a school context, it is necessary to make use of concepts from different fields such as language learning and learning with ICT. In the following section I will give a background to my study and situate it in a framework to clarify why it is relevant and important within the field of educational research.

## **1.3. Information and Communication Technologies in the life of youngsters – in and outside of education**

During the last decades, the rapid development of different technologies such as computers, mobile phones, the Internet and social media, have made an impact on many people's lives, particularly in the western world. Everyday tasks as well as interaction with other people have, to a certain extent, become digitalised activities. For example, paying bills and accessing information about services supplied by different institutions, has become something which we, to a large extent, are expected to do on the Internet. We communicate with others using e-mail and text messages but we also come into contact with new people



through social media such as Facebook or MSN. Whether this technologisation and digitalisation of society means that we learn differently, or whether it should impact what education is about and how education is organised, is however a contested matter.

### ***1.3.1. ICT outside of education***

Knowledge about how to use ICT and its different features has largely spread and developed outside of the educational system. In a Norwegian survey of youngsters' use of media, children between 9 and 16 years of age were asked from whom they have mainly learnt about the Internet (Medietillsynet 2010:49). 49% state that they have learnt about the Internet themselves, closely followed by learning from parents and friends of their own age.<sup>1</sup> 25 % said that they have mainly learnt from their teachers.

Looking at studies of what youngsters do in their spare time it is evident that the use of different technologies plays an important part in young peoples' lives outside of school. To exemplify this I will present some of the findings from a survey done on 9-16 year olds in Sweden (Medierådet 2008).<sup>2</sup> A significant difference compared to earlier surveys done in 2006 and 2005, is that the TV as the type of media which most youngsters have in their room has been superseded by the computer.<sup>3</sup> The number of high consumers of TV has decreased<sup>4</sup> whereas the number of high consumers of Internet and computer games has increased.<sup>5</sup> The computer thus seems to be replacing the TV as the medium which young people mainly use and watch. Using the Internet has the highest rate of high consumers with 18%.<sup>6</sup> The group of high

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<sup>1</sup> 47 % say that they have mainly learnt from their parents, 40% have mainly learnt from peers their own age and 31% have learnt from older siblings. It was possible to choose more than one alternative.

<sup>2</sup> A division is made in the report between children aged 9 to 12 and youngsters aged 12 to 16. The reason why there are 12-year olds in both groups is that some pupils turned twelve during the time of the survey. I will here concentrate on the result for the older group, when that distinction is done in the report.

<sup>3</sup> 56% of the group aged 12 to 16 have a computer in their room. 50% have access to the Internet and 6% have a computer without access to the Internet. 50% have a TV in their room. It was possible to choose more than one alternative.

<sup>4</sup> 20% were high consumers of TV in 2006 and 16% in 2008.

<sup>5</sup> 16% were high consumers of the Internet in 2006 and 18% in 2008. 9% were high consumers of computer games in 2006 and 11% in 2008.

<sup>6</sup> Those who state that they engage in an activity for three or more hours on an ordinary day are seen as high consumers. When showing the percentage of high consumers no distinction is made between the different age groups.

consumers is not a homogenous group but they do tend to spend less time than average on schoolwork and sport activities.

When asked what they usually do in their spare time, the youngsters could choose a maximum of five activities. In the age group of 12 to 16-year olds three activities; meeting friends, doing schoolwork and being on the Internet, gained the highest scores.<sup>7</sup> There is a significant increase in the older group compared to the younger, when it comes to engaging in activities on the Internet.<sup>8</sup> 97% of 12-16 year olds state that they use the Internet in their spare time. When they are online the most common activities are chatting and watching film clips on, for example, YouTube.<sup>9</sup> There are gender differences both when it comes to what youngsters do in their spare time and what they do when they are on the Internet. In their spare time boys play more computer and TV-games but girls are on line to a greater extent.<sup>10</sup> When on the Internet boys play games and watch film clips more than girls do<sup>11</sup> and girls chat and visit social media sites such as Lunarstorm more than boys do.<sup>12</sup> Girls also write more e-mail and post their own texts or pictures on the Internet.<sup>13</sup>

Both the Swedish (Medierådet 2008) and the Norwegian (Medietillsynet 2010) reports emphasise possible Internet threats and ask whether the pupils have experienced bullying, sexual suggestions or threats while online. This reflects the general discussion in society about the Internet and whether it provides opportunities or threats, or both.

The computer in general and the Internet in particular have both conjured strong feelings, positive and negative. Drotner (1999) recalls similar “media panics” connected to the introduction of other media

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<sup>7</sup> 62% have chosen meeting friends, 61% doing schoolwork and 62% being on the Internet. It was possible to choose a maximum of five alternatives.

<sup>8</sup> 33% of the 9-12 year olds chose being on the Internet compared to 62% of the 12-16 year olds. It was possible to choose a maximum of five alternatives.

<sup>9</sup> 83% stated that they usually chatted when they were on the Internet and 75% watched film clips on You Tube or similar sights. It was possible to choose a maximum of five alternatives.

<sup>10</sup> 52% of the boys play computer games and 15% of the girls. 38% of the boys play TV-games and 6% of the girls. 53% of the girls are on the Internet and 44% of the boys. It was possible to choose a maximum of five alternatives.

<sup>11</sup> 76% of the boys play games and watch film clips on sights such as You Tube. 64% of the girls watch film clips and 54% play games. The numbers are for both age groups. It was possible to choose a maximum of five alternatives.

<sup>12</sup> 81% of the girl's and 65% of the boy's chatt. 54% of the girls and 24% of the boys visit sites such as Lunarstorm. The numbers are for both age groups. It was possible to choose a maximum of five alternatives.

<sup>13</sup> 26% of the girls and 15% of the boys write e-mails. 20% of the girls and 6% of the boys put their own texts and pictures on the Internet. The numbers are for both age groups. It was possible to choose a maximum of five alternatives.

such as TV and video, and claims that these technological developments include a conflict between democratisation and control. The Internet can be seen as an arena which invokes democratisation since it may enable an increasing number of individuals to express themselves and to gain access to a vast amount of information. At the same time the Internet is an arena which is difficult, if not impossible, to control, which has caused demands for both censorship and legislation. This can also be seen as a generational struggle where the older generation wishes to control the young and where the youngsters' media uses are targeted as evil (ibid).

### ***1.3.2. ICT in education***

In Sweden the spread of ICT within the educational system has mainly been funded by governmental projects which were aimed at ensuring access to technologies in all schools, as well as the pedagogical use of ICT. Cuban (2001) suggests three main goals for school reform through new technology; making schools more efficient and productive, transforming teaching and learning into an engaging and active process connected to real life and preparing youngsters for the future workplace. In Sweden there has also been a strong emphasis on a democratic argument which means that “*all* pupils, irrespective of where they live in the country and to which social class they belong have a right to become computer literate in the Swedish school” (Jedekog 2005:17). Starting in the early 1980s, several campaigns aimed at equipping schools with computers and stimulating the use of computers for educational purposes have been completed in Sweden (ibid). The campaigns have not, however, led to an explosion of the use of ICT in Swedish schools. Karlsohn (2009) argues that the lack of critical perspectives on ICT at the end of the 1990s lead to the absence of a deeper reflection on the technology and its suitability, usefulness and function in school which in turn lead to an uncertainty of ICTs role and usefulness in education. The technology has, on the one hand, become an integrated part of educational institutions, but at the same time it occupies a rather marginal space in the practices of teaching (ibid). One reason for this could be that it was authorities and other actors outside the school environment that advocated the need for computers in schools, rather than actors within the education system. Another reason, put forward by Säljö (2000), may be that the use of ICT challenges the way we look at knowledge and how we organise education.

The educational system of today is situated within its own history as well as a certain institutional culture and tradition. Learning has become institutionalised through the establishment of educational systems, and within them the social practice of teaching has developed through history. These practices include discursive procedures where rules, both explicitly and implicitly, are established. These rules have to do with the social roles enacted by teachers and students but also with how to solve problems within an educational setting.

Traditional forms of teaching developed in a society where information was relatively hard to gain. At that time, students also differed from today's youngsters in that they had rarely travelled or gained much knowledge about the world and different societies outside of school, writes Säljö (2002:22). The information supplied by teachers and textbooks was hence an important source of knowledge. The situation today is radically different. Access to information is ample and therefore students need to be able to evaluate different sources of information and critically consider the reliability of the sources rather than uncritically accept what is said or written (*ibid*).

Schools have long since lost control over which information reaches the inhabitants. Individuals, such as teachers, can only master a very small part of all the knowledge and skills which society, as a collective, masters (Säljö 2002:16). The hierarchy within education where the teacher traditionally is seen as the bearer of knowledge is challenged by the fact that teachers sometimes are not the experts in today's classroom. This may be true in particular when it comes to questions about technology in general and ICT in particular. Since the teacher is not necessarily the expert, the interaction tends to take on a more collegial character (cf Säljö 2000, Schofield 1995). It tends to move away from the traditional teacher-pupil communication where pupils answer questions asked by the teacher, and the teacher responds to and evaluates their answers. The computer also seems to enhance the collaboration between students since the computer, as an artifact, is conceived of as something concrete which you naturally and productively can work with collaboratively (see Säljö 2000).

Teachers' pedagogical views are important when it comes to creating learning environments with the use of technology. Klerfelt (2007) states that children today from an early age participate in media practices as well as educational ones. The traditions of these practices may stand in conflict with each other and the challenge for educational practices then becomes to create a meeting between these different practices rather than claiming the educational practice as the only prevailing one. To

enable an integration of technology teachers may have to adopt new pedagogical strategies. A report from the Swedish National Agency for Education (Skolverket 2009) on the usage of ICT in Swedish schools, suggests that teachers, to quite a large extent, use computers and ICT in their daily work.<sup>14</sup> More than half of the teachers state that they use computers during lessons every week while about 10% say that they never use ICT during lessons. Whereas most of the teachers have had in-service training in basic computer and word-processing skills, 6 out of 10 say that they need further training in how to work with images, sound and video through ICT. 50% also state that they need in-service training on how to use ICT as a pedagogical tool. About 40% of the teachers claim that the use of ICT helps them to adapt to the different needs of students and they also claim that the use of ICT increases the students' motivation and stimulates the learning process. Some teachers, however, state that the use of ICT impairs pupils' learning and concentration.

In an analysis of investigations done in different parts of the world, mainly Europe and North America, relations between efforts to enhance the use of ICT in education and pupils' development and results are in focus (Myndigheten för skolutveckling 2009). The conclusion is that ICT may have a positive effect on students' learning and development, but only under certain circumstances. Using ICT seems to affect both successful students as well as those students who have difficulties in school. An emphasis on how technology is used in relation to a pedagogical idea is crucial to affecting learning. The use of ICT may promote collaboration among pupils, where they are able to make their own choices and take an active part in their learning. Another conclusion made in the analysis of the different investigations is that the role of the teacher is changing. When the teacher's role changes to become more of a coach, the students must take greater responsibility for their learning and for completing their tasks.

The Norwegian report cited above (Medietillsynet 2010), has asked youngsters about the use of computers and the Internet in school. 41% of the youngsters asked said that they used the Internet in school several times a week or more. 60% also state that, during the last year, they have learned about how to use the Internet in school. In earlier surveys the pupils had mainly learnt how to access the Internet in school but this has changed. They are now taught mainly about what not to do on the

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<sup>14</sup> The study has been done through surveys where 2000 teachers at compulsory school and upper-secondary school have been asked to answer six questionnaires. Teachers at other levels as well as principals have also taken part in the survey.

Internet and how to find trustworthy information.<sup>15</sup> The focus hence seems to have shifted from operational issues to safety issues. Whether potentials for using ICT as a source for learning as well as producing and sharing material have been overlooked in the study or whether these issues are not dealt with in school, is unclear. Jenkins et al (2006) write that focusing on the negative effects of media consumption does not sufficiently take into account the competence and knowledge which youngsters today acquire through active engagement in ICT. Focusing on the negative effects runs the risk of misleading teachers, parents and other adults in which role they should assume in order to help children learn and develop.

Gee (2007, 2009) argues that “popular culture often organises learning for problem solving, and for language and literacy, in deep and effective ways” (2009:317). The way youngsters use ICT and learn how to use it says something about the potential for meaning-making which are embedded within the usage of, and engagement with, these technologies. It also shows considerable differences in how knowledge is generally accessed, expanded and spread compared to traditional schooling. Skills are largely gained by experimenting and then further developed among peers, (cf Säljö 2002:21, Jenkins et al 2006). This exchange of knowledge among peers is constrained in schools both by the fixed leadership hierarchy, where different roles are assigned to teens and adults, and by the focus on a model of autonomous learning, according to Gee (2004). In what Jenkins et al (2006) designate as participatory cultures, an informal mentorship, where those who are most experienced pass along knowledge to novices, is common. In participatory cultures, scaffolding is something which an entire community takes responsibility for, but in the classroom it is still mainly provided by the teacher (Jenkins 2006a:178). Participants are encouraged to create and share their own material and they are active in assisting in the formation of the material by commenting and sharing knowledge.

Taking a historical approach on the development of ICT in education, like Cuban (2001), is, according to Rasmussen & Ludvigsen (2009), not sufficient. They argue that there is a need to “increase the analytical attention given to how students and teachers use and make sense of ICT in their daily activities” (ibid:84) in order to understand the role ICT

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<sup>15</sup> 48% had been taught not to post personal information on the Internet and 38% not to post pictures of themselves. 56% had been taught about what is not allowed on the Internet, and 39% how to find trustworthy information. It was possible to choose more than one alternative.

plays in practice and how it may, or may not, change practice. Research on reforms tends to be concerned with evidence of the effect these reforms have had. This is problematic since it implies a direct relationship between intentions in reform documents and changes in institutions. To be able to scrutinise the use of ICT in educational practice and access a more concrete and nuanced picture of its impact, there is a need to focus on how ICT mediates activities in practice (ibid:86). Reforms are typically top-down changes which focus on the overall change of a system, but do not address local practices. In contrast, innovations are typically bottom-up changes focusing on local practices, write Sannino & Nocon (2008:235). By bringing together historical and interactional perspectives, it is possible to focus on emerging changes, instead of intended changes, and to understand how “top-down” processes meet and emerge with “bottom-up” processes, Rasmussen & Ludvigsen (2009:91) claim. Whereas evaluations of reforms generally pay attention to statistically significant outcomes, evaluations of innovations instead focus on the description and analysis of processes. The sustainability of local educational innovations may not refer to local continuity; innovations may spread instead through interpersonal interactions and thus be adapted in other settings (Sannino & Nocon 2008:236).

Hallerström & Tallvid (2008) have followed and evaluated a 1-1 project in Sweden where students have been given individual laptop computers which they can use both in school and at home. The initiation of similar 1-1 projects is, at present, occurring in many areas of Sweden as well as in other countries. Hallerström & Tallvid write that there are several reasons for schools’ increasing interest to invest in individual laptops for students. The fact that computers have become cheaper, smaller and lighter with increased capacity have precipitated this development. The growing interest from computer manufacturers in this emergent market is also an important factor (ibid:24). The development in society at large, where computers have become increasingly important in everyday life could also be considered to have had an impact on the acceptance of computers as a tool for individual students in the educational system.

In this study there is a focus on how ICT mediates activities in the practices where the study has been conducted. Creating multimodal texts in language education can be seen as an innovative practice which may contribute to the enrichment and development of the practice of creating texts in a school context. Jenkins et al (2006) argue that to have access to participatory cultures forms a new type of “hidden curriculum”

which will affect youngsters' opportunities in school as well as in their working lives. Educators and the educational system should make sure that all youngsters have the skills, knowledge and experiences needed to participate in the world of tomorrow (ibid). An important issue, according to me, is to ensure that pupils are able to work in a multitude of ways in different subjects. Some pupils will prefer to write typographical texts with pen and paper, but others may prefer to create texts using written or spoken language, as well as other ways of making meaning, such as images and sound. Different technologies allow for different ways of creating meaning and expressing one's understanding. As these forms of expression are available and plausible to use in a majority of schools in Sweden today, I see no reason as to why students should not be allowed, and even encouraged, to use the mode of meaning-making which they find best suited for what they want to express.

#### **1.4. Literacy and modality**

Literacy is a debated concept and I do not intend to give any extensive or exhaustive account of that debate here. Rather, I intend to elicit aspects of this debate which relate to issues in my study.

Literacy as a concept is related to educational issues since it is often associated with how children learn to read and write, but also since there is a cognitive approach to literacy which associates the development of writing with cognitive advances in society. Underlying approaches to literacy are hence, as claimed by Street (2009) both educational issues as well as theories of learning. Although there has been a move towards literacy used in contexts beyond the classroom the orientation to educational issues is still present, states Baynham (2004).

Janks (2010) writes about literacy as reading, as in decoding, reading with the text, as in making meaning of a text in order to comprehend and analyse it, and reading against the text, as in recognising the text as a selective version of the world. Green (2002) refers to this as operational, cultural and critical literacies and considers them to be intertwined so that the dimensions of language, meaning and power are brought together. In critical literacy education it is, according to Janks (ibid:23), possible to attend to the relationship between language and power by foregrounding either domination, access, diversity, or design, but these orientations are also interdependent. Dominance and access for example, says Janks, come together in the work of genre theorists such



as Cope & Kalantzis (1993), as they have described features of dominant school genres and emphasised the need to explicitly teach the features of these genres to students in order to give students access to them. It can be argued that explicit teaching of dominant genres may contribute to maintaining their dominance and thus aggravate the valuing and promotion of other genres (Janks 2010:24).

The New London Group (1996) mainly foregrounds the aspects of diversity and design in their proposal of a “pedagogy of multiliteracies”. With their notion of multiliteracies they seek to broaden the understanding of literacy by incorporating aspects of multiplicity. A multiplicity which concerns both the diverse and globalised societies of today as well as the variety of texts associated with information and multimedia technologies, which in turn means a broadening of the view of language by taking into account other modes of meaning. The New London Group stresses the need for students to be able to make meaning by using and selecting from the many different resources for meaning making available to them. Janks writes that whereas “critical literacy that focused on domination tended to emphasise critical “reading” and deconstruction across a range of modalities, the work on design emphasises multi-modal production and reconstruction using a range of media and technologies” (ibid:26).

Similar to the claim of the New London Group that traditional literacy pedagogy mainly concerns the teaching and learning of how to read and write, Jewitt & Kress (2004) argue that there is a common assumption that speech and/or writing is sufficient for learning, although no communication is monomodal. Jewitt (2006:134) calls for an accommodation of the new within the old where the concept of literacy is expanded beyond language to all modes, instead of fragmenting the concept of literacy into visual literacy, digital literacy and so on. Such a fragmentation may lead to a sense of competition where literacy as language is challenged by other literacies.

As Street (1998) points out, there is a gap between research on the one hand, which indicates that literacy practices are developing and spreading, and educational and governmental discourses on the other hand, which focus on falling standards and lack of literacy skills. Street claims that this gap can be explained by the new approach to “language and literacy that treat them as social practices and resources rather than a set of rules, formally and narrowly defined” (ibid:1). To assess something which is rule governed and narrowly defined, such as spelling, may be easier than assessing multiplicity and a social practice, such as a wiki or a discussion on a blog. These skills may thus fail to get

credit in assessment. While new technologies are often seen as a means to change and improve education, educational policies and assessment often fail to take them into account. A focus on the assessment of rule-governed and formally defined skills, may according to Jewitt (2006), make it difficult to connect the literacy required in school with the “after-school worlds” of many young people.

Seeing technologies as mediating tools means that they impact the way in which learning is mediated as well as the potential practices available for those who use them, writes Säljö (2000). Various technologies offer different potentials for learning, but how a technology contributes to learning depends upon how it is used (cf Jewitt 2006). These different potentials may require a re-thinking of what it means to learn, as well as new ways of looking at literacy and what it means to be literate (ibid). ICT may be used as a didactic tool which mediates the traditional content of schooling. When applying a socio-cultural perspective on learning and how it takes place in relation to socio-historical conditions, ICT does, however, take on another role. Given this perspective, ICT has changed society so that an adaptation of the content of education is necessary, according to Linderoth (2009). Students producing multimodal texts with the help of ICT could be seen as one such adaptation of the school content, as it is possible and relatively easy to produce your own media using typographical texts, as well as sound and moving or still images.

#### ***1.4.1. Multimodality***

Mode is according to Kress “a socially shaped and culturally given resource for making meaning” (2009:54). In communication modes such as image, writing, layout, music, gesture, speech and moving image are used. Because of the common assumption that speech and writing are sufficient for learning, other modes may be acknowledged but they are usually seen as marginal with little contribution to learning. A multimodal approach however claims that all modes are meaning-making devices, which in turn means that language, spoken or written, can no longer be seen as central but as one way amongst others of making meaning. Literacy, Jewitt (2006:135) states, can then be seen as a dynamic process where multimodal signs are used and transformed to design new meanings.

Jenkins et al. (2006) writes that the participatory culture of which many youngsters today are part, contains possibilities to learn and to

creatively produce. Whereas old media, such as the TV, fostered consumers and spectators, the new media such as games and YouTube, encourages production and participation (Jenkins 2006b). As users of ICT increasingly become producers as well as receivers of texts, and since they are increasingly active in assisting in the formation of texts, there is a need to reassess the text-reader metaphor, according to Livingstone (2004). Jenkins (2006a) writes that just like we would not assume someone to be literate if they can read but not write, to possess media literacy is not only to consume but also to be able to express oneself by producing one's own media.

The notion of multimodal texts within the context of schooling and language education has mainly referred to the consumption of multimodal expressions, such as films or images (cf Bergman 2007). When students in language education are asked to produce texts the emphasis is naturally on the language, as in speech or writing, but this does not have to mean that other modes are abolished. Being allowed to and able to use a number of meaning making resources, such as images and sound, to accompany the written or spoken language may instead be seen as a way of enhancing the meaning of the text as well as a way to compile the different resources in order to express literacy as containing a number of meaning making modes.

In the steering documents from the Swedish National Agency for Education, the notion of a broadening of the concept of text has been present since the year 2000 (Skolverket 2008). In the description of the character of the subject Swedish and its structure it is stated that a widened notion of text includes written and spoken texts as well as images. "To acquire and work with texts does not always need to involve reading but also listening, film, video etc." (ibid:7).<sup>16</sup> There are however, indications that texts in a school context remain mostly typographical texts. In a research summary made by Myndigheten för skolutveckling (2004), objections are made to the generally negative attitude towards "new media" within schools and instead the potentials of "new media" are put into focus. "The new media and popular culture offer ample possibilities for active, creative and differentiated meaning-making" (ibid:18).<sup>17</sup> In their definition of a widened concept of language and text, popular culture is included as well as different media such as TV, video and computers.

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<sup>16</sup> My translation of "Att tillägna sig och bearbeta texter behöver inte alltid innebära läsning utan även avlyssning, film, video etc."

<sup>17</sup> My translation of "De nya medierna och populärkulturen erbjuder rika möjligheter till aktivt, kreativt och differentierat meningsskapande".

The notion of multimodality and the claim that all modes are meaning-making devices may be a notion which is particularly hard to introduce in the context of foreign language and mother tongue education. Since the content of these subjects is language as such, this notion might seem as a threat to the notion of literacy based on the ability to read and write. The use of several modes should, however, not be seen as a threat to reading and writing. Jenkins et al (2006) stress that in order to engage in what they call participatory cultures it is necessary to be able to read and write. The emergence of “new digital modes” will, however, change our relationship to printed texts (ibid:19).

During my work as an upper-secondary school teacher many, if not most, of my students were learners of Swedish as a second language and in this study several informants are also second language learners. Broadening the meaning of text and allowing for students to work in small groups is something which I have found facilitates and motivates students to work with producing texts, regardless of their language background. I do not see it as something which particularly suits second language learners but rather something which facilitates the creation of text for students in general.

### **1.5. Second language learning & collaborative learning**

The concept of literacy and the availability of several modes when producing texts is one aspect of a diversified society. Another aspect of a diversified society is multiculturalism and societies where many, if not most, of its inhabitants speak several languages. Educational systems in many societies today have a multilingual student population, which often puts a strain on systems originally designed for pupils with a certain language background. Whether these monolingual societies have ever existed in reality is disputable, but educational systems were often constructed at a time when the building of nations was in focus and schools were used as unifying institutions. This may account for some of the difficulties which educational systems today face when trying to adapt to a diversified reality.

Sweden is a multicultural country where many youngsters have learned Swedish as a second language and speak other languages than Swedish at home or with other members of the family. In the municipality where this study was conducted 46 % of the inhabitants aged 15 at the beginning of 2010, are of foreign origin, which means that either they or their parents were born abroad (Malmö Stad

2010:11). Even though multilingualism and multiculturalism is a fact in Swedish society and education, it is still often treated as an exception, states Lindberg (2009:18). Taking a homogenous majority culture as their point of reference, schools tend to treat multilingual students as deviant and in need of help to comply with a monolingual norm (cf Gruber, 2007, Haglund, 2005, Runfors, 2003).

Abrahamsson (2009) writes that the study of language learning underwent a shift of focus in the 1960s where earlier studies of behavior, focusing on imitation and practice, were largely exceeded by the notion of language learning as a process with the learner as an active participant. This also included a shift in focus towards the context in which the language learning took place as well as the influence of various social factors.

Second language students usually relatively quickly become fluent in every day conversations, but to catch up with native speakers when it comes to proficiency in academic language takes a minimum of five years, according to Cummins (2000). He makes a distinction between conversational and academic proficiency where academic proficiency is of higher relevance in order to be successful within the context of schooling (ibid:75). This does not mean that one discourse is superior to the other, but that they relate to different contexts. In a matrix Cummins relates the range of contextual support to the degree of cognitive involvement in language activities. In this matrix the tasks may vary both in contextualisation and in cognitive demand. To write an academic essay or partake in an intellectual discussion are both cognitively demanding activities but the discussion has a higher degree of contextual support than the writing of an essay. In education the discourse varies according to subject and to master the academic language is something which takes several years for second language learners (cf Cummins 2000). Since native students do not wait for second language learners to catch up, the required language proficiency becomes a moving target. To expand all pupils' abilities in managing increasingly abstract academic situations is a major goal for education (ibid).

Interpersonal communication involves cues such as gestures, eye contact and facial expressions which facilitate the meaning-making. Such social cues are largely absent in academic situations which mainly depend on knowledge of language itself (ibid). In a classroom, there tends to be a speech exchange system called IRE (Initiate-Respond-Evaluate), in which the teacher asks questions, the learner responds to the question and the teacher evaluates the learner's response (cf Van

Lier 2001:94). In such an exchange the teacher is in charge and the students have limited opportunities to take initiative, self-correct or to develop a topic (ibid). This IRE-system, together with materials such as textbooks, implies that knowledge is comprised of facts to be memorised, write Barnes & Todd (1995:14). Producing answers to teachers' questions may also imply that "the right answer" is all that is needed, when instead it is the ability to understand and to be able to apply this understanding that constitutes knowledge (ibid).

The importance of second language learners as active participants, who are allowed to speak and produce language as well as listen to it has been stressed by Swain & Lapkin (1998). To work in small groups has proven to be of use for learners in general and second language learners in particular. Working in small groups gives second language learners the opportunity to develop their conversational skills as well as using language for different purposes, such as arguing a standpoint. According to Lindberg (1996, 2004) teacher-led classroom interaction does not give the same opportunities for practicing these skills. In interacting with peers, Lindberg states that students are increasingly able to investigate language and test different expressions which had not been possible if they had worked individually. Collaborative dialogue could hence be seen as both a social and a cognitive activity where the use of language and language learning may occur concurrently, according to Swain (2001:113).

By establishing and using mutual scaffolding in interaction students may assist each other in their language development, writes Donato (1994). Scaffolding is a concept introduced by Wood, Bruner & Ross (1976) which originally concerned the assistance given by parents to their child to do something which they were not yet able to do unassisted. The relationship between the parent and the child is characterised by one being a novice and the other an expert, which is similar to the relationship between teacher and pupil. However, in collaborations between students, those who position themselves as expert or novice varies, whether they are second language learners or not, according to Donato (1994). The same could be true in classrooms using ICT, as the expertise of pupils as well as teachers, varies, and with it the positions which they will enact.

## 1.6. Collaborative writing & speech

To be able to work in collaboration with peers give students other opportunities than those offered in the IRE-system. When speaking to peers pupils may together come to an understanding of the tasks at hand. Talk is important since it is flexible and new ideas can be tried out and explored. In small group talk, immediate response on ideas is available and through collaboration with peers, ideas may be reshaped to incorporate diverse ideas. To distinguish between talk to explore new ideas and talk to present well-shaped ideas in a public manner is useful, according to Barnes & Todd (1995). The flexibility and hesitancy of exploratory talk enables students to reshape and reinterpret ideas and could therefore be considered a strength among peers.

Work done in collaborative writing is, according to Storch (2005), often characterised by cooperation rather than collaboration. If students author the text collaboratively they take part in a joint writing process where they together negotiate what to write and how to write it. This co-construction enables them all to be in control over, and take responsibility for the final text. If, on the other hand, they cooperatively write a text, they might construct their text by putting together extracts from individually written texts. This decreases both the degree of control and the sense of joint responsibility for the text produced, state Onrubia & Engel (2009). Fischer (1994) claims that the development of intersubjectivity may be enhanced by collaborative writing if the task is appropriate for a joint effort. She also concludes that focusing on the finished written product may obscure the dynamics of the composition process and thus be misleading as to the value of the task. To ignore the talk would be to ignore a large part of the process of constructing the text.

If writing activities in education are understood as “a community activity that individuals do under normative conditions set by the teacher”, as claimed by Heap (1989:152), then social dimensions should be included in theories of writing in order to guide practice. The writing is constrained by the rules and responsibilities that apply to writing in classrooms and the resources and tools for writing that are available also affect the process of writing (ibid). While collaborative writing may facilitate exploratory talk which enables understanding, the normative conditions set by the social practice of schooling in general, and the teacher in particular, are, of course, also relevant to collaborative writing. When writing collaboratively, the social dimension in writing becomes even more prominent as the co-authors consistently relate to

the other's opinions about what to write and how to write it. The normative conditions under which the writing takes place, together with the orientation towards the co-authors may thus affect the pupils' enunciative strategies. If the students in this study made multimodal texts outside of school with other peers their interaction would hence differ from the interaction presented here.

### **1.7. Digital storytelling**

The pupils in this study are in the process of creating a multimodal text in the shape of a short film or a digital story. The Center for Digital Storytelling (CDS), where the model for digital storytelling used in the study was developed in the early 1990's, defines digital storytelling as "a short, first-person video-narrative created by combining recorded voice, still and moving images, and music or other sound" (Center for Digital Storytelling 2010). Digital storytelling in the CDS tradition has, according to Lowenthal (2009), appealed to educators since "it combines traditional storytelling with modern-day pop culture and technology" (ibid:253). In the digital stories made in this study the author or authors use their own voice/voices so that their speech becomes the soundtrack of the story. The soundtrack is accompanied by still images and sometimes music. It is possible to add movement to the story by the use of transitions between images, as well as writing by adding preface, epilogue and/or texts on images. In her study on how pre-school children and pedagogues together create digital stories, Klerfelt (2007) compares the computer to the human body as both are "able to express several voices at the same time" (ibid:75). Through the use of ICT it is possible for narratives to simultaneously take different expressional shapes.

Other new media practices such as blogging and YouTube offer possibilities to share personal stories, but whereas these practices are generally learned from person to person, digital storytelling has often required people to attend a workshop in order to develop the plot and produce their story, writes Lundby (2008:3). Though the stories are small-scale and often personal, they are made mainly within institutional frameworks. Digital story projects could then be said to be institutionally led projects which are done under professional guidance (ibid). These relatively new ways to express and share stories, create a new performance space, particularly for young people, according to Erstad & Wertsch (2008:36).



When students in the following study create digital stories most of them do so for the first time, at least within an educational setting. The limited resource of time in an educational setting may be a problem when creating digital stories, as suggested by Lowenthal (2009:257). In order to make the process less time-consuming, the students have, in this study, been allowed to use only still images and they have not been encouraged to edit images with computer programs like PhotoShop, since this tends to be time-consuming. Since the stories are made within the subject of Swedish, the established practice of writing essays is taken as a point of reference in an educational context. The importance of having something to tell has been stressed. Lowenthal (2009:258) considers the importance of a storyline an aspect which needs to be stressed when doing digital stories in order to prevent techno-centric products. In most cases the story has been written down and sometimes a storyboard is used to describe both what is to be said and which images to use.

I do not see the making of multimodal text as something which will or should replace the writing of typographical texts in schools, either with a computer or with pen and paper. Since this study does not include the analysis of creating typographical text I do not intend to compare or evaluate these activities. Within language subjects in education there is, however, a tradition of writing typographical texts which, in turn, means that both students and teachers have experience of this activity in this context. It is therefore likely that they will, implicitly or explicitly, refer to, or take the making of a typographical text as their point of reference when creating texts in language education. In this sense the notion of “the typographical text” is present in the studied classroom and thus also in the study. In Hull & Nelson (2005), the authors argue that multimodal composing through a process of orchestration “can create a different system of signification, one that transcends the collective contribution of its constituent parts” (ibid:225). They further state that multimodal composing should not be viewed as a threat or an impoverishment of traditional ways of composing, but instead as a means to enrich available means of signification. They find the digital stories a closer kin to traditional narrative structures than to digital forms such as hypermedia, since digital stories draw on linearity and temporality when unfolding on the screen. The power of digital stories may hence be in the melding of both old and new genres and media (ibid:251).

## 1.9. Aim and research questions

As I have outlined in this chapter, there are a number of reasons as to why an analysis of how multimodal texts created within the context of schooling are relevant and interesting for educational research. The computer, as a tool, is becoming increasingly important, and what can be done with computer assistance is expanding. Even though schools have been slow in developing their use of ICT, it is also becoming an important tool within this context. As I see it, the crucial question when it comes to ICT in education is how ICT is used in a pedagogical way in order to assist students in gaining knowledge, which in turn will enable them to function as competent citizens in society. To be able to create their own media content is likely to be a competence which will be useful in their later lives. It is therefore of interest to study and analyse what the activity of creating a multimodal text entails in the situated practice of language education.

The analysed interactions are presented in two case studies. The cases have been chosen since the interaction between the two groups of students highlights different aspects of diversity. In case one, language diversity is in focus as the students have different first languages. In case two the diversity concerns the multitude of modes made available to the students when creating a multimodal text. The following two questions are addressed in both cases:

- How do the students position themselves in their interaction, in relation to each other and in relation to a wider context?
- How does the story develop in the interaction between the students?

In connection to these two questions the following additional questions related to each case are addressed;

- Do the positions of native and non-native speaker affect their interaction and if so, in what respect and to what extent?
- How is the activity of creating texts in language education affected by the emerging practice of making multimodal texts?

In the next chapter I will turn to the theoretical framework which has governed the analysis.

## **2. Theoretical framework**

In this chapter I will situate my study within a theoretical framework based on a socio-cultural perspective on learning, where learning and cognition is thought of as something which occurs when people participate in social actions. In the analysis the focus is on situated and mediated actions where students make use of different mediational means, both material and intellectual, such as language, images, sound, computers and the Internet.

Since the interaction, as well as the context, is explored in the case studies, a set of analytical tools will be used at different levels of analysis. After presenting theoretical and analytical approaches, I will discuss how these different approaches converge, and how the different tools are used in the case studies.

### **2.1. A socio-cultural perspective**

The notion of learning and the question of how we learn, are understood from a socio-cultural perspective, where the learner as participant in socio-culturally embedded actions is emphasised (cf Säljö 2000, Wertsch 1998). Learning is situated in both physical and social contexts which affects the learning.

Mental processes, such as learning, originate in social actions and are mediated through interaction. The interaction is crucial both for what is learned and how it is learnt. Knowledge, in this perspective, is not seen as something which can be transmitted between individuals nor is it something which individuals have stored somewhere in their mind. Instead, knowledge is seen as something one uses in practice as a resource for solving problems and to manage situations appropriately. Knowledge is also used to define situations in order to be able to recognise problems and solve them productively (cf Säljö 2000:126).

When individuals act, they do so based on their knowledge and experience of how to act in a particular social practice. Säljö writes that actions and practices constitute each other, as actions are situated in social practices (2000:128). In the context of education a

communicative, or discursive, practice has developed historically. When interacting in a school context, participants hence tend to act in accordance with the established discursive practice, states Säljö (2000:137). In classrooms, an interaction which is generally based on the teacher asking questions, the students' answering the questions and then the teacher evaluating their response, has been noticed and can be seen as an established discursive practice. The possible contributions for different actors within this discursive practice shape the interaction. Based on this discursive practice the actors assume social roles where they tend to behave and act in certain ways.

The socio-cultural perspective derives primarily from the writings of Vygotsky. His theory on the zone of proximal development (ZPD) is of importance in educational settings. Vygotsky (1978) argues for the relevance of assistance children receive from others when performing tasks. A task which the child can perform independently has, according to Vygotsky, already matured in the child. A task which the child can perform with the assistance of others, however "defines the functions that have not yet matured but are in the process of maturation" (ibid: 86). For the child to develop "the only good learning is that which is in advance of development" (ibid:89). It is the talk in interaction with others in the child's environment which provides the source of development within their ZPD. At the core of the Vygotskian concept of ZPD is the notion that "mental functions must be fostered and assessed through collaborative, not isolated, independent activities", write Tuomi-Gröhn (2003:200).

### ***2.1.1. Mediation and mediated actions***

The concept of mediation and mediated action is fundamental in a socio-cultural tradition, since it implies that humans think and act by means of symbolic representations and artifacts (cf Ivarsson et al 2008:202). If one views language as a cultural tool, then speech could be seen as a mediated action, states Wertsch (1998:73). In our interaction we use symbolic representations, such as language, as well as concepts. We also use artifacts or intellectual tools, such as hammers and computers, to carry out activities in our daily life. To understand human activity one needs to include both actions and artifacts in the unit of analysis.

The notion of mediation implies that humans deal with their surroundings through the use of tools, both the intellectual and material variety, according to Säljö (2000:81). As noted by Ivarsson et al

(2008:202), intellectual and material tools are, however, commonly combined and should thus not be seen as categorically different. The usage of mediational means, or cultural tools enables us to use knowledge which has been incorporated into the tools by the people who designed and developed them in the past (cf Säljö 2000). By creating artifacts with certain characteristics, Säljö (2008:16) states that we externalise knowledge, and the adequate usage of the artifacts enables us to make use of this externalised knowledge. Knowledge is hence distributed by both people and tools, or artifacts. New tools are developed, building upon knowledge incorporated in already existing tools which in turn make artifacts crucial in the development of knowledge over time (cf Säljö *ibid*).

When calculating something with a calculator, or when doing it with pen and paper or in our heads, we perform different actions, hence the mediational means shape our actions so that the agents involved could be seen as “individual(s)-acting-with-mediational-means” rather than just “individual(s)”. An action is thus carried out by the individual(s) and the mediational means used. Wertsch (1998) stresses that mediated action involves two kinds of social phenomena which interact in complex ways. “First, mediated action is always social in the sense that it involves cultural tools from a socio-cultural setting, and second, mediated action is often intermental, or social, in that it involves two or more people acting together in the immediate context” (*ibid*:181). Acknowledging the importance of interplay between tools and humans for learning, challenges the notion of cognition as an intellectual process and questions the division between intellectual and material tools.

In socio-cultural research the basic unit of analysis is mediated actions. In mediated actions people make use of external resources and thus the interplay between agent and the cultural tools which they use are in focus (cf Ivarsson et al 2008:211). Mediated actions are affected by their situatedness, and are also embedded in activity systems. For example, the usage of an artifact, such as a computer, varies depending on the context in which it is used but also according to which activity it is a part of. If the artifact is used in different contexts and for different purposes it may also serve as a bridge between these contexts so that how it is used in one context will affect the usage of the artifact in other contexts. In this way, mediational means may assist in adapting ones actions in one context and make them applicable in other contexts. The mediational means hence facilitate the crossing of boundaries between different contexts as well as the creation of coherence between contexts.

### ***2.1.2. Appropriation***

In a socio-cultural perspective, learning, at an individual level, could be seen as the process by which people appropriate knowledge and skills, as suggested by Säljö (2002:16). Appropriation is not about transmitting knowledge or skills from one person to another. The process of learning could instead be seen as a meeting between collective knowledge and our own experiences. In this meeting something partially new is created but at the same time it stems from socio-historical processes.

Artifacts are used to be able to perform tasks such as digging a ditch or making calculations. During the development of an artifact, knowledge is built into it. The agent using the artifact, in order for it to function well, no longer needs to know how to make a spade, or what is important to know during the making of the spade. To appropriate a tool involves a gradual process where the individual becomes accustomed to the tool and learns how to use it in different activities as well as productively (cf Säljö 2000:152).

By appropriating intellectual or material tools you learn how to use the tool in certain situations and for certain purposes and are thus socialised “into communities inhabiting, and continuously developing, symbolic universes, modes of expression, inscription and material artifacts” writes Ivarsson et al (2008:202). The process has also been described by Wertsch (1998:53) as “taking something which belongs to others and making it one’s own” and thereby integrating it in one’s own activities. In interaction we appropriate mediational means so that they function for meaning-making. The ways in which participants’ appropriate mediational means in interaction thus becomes the focus of the analysis.

### **2.2. Positions and positioning**

In positioning theory as described by Harré & Lagenhove (1991), it is claimed that the word has taken on a specific meaning when analysing fine-grained mediated actions between people. Davies & Harré (1999) describes positioning as “the discursive process whereby people are located in conversations as observably and subjectively coherent participants in jointly produced storylines” (ibid:37). Individuals may be included or excluded due to positions, which may be allotted to them, or which they may be allowed to enact. Positions are in general relational so that if one is positioned as powerful, others in effect will be

positioned as powerless. The theory of positioning is a discourse-based approach where positioning according to Harré & Langenhove is understood as a “discursive construction of personal story that makes a person’s actions intelligible and relatively determinate as social acts and within which the members of the conversation have specific locations” (1991:395). Conversations are seen as consisting of positions, story-lines and relatively determinate speech-acts. Teachers, for example, can be recognised in the way their talk takes on a familiar form such as the story-line of instruction. (ibid:396). Linehan & McCarthy (2000) argue that in order to theorise participation in social settings, practice-based and discourse-based approaches may complement each other. The discourse-based approach offers a model of identity construction where people create identities in particular contexts. They may actively position themselves in relation to, or in opposition to, the discursive context. The practice-based approach complements positioning theory by dealing with how practices, through social and historical reproduction, constrain and facilitate identities. By combining the two approaches it is possible in particular interactions to examine familiar storylines as well as the participants’ responses to them. In this sense both individual and community are co-created in interaction (ibid:448-449).

My analysis of the positions enacted by the students in this study is closer to the practice-based approach described by Linehan & McCarthy than to the discursive approach taken by Harré & Langenhove. In my analysis, I use the word position to convey both how the students relate to positions such as teacher, student, native and non-native speakers, and how they in the dynamics of social interaction relate to each other. In the context of schooling students and teachers, in their positions, relate to the traditions and the positions which students and teachers generally enact in the practice of schooling. The practice both constrains and facilitates positions and relating to these positions students can actively accept or contest them. In interaction they relate to the positions enacted by others and may thus constrain or facilitate each other’s positioning. The positions taken or which have been assigned to an individual may vary depending on the immediate context; which teacher they have or what class they are in, who their peers are, which subject is being studied, etc.

Goffman’s (1981) conception of “footing” aims at capturing speakers’ shifting relationship to what they say. As speakers can express their position in relation to their utterance or to the person they interact with, through the selection of certain self-references, it is in the first

case study possible to analyse how the students position themselves by analysing how they use personal pronouns. According to Linell (2009), there are at least four co-ordinates of communication: ego (I), alter (you), object (it) and socio-culture (we, one) (ibid:95-96). The socio-cultural “we/one” indicates the need to distinguish between concrete others (you, thou), as in persons we directly communicate with, and generalised others (we, they, one).

### **2.3. Frames and framing**

Goffman has, in his micro sociological work, studied interaction in close detail and is, like research done with a socio-cultural perspective, interested in how meaning-making is made possible between humans in situated interactions. He explores how humans, in social encounters, act out “a pattern of verbal and nonverbal acts by which he expresses his view of the situation and through this his evaluation of the participants, especially himself” (Goffman 1967:5). Participants in interaction together establish and maintain their own, as well as the other’s “face”.

In case two, I will use Goffman’s (1974/1986) concept of framing to explore how the pupils’ notion of what they are doing may shift during the activity of making a multimodal text. In all interactions the participants answer the question “What is going on here?” (ibid:8) to reach a more or less shared definition of the situation. Through this understanding, they are then able to co-create activities. Individuals make their actions fit with their understanding of what goes on, and in doing so create a frame of activity where the interpretation of a situation is constantly being adjusted in interaction (Goffman 1990:247). As Goffman points out “those who are in the situation ordinarily do not *create* this definition, even though their society often can be said to do so; ordinarily, all they do is to assess correctly what the situation ought to be for them and then act accordingly” (1974/1986:1).

Institutions play an important role in the activity of framing as people within institutions tend to take on social roles, such as teacher and pupil. Goffman defines a social role as “the enactment of roles and duties attached to a given status” (1990:26) and when a person takes on an established social role this role often has a particular front established to it. A given social front tends to have stereotyped expectations attached to it so that it thereby becomes a “collective representation” (1990:37). Goffman claims that “Within the walls of a social establishment we find a team of performers who cooperate to present to an audience a given



definition of the situation” (1990:231). The framing in institutional practice is thus not only local but also embedded in practice.

Even though any one situation is likely to relate to several frameworks, one framework may be principally relevant to answering the question of what is going on (Goffman 1990:25). When making a multimodal text in school the activity could be seen as having the overall framing of “doing a school assignment” but within that framing, the students’ framing of their actions may vary depending on what they see themselves as doing whilst performing different actions within the activity of making a multimodal text.

#### **2.4. Modes and modality**

According to Kress, a mode is “a socially shaped and culturally given resource for making meaning” (2009:54). Modes such as image, writing, layout, music, gesture, speech, moving image and soundtracks are used in communication. Though no communication is monomodal, speech or writing are commonly assumed to be sufficient for learning, state Jewitt & Kress (2004). The notion of multimodality claims that all modes are meaning-making. Kress writes that “if all modes are used to make meaning, it poses the question whether they are merely a kind of duplication of meanings already made in speech or writing maybe as ‘illustration’ or ‘ornamentation’ - or whether they are distinct, ‘full’ meanings. If the latter, then language has to be seen in a new light: no longer as dominant and central, as fully capable of expressing all meanings, but as one means among others for making meaning, each of them specific” (2009:54). Even though language, as in speech and writing, is important for making meaning, the multimodal approach aims to look at all modes as meaning-making without claiming that one mode is more important than the other. Whereas one mode may be the main bearer of meaning in one instant, another mode may play that part in another situation.

Jewitt & Kress (2004:9) write that multimodality is the field onto which they apply social semiotic theory. Social semiotic draws attention to the role of the people in meaning-making, and to their social agency. Jewitt & Kress write that whereas the dominant form of semiotics regard language as a ready-made code which places people in the passive role of producing meaning, social semiotics understands language as a result of people’s constant social and cultural work. In the specific socio-cultural environment, people use the resources available to them to

create signs, and in using them they change these resources (Jewitt & Kress 2004:10). When using the resources of images, sound, speech and so on in a multimodal text created within schooling, how the modes are used will be affected by the context, but the use of these modes will also affect the school context.

Different modes have different affordances - potentials and limitations. Jewitt (2006:25) writes that she sees modal affordance as that which is possible to express and represent with a mode. Speech has sequence in time as an organising principle as it happens in time. Image, on the other hand, is displayed and thereby organised by space and simultaneity (ibid). The organisation of images can produce hierarchy where organisation of speech produces sequence. Some modes, such as gesture and moving image, combine the logics of time and space (Kress 2009:56).

Goodwin et al (2002) use the term “multi-modal” to describe embodied interaction where gestures, intonation and verbal communication are used to display positions of opposition (ibid:1630). Goodwin (2000) argues for an “approach to the analysis of human action that takes into account simultaneously the details of language use, the semiotic structure provided by the historically built material world, the body as an unfolding locus for the display of meaning and action, and the temporal unfolding organisation of talk-in-interaction” (ibid:1517). The body is used to perform actions within interaction, which become publicly visible displays of relevant meanings.

In the case studies I make use of both notions of multimodality. When analysing how the students use gestures and gaze to accompany their talk and sometimes to stress certain aspects of what they say, the notion of multimodality as embodied interaction as suggested by Goodwin et al (2002), is used. When it comes to the use of different modes such as images and sound in relation to the creation of the multimodal text, the notion of multimodality as expressed by Jewitt and Kress is applied (Jewitt 2006, Jewitt & Kress 2004, Kress 2009).

## **2.5. Activity theory**

In activity theory it is not seen as sufficient to use situated actions, as in the socio-cultural perspective, as the unit of analysis, since every action is situated in a context and cannot be understood without it. Activity theory sees, as its unit of analysis, “the object-oriented, collective and culturally mediated human activity, or activity system” write Engeström

et al (1999:9). In comparing activity theory to what Nardi (1996) calls “situated analysis”, she states that “situated analysis” makes it “difficult to go beyond the particularities of the immediate situation for purposes of generalisation and comparison” (ibid:92). To avoid descriptive accounts of moment-by-moment interactions, Nardi sees it as important to pay attention to a broader pattern of activity. She also thinks it is important to pay attention to what subjects bring into a situation and how the subjects’ interests and prior knowledge construes the situations (ibid:90). Activity theory stresses motivation and purposefulness as well as the shaping force of goals in activities. This stands in contrast to the notion of goals as something we construct afterwards which defines them as retrospective and reflexive as argued by Lave (1988:183).

In an activity system, a person engaged in an activity is a subject. The activity is directed towards an object and activities differ from each other depending on their objects. Activities continuously change and develop which means that each activity also has a history, and older phases of activities may be embedded in them as they develop (cf Kuuti 1996:25). The transformation of an object to an outcome motivates the activity and the process of transformation usually consists of several steps or phases.

Just as in a socio-cultural perspective, the notion of mediation is a central idea in activity theory. Tools mediate the reciprocal relationship between the subject and the object and in doing so it both enables and limits the subject. In the lower part of the triangle, depicting the activity system, are factors related to the context in which the activity takes place; rules, community and division of labour. Community consists of those who share the same object. The relationship between subject and community is mediated by rules which incorporate norms, conventions as well as social relationships within the community. Divisions of labour mediate the relationship between object and community. Each mediating term is historically shaped but is also open to development (cf Kuuti 1996:28)

In what Engeström calls the third generation of activity theory (2009:56), the basic model is expanded to include at least two interacting activity systems (figure 1). When several activity systems are involved, the object becomes potentially shared and jointly constructed and the boundaries and contradictions between activity systems can be analysed. According to Engeström (ibid), standard theories of learning focus on processes where a subject acquires knowledge, which is identifiable, stable and reasonably well defined, in such a way that lasting changes can be observed in the behaviour of the subject. It is,

however, common for people and organisations to learn new forms of activity which are not yet there. There are no competent teachers in such learning processes, as activities are learned whilst being created.

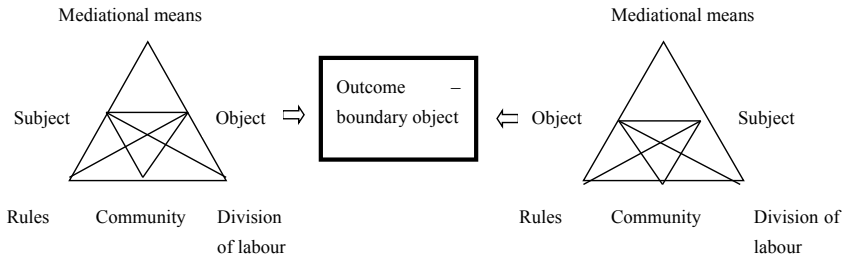


Figure 1 Interacting activity systems and outcomes as boundary objects

Engeström et al (1995) see the transportation of ideas, concepts and instruments from different domains as boundary crossing. Crossing boundaries involves stepping into unfamiliar domains which, in turn, requires the formation of new conceptual resources. Boundary crossing calls for a horizontal expertise where movement across boundaries is necessary. When learning is considered to be a vertical movement where the expert teaches the novice, such horizontal movements are largely ignored.

The concept of boundary objects relates to objects which inhabit several intersecting social worlds (Figure 1). Star & Griesemer (1986) state that a boundary object has different meanings in different social worlds, but because of its common structure it is recognisable in different domains. To create and manage boundary objects is thus a process which is crucial to developing and maintaining coherence between intersecting social worlds.

## 2.6. Relating different approaches to each other

Bringing together multimodality and a socio-cultural tradition may be contradictive, since the multimodal approach stems from a cognitive view on learning. In cognitive theory, verbal and visual information is believed to generate different cognitive processes where incoming information is stored in different verbal and visual bases from which learners can create connections between corresponding verbal and visual events (cf Mayer & Moreno 1998:2). Explaining something using

several modes rather than one is considered to be better, since it enables the student to build two different mental representations and make connections between them. Learners construct knowledge by actively selecting, organising and integrating verbal and visual information according to cognitive theory (ibid). The cognitive approach, as described by Mayer & Moreno, and the socio-cultural way of looking at learning thus stand in sharp contrast to each other.

There are, however, researchers, such as Jewitt (2006), who has combined the multimodal approach with theories which take a socio-cultural view on learning, in her case activity theory. According to Jewitt, the multimodal approach to technology-mediated learning “offers a way of thinking about the relationship between semiotic resources (i.e. the resources of and for making meaning) and people’s meaning making” (ibid:16), and she sees this relationship as central when attempting to understand the impact of new technology on learning. By bringing these theoretical approaches together, Jewitt claims that she can significantly reconfigure them for learning. Activity theory “is useful as it moves away from the idea of an individual learner engaged with what is represented on the screen to suggest a more complex view of learning to ask how technologies mediate activity” (ibid:23). By emphasising meaning-making and mediation, Jewitt focuses on the potential which activity theory has for analysing the situated character of meaning-making as well as the need to consider mediation multimodal. Focusing on the embedded mediation in activity instead of the relation between the student and what is on the screen, she also distances herself from a cognitive view on multimodality. Like Jewitt, I see the different modes as resources for making meaning, and when the students are required to make a text accommodating these different resources, the mediation within the social activity system is affected. This, in term, may also affect the way the students make meaning. It is not the different modes, as such, which change the meaning-making of the students. In altering the situated activity of creating texts within education, working with multimodal texts may, however, alter the practice of creating texts in schools in connection to several of the components in the activity system.

Ivarsson et al (2008) write about the socio-cultural emphasis on the role of language as a symbolic resource and whether that contradicts the notion of multimodality. They argue that the socio-cultural perspective readily accepts the significance of other forms of mediation. However, language, as speech and writing, plays a crucial part in the socio-cultural interpretation of mediation as it also plays a fundamental role in shaping

our understanding of the world. In communicative encounters we use linguistic resources to structure and categorise our experiences (ibid:203). Ivarsson et al (2008) argue for a view where different modes are seen as ways of externalising experiences and communicating about them. Different forms of mediation interact in complex ways and different modes may build on and presuppose each other. For example, in order to read a map one uses knowledge which is embedded in both visual and discursive practices. Language, as in speech and writing, can fulfil “a bridging function when engaging in a multimodal communication” (ibid:205). Using texts as mediational means have enabled us, for example, to present and discuss concepts, develop definitions and test hypotheses, states Säljö (2000:208). Concepts emerge over time, becoming established and cemented as part of the established practice of meaning-making. These established concepts, sometimes originating from non-linguistic representations, need to be appropriated by those who wish to appear competent in that particular context. In this way language, as in speech and writing, plays a crucial role as tools for cumulating meaning-making (Ivarsson et al 2008:205). A collective construction of knowledge, where the text is the mediational tool, has developed and knowledge has hence become increasingly discursive (Säljö 2000:208). To distinguish modes and their different characteristics and affordances may theoretically be done, but in practice modes often interact with each other as they are used in mediated actions in situated practices. Mediated actions are affected by their situatedness and the practices in which they are embedded. Using mediated action as the basic unit of analysis focuses on “individual(s)-acting-with-mediational-means” and could be seen as an alternative to analysing one mode disconnected from other meaning-making resources (cf Ivarsson et al 2008:211).

## **2.7. Summary of analytical concepts used in the cases**

With the aim of clarifying how the different theories and concepts explored above are used in the present study, I will in the following section relate them to the analysis done in the two cases.

The socio-cultural perspective on learning serves as a basis for my stance on what constitutes learning and how this is made possible. These assumptions hence govern all analysis.

How the students position themselves, and are positioned by others, is explored in both cases. In case one, chapter 5, the students’ positioning

is analysed in relation to the positions of native and non-native speaker and how these positions may affect the interaction. In relating to the collective representations of native and non-native speaker the students may, in their positioning, contest what these positions involve. In relating to each other, they may also constrain or facilitate the positions enacted by others. What, and how, different participants are allowed to contribute in the interaction can thus be influenced by which positions they enact, and whether the positions they enact are constrained or facilitated by their peers.

In case two, chapter 6, the students position themselves in relation to each other and the different modes they work with as more or less capable peers. To some extent the positions of student and teacher, within the educational context, are contested as the positions of expert and novice are explored. In working with some modes but resisting others, the students can also be seen as positioning themselves in relation to the school context.

Framing is used as an analytical tool in both cases to explore the students' understanding of the questions "What is going on here?" Their framing of the activity they are partaking in changes as they undergo the process of making the text. Adjusting to the norms and rules of the school context also affects how the students frame their actions.

In both case studies, activity theory is used as a means by which the context of schooling can be analysed. Seeing the school context as the lower part of the activity system triangle where rules, community and division of labour are taken into account, the interaction can be analysed in regards to the institutional practice of schooling. Norms about how things should be done, which have been developed over time, may be embedded in the rules. This may not be apparent to the actors in situations today, but may still influence the way the activity is carried out. By using activity theory the interactions between students can hence be analysed within the broader context of schooling in which it is embedded. In connection with the third generation of activity theory, the notion of boundary objects becomes relevant, especially in case two, as activity systems are related to each other. Though the multimodal text may be new in a school context it is likely to be familiar to the students in other contexts and it may hence serve as a boundary object connecting leisure activities with educational ones.

The use and appropriation of mediational means are in focus in case two, together with the concept of multimodality. The use of mediational means, as well as the object of the activity, has been altered since the most common way to author a text within the school setting is to write a

typographical text. To alter some components in the activity system may affect other components, such as the division of labour. Relating the activity system of making a multimodal text in a school context to other activity systems, it is possible to explore the affects they may have on each other and the different components within the systems.



### 3. Research overview

In the following chapter, I will exemplify research which has been done and which concerns issues which will be dealt with in this study. It is, however, an overview and as such it does not in any way claim to present a complete account of studies done within the different fields. In this first section I will outline the overall concerns of this study as ICT, collaborative work and institutional practices. In the following section I will relate the study to the specific aspects of second language learning, collaborative writing and digital storytelling.

As this study concerns the use of ICT in language education when students collaborate in small groups it connects, to a certain extent, to the research field of computer-supported collaborative learning (CSCL). CSCL is a research field, within educational science, which is concerned with how ICT may support learning in groups, but also with understanding actions and activities mediated by ICT. Stahl (2006), states that CSCL differentiates from other domains in that it focuses on group learning with support of computer-based tools. Personally meaningful knowledge is built when constructing new meaning, and understandings through discussion and argumentation with participants in interaction. The collaboration is not competitive, instead efforts are made to work and learn together (ibid:5). Arnseth & Ludvigsen (2006) discern two approaches within CSCL which they call systemic and dialogic. With a dialogic approach, the research focuses on the constitution of meaning, and function of interaction, tools and knowledge in social practices. The aim is “to understand how the meaning of knowing, knowledge and artifacts is constituted in dialogue between participants, who through their actions are responding to various contextual features of the setting and are thereby making them relevant” (ibid;172). The analytical concern then becomes how ICT provide a context for social interaction. Arnseth & Ludvigsen state that whether new practices involving ICT become productive or not relates largely to how they fit with already existing practices, but these new practices will also change “the institutionally appropriate ways of doing teaching and learning” (ibid:177).

When making a multimodal text, the main aim of using ICT is neither to support group learning, nor to provide a social context for interaction, instead ICT serves as a mediational tool in the process of creating a text. As such it will give rise to interaction between students who work collaboratively with the creation of the text. Interaction between students is, however, not a feature connected to ICT as interaction would have occurred even if students used other mediational means. That the practice of making multimodal texts has to relate to existing practices as Arnseth & Ludvigsen (2006) state, is, however, of importance. To study what this new or emerging practice entails when set within the institutional educational settings, as well as how the students relate to it and make use of it, is of importance in this study.

Collaboration between students in small groups is a fairly common practice in a school setting, and can thus be seen as an existing institutional practice. Since I am interested in how the students position themselves in their interaction as well as how the stories they create develop during interaction, the dialogue between collaborating students is in focus in the analysis. Mercer (1994a) has within a project, *The Spoken Language and New Technology (SLANT)*, investigated how computers may encourage conversations among students and how these conversations may, in turn, develop and extend learning. He discerned three conversational patterns in the students' interactions; disputational talk, cumulative talk and exploratory talk. In disputational talk, speakers challenge the views of other speakers, but do not justify their challenge by building on previous utterances or by giving new information. In cumulative talk, speakers built on each others' contributions but do not give explicit comments on them. Exploratory talk was characterised by the speakers proposing hypothesis. Objections were made and justified and new relevant information was offered. Mercer concludes that these different kinds of talk may stimulate activity in certain contexts and it would thus be wrong to judge any kind of talk as a better form of communication. He does, however, propose activities which generate exploratory talk as it encourages and develops the students' ability to reason and be receptive to the reasoned arguments of others when making decisions and drawing conclusions (ibid:27). It is not my intention to try to classify conversational patterns in the interactions between the students, but how the students position themselves, and are positioned by others, may affect which patterns occur and that in turn may affect the outcome of the collaboration.

Being placed within an educational setting in general, and a language educational setting in particular this study needs to relate to the existing

practices in this context. In a study done by Olin-Scheller (2006), upper-secondary school pupils' encounter and reception of fictional texts in school and outside of school are analysed. Olin-Scheller comes to the conclusion that the students live in two different text worlds. In an educational setting the pupils were mainly exposed to literary fiction in the shape of typographical texts with which they were not particularly emotionally involved. The pupils stress the importance of emotional involvement in texts and in this respect the difference between texts in and outside of school is most prominent. The students are accustomed to the way in which multimodal texts rapidly create intimacy and emotional involvement which, in turn, suggests that an increased occurrence of multimodal texts in education would make the study of texts more attractive to students. Bergman (2007), who studied four different upper-secondary school classes, came to the conclusion that fictional texts were the most common medium in the teaching of Swedish. Films were the second most common medium but they were often "used for comparison, illustration, as a complement to works of fiction in order to motivate the pupils in their study of literature" (ibid:349). Both studies show that the connection between texts that students consume and produce outside of school and the ones they encounter in school was weak. As studies of youngsters' media consumption show they are active consumers and producers of texts in different shapes. To work with and create multimodal texts in language education could hence be a way of bridging the gap between the different text worlds in which students seem to live. The out-of-school practices of the students may affect their creation of a multimodal text in different ways. Their stories may, for example, show characteristics associated with films or games, or in using a computer to create their multimodal texts they may be able to make use of abilities connected to out-of-school practices.

The use of ICT in educational settings has been explored and discussed extensively<sup>18</sup>. As Lantz-Andersson (2009) concludes in her thesis, ICT does not improve learning in a linear sense but educational activities involving ICT imply a different way of learning with both possibilities and problems. In her analysis she uses Goffmans concept of framing (1974/1986) and claims that the overall definition of "doing school work" is stronger than the changes ICT enables. Even though ICT may offer new ways of working the students may also proceed more or less as they are accustomed. When studying an emerging

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<sup>18</sup> See further chapter 1.3.

practice such as the making of multimodal texts it is hence of interest to note whether this new practice alters the way the students “do school work” or not. As Almqvist (2005) stresses, we do a number of things acting in accordance with our habits. Habits are connected to experience just as habits are shaped by experiences of different actions. The meaning of ICT is thus shaped by the participants’ habits, the institutional customs as well as by the assignments they are given. Almqvist concludes that the students use ICT in education, mainly as a source of information which implicates the discursive use of ICT in an educational context. In one of Almqvist’s studies, the pupils’ merely copied information they found on the Internet instead of selecting and discarding information, which was the intention of the assignment. They acted in a way which was expected of them in this particular setting and which they had learned from experience. Since institutionalised habits play a significant role in how a certain technology affects the making of meaning, an important empirical question within educational research is thus how individuals are acting with technology in educational settings. When creating a multimodal story, the students are working with tools related to contexts outside of schooling, which may accommodate the interaction of habits and abilities connected to practices both inside and outside school.

### **3.1. Second language learning**

That taking part in collaborative activities is beneficial for second language learners has, for example, been shown in a study done by Lindberg (1999). Through collaborative interaction, second language learners were, in the study, given ample opportunities to try out alternative structures in the target language. The interaction also gave opportunities to notice gaps in their own, and others, language abilities. Lindberg states that students, in collaboration, may realise that to simply repeat a form several times or claim that it sounds right is not enough to justify a solution to a language problem. Instead, they need to explain or refer to a general pattern in the language. The students may, for example, be uncertain of whether to use *has* or *have* in a sentence. Instead of repeating “he *has*” the students will have to refer to a pattern where *has* is used in connection with *he*, *she* or *it* in order to convince the other students to accept the solution. As this requires further language analysis it may push the learner to use formal knowledge as a tool for developing their second language, writes Lindberg (2003). The

usage of everyday language is not enough to explain the reasoning behind a solution, rather the use of a particular discourse, or academic language, is needed. On the other hand, in a study done by Gröning (2006), students are found to solve problems by using everyday language, even though the problems are school and knowledge related. Because of this, Gröning sees the use of everyday language as a resource for the students' learning. She suggests that it may be justified to partake from a strict division between everyday language and academic language when studying language use in learning processes within education. When collaborating to create their multimodal text, the non-native students in this study may, in accordance to the findings in Lindberg's study, be able to increase their language awareness through collaborative reflection. It is also of interest to notice if the students use formal knowledge to develop their language or if they, in accordance with Grönings results, use everyday language instead.

In Gröning's study, just like in this one, native and non-native students collaborate in small groups, and though Gröning concludes that the students may scaffold each others' language learning when collaborating in small groups, her findings also point to situations where non-native speakers are treated as beginners and where their experiences of multilingualism are marginalised. In a pattern in the interaction, revealed by Gröning, corrections were only directed towards non-native speakers. The non-native speakers were active in both asking and responding to different types of questions while the native speakers mainly responded to questions and only asked questions when aiming to correct non-native speakers. The students with Swedish as their second language, tried to resist the corrections initiated by their peers by negotiating or rejecting their comments. When the non-native speakers asked questions the native speakers tended to oversimplify their answers and hence treated them as linguistically ignorant. As one of the research questions in this study relates to whether the positions of native and non-native language learner affect the interaction, the study done by Gröning (2006) is of particular interest as it points out certain aspects where the positions affect the interaction and positions the students as more or less capable peers.

Karlström's (2009) thesis will serve as an example of research where second language students use computers in their collaborative work with writing. He has analysed the use of Computer Assisted Language Learning (CALL) when students collaboratively worked on revising essays. The students used a program called Grim which is intended to encourage linguistic reflection when writing in Swedish as a second

language. He found that the program tended to assume control over the students' texts rather than provide guidance towards improving the texts. Karlström concludes that it is of importance to conduct research on how use of tools occurs and how tools may be adapted for use in specific learning situations. The programs used when making a digital story in this study are not specifically designed for educational use but for the purpose of creating and editing films on a personal computer. The programs are not aimed at improving texts but to facilitate the making of multimodal texts. In that respect, the assignments given to the students have been adopted rather than the programs.

### **3.2. Collaborative Writing**

Even though the students, while making a multimodal text, do not actually have to write a text, they must have something to say when they record the soundtrack to their film. As the students work collaboratively they use speech as well as gestures, gaze and intonation in order to create meaning and together decide what their story will be about. Working collaboratively also emphasises the social aspects of writing, aspects which Heap (1989) states need to be included in theories of writing in order to guide practice. As well as relating to the readers of the text, the writer(s) may also orient to other people whose actions may affect the writing process. By analysing an excerpt from a primary school Heap shows how a student, when reading aloud, views the other students around the table as an audience who, by commenting on her text, may become consequential for her reviewing process. The web of social relations in a classroom thus needs to be taken into account when considering how writing is achieved and learned. When writing collaboratively, the students will, of course, have to relate to their co-authors in particular, but other students or the teacher may also affect the writing process. The writing, according to Heap, is constrained by the rules and responsibilities that apply to writing in classrooms and the resources and tools for writing that are available also affect the process of writing. The rules concern "what is to be done (e.g., writing assignment), where it is to be done (table, desk) and how it is to be done (as quietly and as well as possible)" (1989:150). Heap argues that writing activities in education must be understood as "a community activity that individuals do under normative conditions set by the teacher" (ibid:152). The students write because they are required to as well as to avoid negative sanctions or receive positive sanctions from

the teacher. Writing is hence “encapsulated in normative orders (rules, rights and responsibilities) that condition the occurrence of those activities” (ibid:149). These normative conditions are part of the institutional practice, but as the creation of multimodal texts can be seen as a new practice, they may to some extent be altered. As an emerging practice the rules that apply to the making of multimodal texts have not yet been established. Which rules that apply may be negotiated as the activity occurs, but if writing is considered to be a cultural artifact, as suggested by Heap, the history which has shaped its use will also affect the emerging practice of creating a multimodal text.

When writing collaboratively, coauthors can function as an audience whose immediate feedback can be taken into account in the negotiations of the text. Both Dale (1994, 1996) and Storch (2005) stress the importance of this immediate feedback to the participants in collaborative writing. Storch (ibid) writes that those pupils who worked collaboratively produced more linguistically complex and grammatically accurate texts. This may be because they were able to pool their linguistic resources through collective scaffolding, but also because of the immediate feedback which they received and gave each other. Storch (2005), in her study on adult second language learners’ collaboratively written texts, also stresses the importance of investigating the composing process. In the process of co-construction, the students were seen building and augmenting each others’ contributions as well as offering alternative phrasing. Since ideas are evaluated as they are spoken, revision is an ongoing process throughout the collaboration. Fisher (1994), who has investigated students’ talk when jointly writing a text on the computer, also advocates for the study of the composing processes. She questions research approaches which mainly focus on revisions made to texts, since looking at the finished product “may obscure the richness of the composing processes that have taken place and may provide a partial and misleading view of the value of the task” (ibid:252). The talk during the production processes constitutes the evidence of how the students compose written texts at the computer. Fisher found that students, in their talk, took on a shared perspective which made them produce “an outcome different from that which would have been produced by any one pupil separately” (ibid:260). This further strengthens her argument of the value of examining the composing processes as well as proposing that both process and product should be seen as a joint achievement.

When studying teenagers while they wrote essays during language education, Dale noticed the occurrence of productive cognitive conflict

to be a major factor of successful co-authoring. Students are likely to disagree or offer alternative ideas which force them to legitimise their statements to a greater extent than if they were writing alone (1994:340). The success of co-authoring is, according to Dale (1994) greatly influenced by social factors. "Only those groups in which students respected each other and in which all members' input was valued could function effectively" (1994:341). In a group studied by Dale, one student dominated the group and took on an authoritative role which led to the other members responding to him rather than to each other. Dale concludes that students need to be given a rationale for writing together and since most academic experiences are individual and competitive they also need knowledge about strategies and behavior which governs successful collaboration.

Since the interaction between students collaborating to create a multimodal text is in focus in this study, and the studies of Fisher (1994), Storch (2005) and Dale (1994) all deal with aspects of what such collaborations may involve, their findings can be related to when analysing the interaction between the students making multimodal texts. Dale touches on the subject of how students position themselves and each other and how this may affect the co-authoring process. As this is something which relates to one of the questions asked here, this is an aspect which will be further explored in the analysis.

Vigmo (2010) has studied upper-secondary students while they create a film, using moving images, as part of their education in English and computer science. Similarly to the students in this study, the pupils, throughout the process of making the movie, spoke about what they were going to write and say. Speech was thus important throughout the process of making their film. Whereas writing a synopsis was initially the primary activity, it later became secondary when the students decided to add a scene where they acted and spoke in front of the camera. For this scene they did not write down a script but instead the dialogue evolved as they went along. The pupils continually changed which mode was in focus so that speech and writing interacted and overlapped. When the students spoke, they based what they said in the written synopsis, and what they wrote stemmed from their spoken dialogue. As the students in this study go through a similar process to the one undertaken by the students in Vigmo's study, it is possible that the speech and writing will be interacting in a similar fashion.

In Rasmussen's thesis (2005) integration is found to be particularly important in ICT-rich environments since the amount of information increases. When doing project work, the students in his study had to



create meaning from the content they collected, as well as integrating different types of content. The collection of facts appeared to have a superior position in school activities. In the making of multimodal texts the students in this study work with programs where they create their own content. When collecting facts they collect material created by others, but in assembling and integrating the material the students may create their particular view on the subject. The content of the story as well as the assembling of modes may evoke discussions and negotiations between the students. When the students assemble the different modes they decide how they relate to and interact with each other, and in doing so they make their own particular version of how to depict a certain message.

### **3.3. Digital Storytelling**

As the multimodal texts created by the students participating in this study are in the shape of digital stories I will now relate the study to some earlier studies done on digital storytelling, both in and outside of an educational context.

Erstad & Silseth (2008) have studied lower-secondary school students and the digital stories which they made in a project called “Young Today”. In their analysis they use the concept of agency to reflect on how the use of digital storytelling in schools challenges traditional formal settings for literacy and learning. Through the analysis of a story about the online game World of Warcraft, made by three boys and interviews with the boys, they came to the conclusion that in making a digital story the boys had, by using their own cultural tools, produced an expression of an activity which constituted an important part of their identity. The digital story seemed to lower their threshold when it came to projecting their voices and it gave them a place to enter into dialogue between the informal and a more formal understanding of young peoples’ gaming activities. The creation of digital stories seems to encourage students to connect activities and practices both in and outside of school. Klerfelt (2007:105) sees computers, images, language episodes, and multimodal products as boundary objects since they unite and motivate both the children and pedagogues to partake in the mutual activity of creating computer-supported storytelling. The digital storytelling could hence be called a boundary practice which links educational and media practices and thereby creates room for meaning-making and for the process of transformation to take place. In the

following study I intend to further explore whether the multimodal texts as well as the mediational means with which the students work, could be seen as boundary objects.

Klerfelt (2007) states that the computer may be a place and a viewpoint from which it is possible for both pedagogues and children to enact different positions which, in term, may lead to a change in the relationship between them. In her study, Klerfelt observed how pre-school children and pedagogues together created digital stories. One of the observed pedagogues is called an “allower”, as she supports a child in making a game on the computer which resembles computer games that he is familiar with from practices outside of the educational practice. By changing the relations to others in a social practice a change involving the educational setting can be set in motion and lead to the alteration of conditions for learning in that context. Other researchers such as Säljö (2002) and Schofield (1995) have also suggested that use of ICT will change the role of teachers and students in schools. The interaction between teachers and students has been seen to take on a more collegial character as the teacher becomes a coach rather than an expert. As my main focus is on the interaction between students, it is primarily their positions which will be in focus, but as they may position themselves in relation to the educational context and the teachers in it, an alteration in their positioning may also initiate an alteration of institutional practices on a larger scale as suggested by Klerfelt.

To create digital stories in contexts outside of school, as described for example, by Hull (2003), Hull & Katz (2006), is, in some respects, different to creating digital stories in schools. I would say that the concept of what a digital story is has been altered in this study in order for it to be accommodated within the context of schooling. The focus on telling a personal story as well as forming an agentive self is less prominent, and instead the stories are told by people enacting their position as students. As creating multimodal texts within education is an emerging practice, this may however change if pupils are able to make several digital stories. Whether or not this is the case depends largely on the teacher, and whether he or she actively encourages the telling of personal stories, as well as the teacher’s ability to create a classroom atmosphere where the pupils feel confident in telling and showing personal stories to each other. Hull (2003) recognises the difficulty for schools to find time and space “to think expansively about the interface of literacy, youth culture, multimedia, and identity” (2003:233), but she calls for spaces centered on new media and new literacies since she sees them as crucial forms and practices of communication and

representation in our times. By combining, juxtaposing and manipulating different semiotic systems, it is currently possible to design meaning in complex ways. These new formulations of literacy could be explored and learned from.

### **3.4. Summary**

In this chapter I have presented research connected to the overall concerns of this study; ICT, collaborative work and institutional practice, as well as research connected to specific aspects such as second language learning, collaborative writing and digital storytelling.

Some of the studies presented serve to explicate what characterises talk between students (Mercer 1994a), the institutionalised setting of language education (Olin-Sheller 2006, Bergman 2007) and the social aspects of writing in this setting (Heap 1989, Dale 1994). Others advocate the importance of conducting research concerned with the process of collaborative writing (Storch 2005, Fisher 1994), emerging practices (Arnseth & Ludvigsen 2006, Karlström 2009) and whether they affect the institutionalised habits and established social practices (Lantz-Andersson 2009, Almqvist 2005). These studies serve as a point of reference in arguing for my study in general and the questions asked in particular.

When analysing the interaction between the students in this study what Dale (1994, 1996), Fisher (1994) and Storch (2005) write about collaborative writing is important to relate to. Their findings will be compared and contrasted to my findings. As the findings of Lindberg (2003) and Gröning (2006) differ to some extent, their different conclusions will be related to when analysing the interaction in this study. The use of written and spoken language and how they are intertwined in the writing process in Vigmo's study (2010) are interesting to relate to, as the writing process which the students in this study experience in many ways is similar.

Dale's (1994) and Gröning's (2006) studies are important to relate to when discussing the positioning of students and how this can affect the co-authoring process. Whether altered positions in an emerging practice may affect the institutionalised practices, as discussed by Klerfelt (2007), will also be explored.

In connection to the emerging practice of writing multimodal texts issues such as whether this emerging practice encourages students to connect to practices both in and outside of the educational setting, as

well as whether or not emerging practices alter existing habits will be discussed and explored. The findings of Erstad & Silseth (2007), Klerfelt (2007) and Almqvist (2005) concerning these issues will thus be related to.

## **4. Method and material**

In this chapter, I will present the empirical material which forms the basis for the analysis and discussion in the study and how it has been collected. As the material has been transformed from video-recordings to typographical transcripts I will outline this process as well as the analytical tools which have governed the analysis. Ethical considerations as well as my own involvement in the empirical material will also be discussed.

### **4.1. An ethnographical approach**

In gathering the empirical material, I have taken an ethnographical approach as I have been observing events and actions in their natural settings. Delamont (2004:206) states that the terms ethnography, fieldwork and participant observations are all part of the wider term, qualitative research. She sees ethnography as the most inclusive term where fieldwork and participant observations are descriptions of the location and technique of data collecting. According to Alvesson & Sköldbberg (2009:85), ethnography is often associated with observations over a long period of time, but if the researcher already has considerable knowledge of the general context of the study, the time spent observing it may be reduced. By integrating detailed analyses of talk with an ethnographic approach, I want to ground the analysis of the data in the situational context of the classrooms where the interaction took place, and also take into account the socio-cultural practices and traditions in which the interaction is situated.

#### ***4.1.1. Participant as observer***

As an observer one will, in varying degrees, participate in the setting one observes. Accounts of one's observations will thus, as stated by Pole & Morrison (2003:20), include autobiographical elements. Research cannot be conducted in a vacuum; instead it is inevitably

influenced by the wider society as well as by the personal biography of the researcher. Familiarity with the setting in which the research is being done could be seen both as an advantage and a disadvantage. Since school is familiar to most of us, a school ethnographer's task is "to make the familiar strange" (Gordon et al 2001:188), both to others and to themselves. As I have worked as a teacher at upper-secondary school in language subjects, the environment in which this study has been done is very familiar to me. On the one hand it means that I have experiences which could inform my work as a researcher, on the other hand it may make it more difficult for me to keep a distance to the field. Wolcott (1999) claims that the tendency to prefer a distant observer role is a result of efforts to assure that we behave like "real researchers". To assume a more active role is encouraged by ethnographic tradition but it conflicts with the ideal image of how research should be done, which most of us have been socialised to believe in (ibid:50).

When collecting material for this study I have been present in the classroom, not as a distant observer but rather as a participant observer. Since the teachers of the classes where I did my research had little, if any, experience in doing digital stories, they were uncertain of the technology and whether they would be able to help their students. To make multimodal texts in language education was not an established practice in the classrooms where the research was done. Neither the teachers nor the students were certain of what this practice would involve or how to accomplish it practically. Because of this uncertainty it is unlikely that they would have agreed to be recorded while doing their multimodal texts had I not been there to assist them at the same time. In order to be able to assist the teachers, as well as their students, in creating multimodal texts my active involvement in the classroom was necessary.

If the students asked me about the assessment of their stories, I told them to speak to their teacher as I was not involved in assessing them. They may, hence, have turned to me, rather than their teacher, with enquiries since I was not going to assess their work or because they thought that I knew more about making digital stories than their teacher did. Since the practice of making multimodal texts in the classroom is an emerging one, the rules of what governs the work may in general be more open compared to established practices, such as writing an essay with pen and paper, as the positions of experts and novices in an emerging practice tend to be more flexible. In the recorded classrooms, I was at times an expert when it came to working with the computer programs which were shown to the students. Some students, on the other

hand, used both these programs, and others, in ways which I was not familiar with, thus making me the novice and them the experts.

If my intentions with the research had been to study and record the classroom setting and the interaction between teachers and students, my active involvement would most probably have affected the outcome of the study. As my intentions were to record and study the interaction between small groups of students while they made their multimodal text, I do not see my active participation as affecting the outcome to the same extent. What I study as a researcher are the video recorded interactions between students. In those recordings, both the teacher and I are present. To what extent we are present varies, as some groups ask questions and call for assistance more than others. It is when viewing, transcribing and analysing the video recordings from the classroom that I take on the role of a researcher. To be able to listen to and closely analyse the interaction between students is not something which I, as a teacher, am familiar with. In that sense, the material with which I work as a researcher is strange to me, even though I am familiar with the context in which it took place.

## **4.2. Design of the study**

The research could be understood as a partial intervention since making a multimodal text is introduced to both students and teachers in the classroom where the data for the study was collected. As a researcher I have brought the making of digital stories to the classroom, but the teachers have decided on the content of the story. Hence the stories created in the different classes differ in content, but as my main interest is in the interaction between students while they make their story, this is not of great importance.

The study shares some features of both design-based research and action research, but also differ from these methods. In design-based research (DBR 2010), researchers work in partnership with educators. By designing, studying and refining theory-based innovations in realistic classroom environments, the aim is to refine theories of learning. Action research is similar to DBR in that it is done in realistic classroom environments but its main aim is, according to Pring (2004:133), to improve educational practices. Action research is designed to bridge a gap between research and practice in order for research to have an impact on practice and it focuses on issues which have been identified as problematic by participants, write Cohen et al (2007:298). Although

this study was done in realistic environments and I co-operated with the teachers involved, the collaboration did not involve aspects of refining a jointly designed innovation, neither did it, primarily, aim to improve practice.

#### ***4.2.1. Gaining access to the classroom***

In gaining access to the classroom I have co-operated with the teachers, which was necessary to gain their trust in the research as well as in me personally. While doing the research, this trust needs to be continually re-established, with the teachers as well as with the students. The researcher is hence dependent on the approval of her/his presence from the people present in the environment which is studied. This may lead to an ingratiating stance being taken by the researcher. My background as a language teacher at upper-secondary school probably made it easier for me to gain access to the schools, as well as establishing trust with teachers and students. As I am familiar with the context I know the social codes, how to speak and how to act.

My aim was to find teachers in Swedish, or Swedish as a second language who were working with multimodal texts with their students. As the making of multimodal texts is not an established practice, few teachers were familiar with how to create a digital story, but some were interested in learning how to do so and interested in using it in the classroom. The teachers I contacted were interested in doing digital stories with their students, but they had never done so before. I first contacted the teachers via e-mail to arrange a meeting. At the meeting I explained my research, they asked questions and we tried to find time to do the project with the students. Since they were not used to doing digital stories themselves, I showed them which programs I usually used. One of the teachers made a digital story herself as part of a course<sup>19</sup> before we started the project with the students. With one teacher, we arranged to meet again so that I could assist her in doing her own digital story. The third teacher had already made digital stories outside of school so she was familiar with the process.

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<sup>19</sup> The teacher took part in a course called PIM (Practical IT and Media competence) (Praktisk IT och mediakompetens). The course is mainly done over the Internet and the teachers do assignments to reach different levels. The course has been developed and spread via the Swedish National Agency for Education.



#### ***4.2.2. Pilot study***

The pilot study was made during the spring semester 2009. It was done in order to find out if the technical equipment, such as video cameras and audio recorder, worked and how they were best made use of, as well as to give me a notion of what kind of data the recorded interactions between the students would generate.

When video recording during the pilot study I used one video camera focusing on the students. Not being able to see what the students did on the computer screen during the process of creating their digital story did, however, limit the analysis. I therefore decided to use two video cameras, one focusing on the students and one focusing on the computer screen, in the other classes.

As the group which was recorded during the pilot study consisted of one student with Swedish as her first language and one student with Swedish as her second language, their interaction was interesting from a multilingual perspective. Having the opportunity to analyse the recorded interaction from the pilot study in connection with a course in analysing video recordings, these recordings were developed and they form the basis for the analysis of case one.

#### ***4.2.3. Collecting Data***

After the pilot study I contacted six different teachers at different schools, as well as the teacher of the class where the pilot study had been done. The reasons why some of the initiated co-operations did not work out may show some of the difficulties which a co-operation like this entails. Equipment was scarce in some schools, it was difficult to find time for optional co-operations and not all students, or teachers, were interested in taking part as they may have been uncertain of what a project like this involves, or whether it will enrich or complicate their daily work.

From November 2009 until April 2010, video recordings in three different classes were made. Including the pilot study, recordings have been made in a total of four classes. In each class, one or two groups of students were recorded while they worked with their multimodal texts. I will call the classes 1, 2, 3, and 4. The class in which the pilot study was conducted is called class 1. Table 1 shows an overview of the number of pupils, how many multimodal texts were created, the number of groups and the number of students who were filmed with a video-camera. The

number of multimodal texts made in each class varies because of the number of students in each group, but also since the size of the groups varied, from one pupil up to four pupils in a group. Two groups, a student working on his own in class 2 and two students working together in class 3, did not finish their multimodal text.

In classes 1 & 2 there are a mixture of students with Swedish as both first and second languages. The students in these two groups are attending an additional year at the “individual programme” (Individuella programmet) in order to be able to continue at upper-secondary school level. They have failed to pass in one or several of the three main subjects, Swedish, English and mathematics, and are hence not yet able to attend a national programme at upper-secondary school level. The students which have been filmed have however passed in the subject of Swedish or Swedish as a second level in compulsory school and are hence at an upper-secondary school level in this subject. Classes 1 & 2 had the same teacher but they were recorded during consecutive school years as class 1 was recorded in the pilot study in the spring of 2009. The two classes were given different assignments and none of the students were the same.

Table 1 Overview of data

Class	Students in the class	Multimodal texts created	Video-recorded groups	Students that were video-recorded
1	10	5	1	2
2	10	3	1	2
3	14	5	2	5
4	15	8	2	4
Total	49	21	6	13

In classes 3 & 4 the pupils are in their first year of upper-secondary school. The students in class 3 were all second-language learners and the recorded lessons were in Swedish as a second language. They are attending the national health care program at upper-secondary school level. The students in class 4 attend the social science program. In this class the students all have individual computers, which meant that they had access to their computers in all lessons. The other classes did not have access to computers during the first two lessons.

All students in the classes were asked to fill in a form where they stated whether or not they consented to being filmed and audio recorded during their work. The form had to be signed by their parents if the

student was under 18 years old. Only groups where all students had given their consent to being video and audio recorded were filmed. I had equipment to record a maximum of three groups in each class. In classes 1 and 2, those groups where all of the students gave their consent were recorded. In class 3, three groups were filmed initially, but as a pupil in one of the groups was absent for several lessons they withdrew their consent. It was only in class 4 that there were more than three groups consenting to being recorded. Apart from the two groups that were recorded, there were two groups that were uncertain of whether or not to partake in the study. One of these groups was filmed during the first lesson, but they felt uncomfortable with being filmed so they decided not to partake. From the two uncertain groups, the choice of group was based on the fact that there were two boys in this group, and mainly girls had been recorded in the study. The majority of students in the three other classes were females, but in class four most students were male.

The recordings were made during their lessons in Swedish or Swedish as a second language. Between five and seven lessons, which lasted around 40 minutes, were recorded in each class. The lessons when the students actively worked with creating their multimodal text were preceded by a lesson where they were briefly introduced to what a multimodal text is and the programs they were going to use. During this lesson I also presented myself and the reason why I was attending their lessons and the students were given information about the research project. These lessons were video recorded but as the analysis focuses on the interaction between the students while they are making their multimodal text, these recordings have not, at this point, been further analysed. The teacher and I were present during all the lessons that were recorded. The teachers themselves decided on the topic of the story and gave, to different extents, guidelines in what to include in the story and when the stories had to be finished. The teacher and I were both present during the lessons, so both of us could assist the students and explain what they were meant to do as their questions arose during the process of creating their multimodal text. Because of this, no extensive introduction to the computer programs in which they worked was done.

The five groups which were filmed in classes 2, 3 and 4 were recorded with two video cameras. One video camera focused on the students, and the other focused on the computer screen in order to catch what the students did on the computer during their interaction. To be able to hear what the students say, an audio recorder was used as a backup to the recorded sound on the video films. The audio recorder was

used in all classes. The recordings made in class 1 were made as a pilot study with only one video camera, focusing on the students.

### **4.3. Video recording as method**

Video recordings form the empirical basis for the analyses and discussions in this study. As I want to study the situated practice of creating a multimodal text, and since I consider meaning-making to be a multimodal enterprise which takes place in interaction, the choice to use video recordings stems from my theoretical standpoints. Neither field notes nor audio recordings would have been able to capture what the students say and do in such a rich way as the video recordings do.

With video recordings one gets a permanent record which one may return to in order to answer “questions of what is actually on the tape versus what observers think they saw” write Jordan & Henderson (1995:45). As Lindwall (2008) points out, the fact that one can play and replay the interaction one is analysing makes it possible to continually develop the analytical foci. By replaying excerpts at different times in my analysis, I have been able to notice details which were imperceptible at the beginning. The recordings are, however, representations of a situation done from a certain perspective and with a certain research interest where particular elements are seen as important and others are not.

When using a video camera, one need to make decisions on where to place it, whether or not to keep it stationary and whether to use one camera or several (cf Heikkilä & Sahlström 2003, Zuengler et al 1998). What one decides affects the empirical material one attains and hence the possible analysis of that data. I decided to use two cameras in order to capture the students interaction as well as what they did on the computer screen. Since it was physically impossible for me to hold both cameras at once, they were placed on tripods. However, positioning two cameras in order to capture what was intended was not always an easy task. It was sometimes difficult to place them at a distance where both of the students could be seen, and sometimes students would move during the lesson and not appear in the picture, or they would conceal part, or all, of the computer screen. Some parts of the recordings are hence not showing what they were intended to show.

The intrusion of the video camera also needs to be considered. There are instances during the recordings made in this study where the participants consciously avoid the camera but also where they

consciously act and speak to the camera. There are, however, also instances where they seem to have become oblivious to the fact that they are being recorded. According to Jordan & Henderson (1995:18), people quickly become accustomed to the camera, particularly when there is no operator behind it and when they are intensely involved in an activity. Jordan & Henderson also state that whereas people may make attempts at modifying their speech, it is difficult to manipulate or control gestures and body positioning for any length of time. The recorded pupils tend to speak about issues concerning their assignment, even though they also speak about other issues. They may stay on task to a greater extent since they know that they are being monitored and everything they say and do will be observed later.

#### **4.4. Interaction Analysis**

I used interaction analysis when analysing the recordings and when choosing which excerpt to present and further analyse. Both ethnomethodology (EM) and conversation analysis (CA) are similar to interaction analysis as they share an interest in naturally occurring interaction. In scrutinising commonplace activities in everyday life, EM seeks to “learn about them as phenomena in their own right”, as stated by Garfinkel (1967:1), the founder of EM. By closely studying interaction, both verbal and non-verbal, when people engage in a certain action the aim is to show how this action “is done”. In that way ten Have (2007:150) suggests that it offers a focus on the situated creation and maintenance of social orders. According to Maynard & Clayman (1991:397), CA is often suggested to have emerged as a kind of EM but exactly how it emerged or what differentiates the two is harder to clarify. Both EM and CA deal with the sequential organisation of talk. Adjacency pairs, such as question-answer or greeting-greeting, are examples of sequences in interaction which structures and organises it. EM and CA both share an interest in embodied interaction according to Maynard & Clayman (1991:400). Research done by Goodwin is taken as an example of how embodied action is exhibited to be part of the systematic moves which make turn-taking a concerted, interactive achievement. Although similar to CA, interaction analysis has been developed and established in recent years as a way of analysing video recordings, as it takes into account talk and non-verbal communication as well as the use of artifacts and technologies. Although in some respect similar to CA and EM, this study is not an ethnomethodological

study nor is the analysis a conversation analysis. If interaction between students in a classroom can be considered naturally occurring interaction is questionable. The interaction is situated in a social practice which affects what is said and how it is said. Therefore, I consider it important to take the social practice in which the interaction is embedded into account in the analysis and I do that by using activity theory as an analytical tool. My analysis does not focus on the sequential organisation of talk, such as adjacency pairs, which is usually done in CA and EM.

Jordan & Henderson (1995) describe interaction analysis as “an interdisciplinary method for the empirical investigation of the interaction of human beings with each other and with objects in their environment” (1995:39). Interaction analysis shares the basic assumption of cognition being a situated social act with the socio-cultural perspective. The goal of interaction analysis is to identify regularities in how the participants make use of the resources available to them in that particular situation (ibid). It aims to ground the analysis in the empirical material, and avoid ungrounded speculations of what people may think. If, however, there is evidence in the recordings, such as certain gestures, movements or verbal errors, which indicates mental states, they may be included. Being able to film interactions enables researchers to replay sequences of interaction, which in turn allows for the close interrogation into different modes, required by interaction analysis.

Jordan & Henderson write about analytic foci, as in ways of looking, that are consistently employed in interaction analysis since they repeatedly have proved to be relevant. Artifacts are one of the analytical foci as they “structure interaction, generate problems, and provide resources for the solution of difficulties as they arise” (1995:75). Artifacts and technologies set up certain social fields and are in interaction analysis seen, to some extent, as a participant in analysis. A central interest in interaction analysis is to understand “what kinds of activities and interactions particular material objects engender and support and how these change as different artifacts and technologies are introduced” (1995:75).

#### **4.5. Transforming video recordings to transcripts**

All video recordings of the students have been transcribed. The students' interactions as well as their movements, and what they did on

the computer as they were speaking were included in the transcripts. To transcribe video recordings is a time-consuming activity but to transcribe the interactions is also a way to familiarise oneself with the material and to start the analysis of it.

Transcripts of interactions may vary in detail depending on the analytical interest of the researcher. The extent and detail of the analysis is hence driven by analytical interests which means that significant features of the interaction which emerge during the analysis of the recordings are “more comprehensively and exhaustively transcribed, whereas others are set aside until shown to be relevant to the analysis” (Jordan & Henderson 1995:49). In the case studies, the excerpt includes notation of gestures and what the students do on the computer screen as they speak. This may make the reading of the excerpts somewhat difficult to follow but, as what the students do as they speak is considered to be part of how they co-operatively make meaning, it has been included in the transcripts. In appendix 1 there is a key to the transcript notation system that I have used.

After transcribing all the interactions, I colour-coded the transcripts in order to discern what the students focused on in their interaction during the lessons. Having colour-coded the interactions, a pattern appeared which revealed how the students focused on certain actions at certain points in the process of producing the multimodal text. The activity of creating a multimodal text thus typically appears to include the actions of:

- writing the story,
- finding images to match the story,
- recording the story,
- adding features such as preface and epilogue in the program used to create the film,
- putting together and editing the story,
- creating the movie file and adding music.

Throughout these actions, the students speak about technical issues such as different features of the program, how to download images from Internet or how to find images which they have already downloaded. They also talk about the recording equipment, matters other than the task at hand and organisational matters, such as when the text should be finished, throughout the different actions. Not all groups perform all actions as they do not all add features such as transitions or music.

## **4.6. Case studies**

Having video recorded six groups when they created their multimodal text and transcribed the recordings I realised that it would not be possible to analyse all the groups in depth. An in-depth analysis of video interaction is time consuming and analyses of all the video interactions would also have been too extensive for the research project at hand. I hence decided to focus on two groups and present the analysis as two case studies. Case studies are most relevant in a study where “how” or “why” questions are being asked “about a contemporary set of events, over which the investigator has little or no control” writes Yin (2003:9). Case studies are also relevant when a phenomena as well as its context is in focus.

After transcribing all six interactions, I was familiar with my material and had, during the transcription, found aspects in some interactions which could further be analysed in order to answer my research questions. The interaction in two of the groups was hence chosen for in-depth analysis. The students in these groups were positioning themselves in relation to each other and the context they were in, as more or less capable peers. One of the groups consisted of a student with Swedish as her second language and one student with Swedish as her first language. These students engaged in extensive negotiations about what their story should be about as well as the language they were going to use. Their positioning of themselves and each other seemed to differ in different negotiations and I saw a possibility to further analyse whether their positions were related to their language background. In another group, the students positioned themselves, in relation to each other and the context of schooling, as capable makers of multimodal texts. In so doing they also actively embraced the use of different modes and positioned themselves as experts of certain modes when creating their multimodal story. In further analysing their interaction, I hoped to be able to reveal more about how the students actually work with developing and assembling the multimodal resources.

### ***4.6.1. The choice of cases***

I decided to choose the two cases since they were dealing with different kinds of diversity. Case one deals with language diversity as the pupils have different first languages and interact in a language which is a first language to one of them and a second language to the other. The



positions of native and non-native speaker and whether they affect the positions enacted by the students in negotiations about the content and the form of their story, is in focus.

Case two deals with multiplicity in expressions as in being allowed and able to express yourself in different modes, such as speech, images and sound. Multimodality is in focus and the notion that all modes are meaning-making is essential. As stated above, whilst transcribing the interactions I discerned a certain pattern in what actions the students focused on during the creation of their text. The pattern revealed that the students, generally, started the process of creating their multimodal story with writing a text typographically. Taking a multimodal view on the creation of text it is particularly interesting to study the students in case two since they deviate from this pattern.

Analysing interactions which clarify, in one case, the diversity of modes used when creating multimodal texts and, in the other case, the multilingualism present in contemporary classrooms, means that these different aspects of multimodality and language present in the aim of this study are taken into consideration. There are of course other aspects in the material which could have been further explored but at this point I found these two aspects of diversity to be the most compelling.

#### **4.7. Ethical considerations**

In line with the ethical guidelines for research (Codex 2010), I gave the students information about the research and they were able to choose whether or not they would like to take part. The students were given information which explained my research, and where they stated whether or not they gave me permission to video and audio record them. They could also choose whether the films could be shown to other researchers or if only myself, as a researcher, was allowed to see the films. If they were under 18 years of age the form had to be signed by their parents. I also informed them that they could withdraw from participating at any time and that their identity would be kept confidential so that the persons taking part in the study could not be identified. When informing the students about the research I made clear that I would not be able to video record all groups as I did not have the necessary technical equipment to do so. By doing this I wanted them to know that the research could be carried out even if only a minority of the pupils consented to being recorded. In this way, I hope that no pupil felt compelled to participate. On the other hand, it also means that the

students which did participate are students who, for one reason or another, wanted to participate.

## **5. Co-authors' negotiation and positioning in interaction**

In this case, the video recordings of two female students when they collaboratively write a text is presented, and the students' interactions are analysed. Through an analysis of the students' interactions, I explore how they use different forms of self-reference to position themselves. Since one of the students is a second language learner of Swedish, the positions of native and non-native speaker and how they may affect the interaction is in focus. The interaction is analysed taking into account the situational context through detailed analysis of the transcribed interaction, as well as considering the socio-cultural context of writing in an educational setting and as first and second language speakers.

The students are here called Louise and Maria. Louise is a second language learner of Swedish whereas Maria is a native speaker. Although the majority of students in class 1 are non-native speakers, the group consist of both first and second language students who have Swedish lessons together. When assessing the students, the teacher will, however, give grades in both Swedish and Swedish as a second language depending on whether the students are native or non-native speakers. As these two students chose to sit in a separate room during the lessons which the excerpts were taken from, other people are largely absent from the interaction. The teacher/researcher does, however, play a small part during these lessons, though this is not shown in the excerpt, and when the students later continue to work with their text at the computer they are in the same room and hence other people also take part in and affect their writing process. Their teacher gave them the assignment to write a text about a goal or a dream they have for the future. They each made a list of individual goals or dreams and then had to choose one subject from their two individual lists to write about.

When analysing the interaction and how the students position themselves I have made use of Goffman's concept of footing (1981), which relates to the way speakers change their relationship to what they say. The changing of pronouns may indicate such a change in footing. By changing the personal pronoun they use, the students show when a

statement is considered to be closely linked to themselves, using the pronoun “I”, and when what they say is linked to the collaborative activity in which they take part, they use the pronoun “we”. They also use the pronouns “you” or “one” to signal a distance to their statements. In Swedish, the pronoun “man” is often used as an indeterminate form of reference. “Man” will here be translated as “one” to capture it being both an indeterminate and an impersonal form of reference, whereas “we” or “you” could also refer to particular persons. The use of “one”, write Scollon et al (1998), makes the text ambiguous and polyvocal as it may be the voice of both the speaker and the anonymous other. Depending on the context, it is sometimes possible to translate “man” with “I” but at other times it relates to a generalised other where the speaker may or may not be included.

The following sections present the analysis of the interaction. The conclusions are drawn from the close analysis of the transcribed interactions and hence mainly concern the situational context. After summarising the findings from the situational analysis, the case is concluded with an analysis that focuses on socio-cultural aspects of the negotiations and where differences in collaboration, depending on the topic of the negotiations and the positions which the students enact or resists, will be explored.

### **5.1. Analysis of interaction**

In the five-hour long recordings of the girls’ work with the text they spent much of their time negotiating both what the text should be about and how this should be expressed. The two students in this study write collaboratively and they do so by continually negotiating both the content and the form of the text.

In this case the interaction from the first two lessons is in focus. That the students focus on writing a text which they later will record as a soundtrack to their multimodal text exemplifies how most of the recorded students worked with the task of creating a multimodal text. The students tended to focus on writing their story, and only later worked with the other modes available when creating a multimodal text. The activity was initially framed as “writing a text” which is a familiar activity in language education. Since this group frequently negotiated both content of the story and language whilst composing their text, the interaction during the first two lessons contain exchanges where the students position themselves in regard to content as well as language.

During the first lesson the students are occupied with writing their text and negotiations are mainly about the content of the text. The text they wrote in the first lesson becomes their work material in lesson two. Negotiating language became possible in the second lesson as the students reflect upon the text, which they have written during the previous lesson, and reformulate it in order to improve their story. While in lesson one they focused on the process of writing a text and negotiating what to include in their text, in lesson two they are focusing on the text as a product which they can react and reflect upon (Swain 2001).

### 5.1.1. “But then it’s like we don’t like it, to adopt” – negotiating content

Early in the first lesson the students decide on the subject of their text. That they have different views on the chosen subject is noticeable in their initial interaction. Without agreeing on a common viewpoint they decide that adopting a child will be the subject of their collaborative text.

**Excerpt 1**, Lesson 1, app 3.15 min<sup>20</sup>

Louise **men jag tror att vi kan ta den adoptera ett fattigt barn**

*but I think we could take that one adopting a poor child*

**för att det är (.) för att dom behöver jättemycket kärlek**

*because that is (.) because they need lots of love*

Maria **Men mest när man adopterar barn (.) det är när (.) ens**

*But most of the time when one adopts children (.) it is when (.) ones*

**föräldrar (.) när dom inte själva kan få barn så adopterar dom ett barn**

*parents (.) when they can’t have children themselves then they adopt a child*

Louise **J::nej (.) men kolla (.) ja (.) man måste ha mycket pengar för att kunna**

*Y::no (.) but look (.) yes (.) one has to have a lot of money to be able to*

**adoptera [me]**

*adopt [bu]*

Maria **[ok] men då måste vi skriva en text om adop (.) alltså adoptera**

*[ok] but then we have to write a text about adop (.) I mean adopting*

**ett barn ska vi ta den då?**

*a child should we take that one then?*

In the excerpt above, Louise starts by suggesting they write about adoption and then gives a reason why she is in favour of adoption where

<sup>20</sup> In appendix 1 there is a key to the transcript notation that has been used. All excerpts have been translated and will here be shown both in the original Swedish and the English translation. Lingual nuances are sometimes difficult to translate and certain idiomatic phrases may therefore have been lost in translation.

she takes the viewpoint and needs of children who are adopted. Maria replies with a counter argument where she argues why adults want to adopt. Louise then adds an economic aspect of adoption. From this short excerpt at the beginning of their collaboration, the different viewpoints and the different aspects from which the girls look upon the subject of adoption are expressed.

The students use the pronoun “we” when orienting towards the task of writing a text. By using the collective self-reference “we” they stress the collaborative aspect of the task at hand. When they put forward an argument they use “one” which refers to an anonymous generalised other. As “one” does not refer to any particular person, using this pronoun is a way of marking what they say as general knowledge rather than personal views.

In the following excerpt the students clearly express personal views and they mark this by using the individual self-references “I” and “you”. They enhance the pronouns “you” and “I” by hand gestures towards the person they refer to and they physically stress their distance to their collaborative writing by moving away from the desk and the paper when not talking about the collaborative text. In their movements, the pupils accentuate that they speak as individuals expressing personal opinions.

**Excerpt 2, Lesson 1**

time



4.16

Maria **Vill du adoptera?** ((rör höger hand mot Louise))  
*Do you want to adopt?((moves her right hand towards Louise))*



4.18

Louise [**Nån gång i framtiden**]  
*[Sometime in the future]*

Maria [**Kolla om inte jag**] (.) **om inte jag kan få barn alltså så med min man eller**  
*[Look if I can't] (.) if I can't have children I mean like with my husband or*



4.20

Maria **nåt sånt (.)** **det är klart då vill jag också**  
*something like that (.)* *then of course then I also want to*  
**adoptera för jag vill ha barn i framtiden**  
*adopt because I want to have children in the future*

In the first picture, excerpt 2, Maria asks Louise whether she would like to adopt and, as she says that, she moves her right hand towards Louise. In the next picture Maria repeats the words “if I can’t” and while doing this puts both her hands on her chest and moves away from the table, leaning back in her chair. In the last picture Maria continues to talk about her personal view of adoption and has moved away from the table and the paper on which they are writing their collaborative text. A movement of the hand towards the chest is used to stress the self-references in conversations, but as Turk (2007) shows self-referential gestures can be used both “to disaggregate a relational collectivity and to extract the self from a collectivity” (ibid:558). Maria’s hand gestures first towards Louise and then to her own chest accentuate the differences between the opinions they express and, in combination with Maria’s withdrawal from their collaborative text, mark her extraction from their collectivity.

Since the subject of adopting a child was taken from Louise’s list of dreams or goals for the future, she shows in excerpt 3 that their text is moving in another direction than she intended. She is in favour of adopting but, from what Maria says, the text will be against adoption. In the discussion that follows, the students do not have eye contact with each other, which emphasises their diverging views. Not until they orient toward the task of writing the text do they again make eye contact, and by doing so explicitly show that they are now focusing on their collaborative task of writing a text instead of their diverging views. The students thereby use their gaze to achieve a mutual understanding in the interaction but also to do the opposite (Van Lier 2001).

In excerpt 3, the three different forms of reference, “I”, “we”, “one”, seem to be used in a certain pattern. Their use of different pronouns displays the students varying positions, or changing of footing, toward their utterances in that they show whether they consider what they say to be something they express as a collaborative “we”, a personal opinion or general knowledge. Goffman (1981) claims that changing footing is a

persistent feature of natural talk and that it may be displayed in interaction through a shift in pronouns. The pronoun “one” is used in the excerpt to express general knowledge or to mask a personal expression as though it were general knowledge. “One”, which does not refer to any particular person, is used between the usage of “I”, when explicitly speaking as an individual expressing personal views, and the usage of “we” when speaking as a pupil in the process of writing a collaborative text. The pronouns in the excerpt are underlined to clarify the suggested pattern.

**Excerpt 3**, Lesson 1, app 5.21 min

Louise **för att vad?** (*båda slutar skriva*)

*Because what? ((both stop writing))*

Maria **Varför väljer vi det?** (2)

*Why do we chose it?(2)*

Louise **för att**

*because*

Maria **Vi tycker synd (.) man kan säga så (.) jag (.) jag tycker synd om barn**

*We feel sorry (.) one could say like that (.) I (.) I feel sorry for children*

**som blir adopterade (.) på grund av att dom barnen som blir adopterade**

*who are adopted (.) because they the children who are adopted*

**(.) dom får inte leva med sin riktiga mamma och sin riktiga**

*(.) they are not allowed to live with their real mum and their real*

**pappa (.)det är sant (.) de blir adop (.) alltså de blir bortadopterade**

*dad (.) it's true (.) they are adop (.) like they are given up for adoption*

Louise **Men då är det (.) att vi inte tycker om det (.) att adoptera(.**)

*But then it's like (.) we don't like it (.) adoption (.)*

Maria **Alltså om man adopterar ett barn (2) det är jättebra för att föräldrarna**

*Well if one adopts a child (2) that's really good because the parents*

**som får detta barn alltså som adopterar barnet de blir jättegglada**

*who get this child like who adopts the child they become really happy*

**och sånt ju (.) och det barnet när det växer upp och**

*and stuff (.)and that child when it grows up and*

**sånt om man adopterar det när det är liten alltså en liten bebis (.) så**

*stuff if one adopts it when it is small like a little baby (.) then*

**tror dom att de föräldrarna som har tat hand om barnet sen**

*they think that those parents who have taken care of the child since*

**den var liten e deras biologiska mamma och pappa**

*it was little is their biological mum and dad*

Louise **um**

*um*

Maria **men (2) jag tycker det är s:: (.) alltså (.) synd ändå**

*but (2) I think it's s:: (.) like (.) sad anyhow*

Louise **ja det är synd**

*Yes it is sad*

Maria **för att**

*because*

Louise **men**

*but*

Maria **barnet som blir bortadopterat får inte växa upp med sin riktiga**

*The child who is adopted is not allowed to grow up with its real*

**mamma och sin riktiga pappa**

*mum and its real dad*



Louise **Men det är inte så synd för att mamman och pappan som (.) det är dom**  
*But it is not so sad because the mum and the dad that (.) they are the ones*  
**som lämnar barnen (.) så varför ska dom tycka synd om varför ska**  
*who leave the children (.) so why should they feel sorry for why should*  
**man vilja leva med (.) sina biolog sånt mamma och pappa (3) varför**  
*one want to live with (.) their biolog something mum and dad(3) why*  
**ska man vilja leva med en som ((ritar på sitt papper)) (.)**  
*would one want to live with someone who((draws on her paper))(.)*  
**som lämnar dig (.) förstår du varför (.) jag vill adoptera (.) you understand**  
*who leaves you (.) you understand why (.) I want to adopt (.) you understand*  
**((tittar på M))**  
*((looks at M))*

Maria **Ska vi verkligen jobba med adoptera?**  
*Should we really work with adoption?*

Maria starts by saying “We feel sorry” but then changes that to “I (.) I feel sorry for children who are adopted” after inserting “one could say like that” between the two. “One” (“man”) is here more closely related to Maria the individual than to the generalised other. Lerner & Kitzinger’s (2007) analysis of repairs in self-reference, which change an individual self-reference form to a collective self-reference form or vice versa, shows that in these repairs the speakers either extract themselves from a collective reference that previously included them when “I” replaces “we” or the “speakers aggregate others to a referent that is retained in the replacement reference term” (ibid:549) when “we” replaces “I”. By changing from “we” to “I”, Maria extracts herself from the “we” as in we-who-are-writing-a-text-together and instead speaks as an individual. When she says that she feels sorry for children who are adopted she probably knows that this is not something Louise will agree with and that is why she changes from “we” to “I”. After concluding her arguments she adds “it is true (.) they are adop – like they are given up for adoption”. By adding this remark and by inserting “one could say like that” at the beginning of her argument she gives her individual opinion an air of being an opinion which is “true” and which is also held by a generalised other. She thereby excludes herself from the “we”, which consists of herself and Louise but at the same time claims that her opinion is something that the general public holds to be “true”. In doing so, she simultaneously extracts Louise and her diverging opinion from the generalised other, thereby making it deviant from what Maria and generalised others believe.

Even though the students do not agree on why you should or should not adopt, they build on each other’s suggestions in the negotiations by repeating each other’s words, for example when they both say that “it is sad”, but for completely different reasons. The co-construction of a text makes it possible for the students to build on one another’s suggestions

and to give alternative solutions (cf Storch 2005). When co-authoring, the students have an immediate audience in their co-authors from whom they get feedback on their suggestions for content and the form of the text which in turn leads to negotiations. The writing process thus, as stated by Dale (1996), becomes recursive when students write together due to the influence of the present reader, the co-author. Planning, composition and revision become inseparable components in a recursive process.

They do not reach an agreement on whether or not their text should be in favour of adoption, instead the discussion ends with Maria questioning whether they should write about adoption at all. During the first lesson they express personal opinions and negotiate what to include in their collaborative text on different occasions. These negotiations end by the students either questioning their choice of subject, as above, or by shifting their focus to the assignment of writing a text as in excerpt 1. The framework of the institutional setting in which the negotiations take place and the activity in which they take part, is thereby made visible and seems to be made relevant in the interaction when the students cannot agree on the content of their text. The students thereby show that they are aware that the socio-cultural context they are in requires them to fulfil their assignment rather than discuss personal viewpoints. Further on in lesson one, they actually devise a solution for writing a text which includes their different viewpoints on the subject of adoption by including advantages and disadvantages of adoption in their text (see excerpt 7).

**Excerpt 4, Lesson 1**



Time 3.48



3.51



Time 3.52



3.54

In the first lesson the students show, by their usage of “we” when referring to the text that they are co-authoring, that it is a task they do together. They both write down the text that they have agreed upon and,

when doing so, they tend to glance at each other while writing (excerpt 4). When glancing at each other they use their gaze to mark their collaboration, just as they, at other times, use avoidance of eye contact to mark their disagreement.

In lesson two, however, it is only Maria who is writing. They have a simple storyboard where they are to draw or write something about the image they want to use, as well as what they are going to say while they show that image. Maria writes which part of their text should go with which image, and Louise tends to read what they have written during the previous lesson to Maria. The fact that only Maria is writing shows in the way that they use pronouns. The writing is referred to as something Maria does and not something they do together.

**Excerpt 5**, Lesson 2, app 1.27 min

Louise **Jag vet inte (.) säg läs det du skrev**

*I don't know (.) say read what you wrote*

Maria **Jag har skrivit vi har valt att skriva om adoptera ett barn**

*I have written we have chosen to write about adopting a child*

As they start to talk about which images to use in their film they use “we”, but refer to the act of writing as something only Maria does.

**Excerpt 6**, Lesson 2, app 8.54 min

Louise **vi kan se sen vilken bild vi ska använda**

*we can see later which picture we are going to use*

Maria **Jag kan skriva texten**

*I can write the text*

Louise **vi behöver inte rita**

*we don't need to draw*

Maria **ska jag skriva [denna]**

*should I write it*

Louise **[ja skriv] ja (3) eller (.) nej vi kan skriva det sist**

*[yes write] yes (3) or (.) no we could write it last*

**det är bättre**

*it it's better*

They are now focusing on coordinating pictures and text, and that is referred to using “we”. Thus, it is only the stage in the process that they are at in that moment that is referred to using “we”. The process of writing down the text belongs to the past and rewriting it is not seen as a collaborative act. The focus of their actions has shifted from writing a text to improving the text which they wrote in lesson one. The framing of their activity is also shifting from “writing a text” to “composing a multimodal text”.

### 5.1.2. “Can one write him?” – negotiating language

In the following analysis of negotiations about language I will analyse instances of language-related episodes. Swain & Lapkin (1998) define a language-related episode as part of a dialogue where students “talk about the language they are producing, question their language use, or correct themselves or others” (ibid:326). In the first lesson, the students were mainly concerned with writing their text and what to include in the text. Questions concerning the use and meaning of words occur in this lesson. In the second lesson, by using the text they have written, they reflect on language issues and are hence able, to a greater extent, to focus on form.

Louise, the second language learner, on some occasions depicts an uncertainty as to the meaning of certain words or how to express herself in Swedish. Maria does not take much notice of her expressing uncertainty, but instead seems to focus on getting the text written. In the first excerpt below, Louise expresses uncertainty of the meaning of the word “advantage” but does not elicit any response from Maria.

**Excerpt 7**, Lesson 1, app 10.24min.

Louise **vi kan skriva** (.) [**det bra**]och **det dåliga som finns** (.) **men**

*we could write* (.) [*the good*] and *the bad about* (.) but

Maria **[men det då]**

[*but the bad*]

Maria **fördelar kan vi säga** (.) ((**M börjar skriva**))

*advantages we could say* (.) ((*M starts to write*))

**fördelar med adoption [med] att a(.)doptera** ((**L börjar skriva**))

*advantages with adoption [with] a(.)adopting* ((*L starts to write*))

Louise **[är det bra eller]**

[*that's good or?*]

Maria **ett barn** (.) **som** (.) **blir** (.) **bort** ((**båda slutar skriva**))

*a child* (.) *which* (.) *is* (.) *taken away*((*both stops to write*))

Louise **slängd**

*thrown away*

Maria **Nej** (.) **som blir bortknuffad av familjen**

*No* (.) *which is pushed away by the family*

When Maria is searching for a word meaning “rejected” (bortstött) Louise comes up with the suggestion “thrown away” (bortslängd). In the end they use Maria’s suggestion, “pushed away” (bortknuffad). When they cannot find the “right” word for what they want to express they use Maria’s suggestion. That they will use Maria’s suggestion is decided by Maria without any further negotiations.

Although Louise explicitly asks to be able to say what is on her mind in the following excerpt she then says to Maria to say it in “your real

Swedish”. As it turns out, Maria does not agree with what Louise is saying, which sparks a discussion about whether children are actually left alone without parents or not. The question of “how one should say it” is not answered.

**Excerpt 8**, Lesson 1, app 7.42 min

Louise **Men vänta låt mig säga först ((Maria slutar skriva)) Vi tycker att (.**)

*But wait let me say this first ((M stops writing)) We think that (.*)

**barn ska inte va ensamma utan föräldrar (.**)

*children should not be alone without parents (.*)

**ja säg du ((rör vänster hand mot M)) på din riktiga svenska (.) hhuur ska man säga**

*yes you say it ((moves her left hand towards M)) in your real Swedish (.) hhow should one say it*

The fact that Louise chooses to use the pronoun “one” instead of “I” when asking how “should one say it” could be seen as a way of distancing herself from her own uncertainty about how to express herself. By using “one”, she neither asks Maria to tell her how she should say it or to correct her. Instead she asks how an anonymous generalised other would say what she is trying to express.

When Maria stops writing, they make eye contact and keep it until when Louise moves her left hand towards Maria saying “you say it” and then looks down at her paper. She looks up again when she asks “how should one say it”. With her hand movement Louise explicitly shows that Maria should take over, but when she does not do so straight away, she also formulates a question. That she looks down when saying “you say it in your real Swedish” reinforces that the formulating of “real Swedish” is up to Maria.

In the following excerpt Louise actually questions and corrects Maria when she wants to use an incorrect form of a possessive pronoun. Maria wants to write “hims” (“honoms”) but Louise questions whether that is the correct form. Gröning’s (2006) study of language-related episodes showed that second language speakers did not correct native speakers. Both first and second language speakers could initiate the correction, but the correction was always aimed at a second language speaker.

**Excerpt 9**, Lesson 2, app 5.36 min

Maria **barnets (3) föräldrar (2) inte är (1) hennes snedstreck honoms honoms biolog**

*the child's (3) parents (2) are not (1) her slash hims hims biolog*

Louise **kan man skriva honoms**

*can one write hims?*

Maria **henne honom honoms hennes honoms jag vet e fan det e min svenska**

*her him hims hers hims I don't bloody know it's my Swedish*

Louise **men sen måste vi göra det bra**

*but later we have to do it right*

Maria **jamen vi renskriver det visar för läraren och sånt**  
*yeah but we will rewrite it and show to the teacher and stuff*

Schegloff et al. (1977) state that in interactions, there is a preference in self-repair which means that the speaker often corrects herself. When a correction is initiated by another, the use of self-repair is especially frequent. Time is allotted after the utterance that allows the speaker to self-repair, and the use of a question initiating a correction makes it possible for the speaker to yet again self-repair rather than to be corrected by another. Instead of self-repairing her former statement, Maria tries out different options as a kind of hypothesis testing (Swain 2001:100). She then concludes that she does not know and states that it is “my Swedish”. That Maria uses the possessive pronoun “my” could mean that she uses the language in her own personal way, thereby letting Louise know that it might not be how “one” should use it. Corrections are delicate issues since they often imply some kind of criticism, and Louise’s statement that they have to get it right later on suggests that she knows that what they are now writing is wrong. Maria does not explicitly accept Louise’s suggestion but, by agreeing with Louise that they will rewrite it, she leaves herself open to correction at a later stage. Persisting in her questioning of the use of “hims” until Maria accepts her suggestion to use “him” instead, could be seen as an instant where Louise scaffolds Maria’s language development, thereby enacting the position of expert. When trying to convince Maria to use “him” Louise does not try to explain her reasoning by referring to a general pattern. She continues to use everyday language just like the students in Gröning’s (2006) study did and does not, as suggested by Lindberg (2003), use formal language to justify her suggestion. As Lindberg’s study was done on adult second language learners, this may be one reason why they tend to use formal language. Gröning’s study and this study, both concerning adolescents, indicates that teens are prone to using everyday language even when dealing with school and knowledge-related issues.

Louise again uses the pronoun “one”, referring to an anonymous generalised other, when asking about the correct way to use the language. This stands in sharp contrast to Maria’s use of the possessive pronoun “my” when referring to “her” Swedish. Since Louise uses “one”, she may be expressing a belief that there are anonymous generalised others who know how to use the language, but she does not see herself or Maria as belonging to those generalised others. Since this part of the conversation actually takes place before the previous excerpt,

Louise may, in excerpt 8, be referring to the fact that Maria has recently said that the language is “hers” and that is why Louise asks her to say it in “her real Swedish”.

Though they rarely use the pronoun “we” when talking about language issues, they use it here when they refer to the school context and rewriting their text before showing it to the teacher. This indicates that it is in relation to the rules and regulations governing both their writing and the task they have been set to do, that they consider themselves to be part of a collaborative “we”. They also seem to refer to the procedures around writing in an educational context that they are familiar with, and where one rewrites the text before one gives it to the teacher. That the outcome of their activity is going to be a multimodal text where their text will be spoken does not seem to be something which alters their actions at this point. They are framing their activity as “writing a text” which, in turn, is framed within the larger context of “doing a school assignment”. When writing a text in this context, the rewriting of a text before showing it to the teacher is something which they consider to be part of the rules which governs the practice. They refer to the practice and the rules as they know it, and do not see the change of outcome as something which will affect this practice

In the following excerpt Louise reads the text they have written in lesson one and Maria writes down what she says, repeating the words as she does so, in the storyboard they work with in lesson two.

**Excerpt 10**, Lesson 2 app 14.30 min

Louise **hennes**

*her*

Maria **hennes**

*her*

Louise **hans**

*his*

Maria **hans**

*his*

Louise **biologiska föräldrar**

*biological parents*

Maria **biologiska föräldrar**

*biological parents*

To be able to acquire language forms, they must first be noticed (Ellis, 1994:361) and, according to Swain (2001), noticing may be promoted when learners produce statements. Maria and Louise clearly notice that they are unsure of the possessive pronoun “his” and, by trying different solutions, they end up using the right form, “his”, instead of “hims”, which they started with. As the students notice mistakes and try out different solutions they are, to some extent, engaged in collaborative

dialogue (ibid), using knowledge-building dialogue to construct linguistic knowledge. When the students in lesson two reflect on the text they wrote in lesson one, they negotiate language which in turn enables them to construct new knowledge about language.

## **5.2. Creating texts within the context of schooling**

In this case, the students predominantly framed their activity as “writing a text” during the first two lessons which were in focus in the analysis. That they were making a multimodal text where modes such as images and sound could bear meaning did not affect the focus on the mode of writing to any great extent. The students focused on the familiar activity within language education of writing a text. Only later were the other modes taken into consideration and they were then mainly used to accompany the text they had written, and which later became the soundtrack of their story.

When the students orient themselves towards the activity of writing a collaborative text, they follow the rules and responsibilities of writing in school. The activity is, in a larger framework, seen as “doing a school-assignment”. Within this framework they are able to take into account their different opinions and interpret them as part of their activity. In their negotiations they switch between using individual self-reference, “I”, collective self-reference, “we” and the indeterminate form of reference, “one”. Their change of self-reference reflects a change in footing as they use “I” when they voice their personal views and “we” when they talk about the text they are writing together. “One” is used to convey what they claim that people in general think or do. In their interaction they use the indeterminate form of reference as a stepping stone between the use of individual and collective self-reference as they move from the content of the text to general ideas and then on to personal views or vice versa. The transition is thus made through the indeterminate form of reference.

In gestures and gaze, the embodied interaction is displayed and used to enhance positions and statements. Maria, for example, marks the differences between herself and Louise by using both self-referential gestures and gestural references to Louise. She accentuates her withdrawal from the collaborative text by physically withdrawing from the paper on which they write. Maria and Louise enact their disagreement by avoiding eye contact, just as they display their mutual collaboration in getting the task done by glancing at each other as they



collaboratively write their text. In doing so, they use eye contact and glances as ways to indicate mutual understanding and disagreement which corresponds to the findings made by Van Lier (2001).

Even though they have different opinions, based on different assumptions, they manage to write a text that takes into account their differences. Instead of elaborating on their different viewpoints, they focus on the activity of writing a text in a school context, thereby avoiding taking a clear stand-point for or against certain views. They make use of their different viewpoints in their text and discuss the question of whether adoption is good or bad rather than taking sides. In their negotiations they build upon each other's suggestions and create alternative solutions and, through the immediate feedback available from their co-author, they negotiate content, form and organisation of the text. Their negotiations show signs of both intersubjectivity and alterity (cf Linell 2009:81-85). On the one hand, the students strive to achieve a common ground of intersubjectivity in order to be able to co-author a text; on the other hand they allow the text a multiplicity of meanings since their different perspectives on the subject are voiced.

In language issues, the students negotiate less and strive for closure or finding the "right" alternative rather than allowing for the possibility of multiplicity of meaning to be an option. The negotiations having to do with language mainly occur in the second lesson because the students then reflect upon the text they wrote in lesson one, and negotiate language in order to improve the text they already have agreed upon. It is the native speaker, Maria, who to a large extent determines how to phrase their text and decides which words are possible to use. Swain (2001) stresses the need for verbalisation for second language learners, and Lindberg (2003) claims that collaboration promotes the use of language as a cognitive tool since it allows the students to "verbalise their implicit language knowledge in a way that facilitates their language processing" (ibid:368). Louise does attempt to phrase what they should write and even explicitly asks to be allowed to do so, but when she seeks recognition from Maria as to whether her verbalisation can be seen as "real Swedish" or not, Maria does not pay much attention to the questions asked. Maria is focused on getting the task of writing a text done, not on scaffolding Louise's language learning by explaining the meaning of words or discussing how things can be said. As suggested by Mercer (2000:140), this accentuates the importance of both parties' involvement in creating mutual scaffolding. Maria and Louise seem to have a shared communicative space in creating their collaborative text. When it comes to language issues, however, their

aims and involvement diverge and because of this a mutual scaffold is not established.

Focusing on the socio-cultural context of schooling in which the activity is embedded, the activity can be framed as “writing in a school context”. The rules and norms that apply to the context of schooling affect the writing process in which the girls are engaged, as well as how they relate to each other. As several studies of the Swedish school context have shown (e.g. Cekaite & Evaldsson 2008, Gruber 2007, Haglund 2005, Runfors 2003), schools relate to multiethnic varieties of Swedish as deviant from a monolingual norm of the language. Even though multilingualism and multiculturalism can be seen as the norm in Swedish schools today, they are still treated as an exception according to Lindberg (2009:18). The schools tend to have a homogenous majority culture as their point of reference and multilingual students are treated as deviant and in need of help. Second language speakers are often seen in the school context as lacking in abilities in the Swedish language and their competence in other languages and knowledge about different cultures are largely ignored. That the native speaker positions herself as more knowledgeable in negotiations about language is therefore not surprising.

Maria shows a lack of response to Louise’s questions about language issues and seems to be more concerned about finishing their task of writing a text rather than discussing language issues. Maria’s lack of response to Louise’s questions may also have to do with their positions as expert and novice not being static and that they are resisting the positions allotted to them. Maria may doubt her expertise in language issues but still tries to position herself as an expert since she is a native speaker. In issues where Louise turns out to be the more capable peer, it may be difficult for her to obtain recognition of her capabilities because of the expectations imposed on them. When negotiating language, there is a tension between the two participants which appears to arise from the fact that they are first and second language speakers. It is noticeable in their ambivalent stance in relationship to the positions that they are presumed to embody in the socio-cultural context of education, and the positions with which they, as individuals, identify themselves.

One of the few negotiations about form that occurs is when Louise questions Maria’s suggestion to use the word “hims”. By correcting Maria, Louise tries to position herself as a capable peer. In Gröning’s (2006) material there were no situations in which a second language learner corrected a native speaker; thus when Louise questions Maria’s use of pronouns, she may be pushing the boundaries for what she, as a

second language speaker, can do. By doing this, she may also threaten Maria as the more capable peer, especially since corrections, as shown by Schegloff et al (1977), often involve criticism and question the other's competence. As Maria and Louise show reluctance to enact the positions of more capable first language student and less capable second language student, they can be seen as resisting the identities imposed on them in the school context.

### **5.3. Summary**

While writing their story, the students in this case negotiated the content as well as the language used in their text. When negotiating content they engage and explore different ideas and interpret their personal opinions as part of the activity. That they change footing when they express different opinions, sometimes stating opinions as an individual and sometimes voicing them as that which is believed by a generalised other, do not seem to be a problem. By focusing on the task of creating a text, they avoid elaborating on their different viewpoints which enables them to create a text where these are taken into account.

When negotiating language the students, however, enact a different relationship. As the interaction is embedded within the context of schooling it appears that this context presupposes Maria, as a first language student, to take the position of a more capable native speaker in language issues. This leads to tension between the students where the educational setting mandates their positions based on their language background as first and second language speakers, but where they, as individuals, do not feel comfortable in the positions assigned to them. The native speaker positions herself as an expert in language issues, but does not always fulfil the rights and duties attached to this status. Her expert positioning is also questioned by the second language speaker. The second language speaker's knowledge, being only silently acknowledged by the native speaker, combined with the preferential right of interpretation that was granted the native speaker in choosing words and phrases, are factors that influence the possible positions the second language speaker may take in the co-authoring process.

## **6. Creating multimodal texts within the context of schooling**

In the following chapter, a group of students and their interaction while creating their multimodal text is analysed. The group in focus is one of the groups which were video-recorded while doing their multimodal text in a class where all of the students have individual laptop computers. The group consists of two male students whom I will here call Isak and Jonas. They both have Swedish as their first language. The assignment which was given to them by their teacher was connected to the reading of a book, "Let the right one in" ("Låt den rätte komma in"). After reading the book, they then watched the movie based on the book and had several book-talks about the story. As their assignment they were asked to alter an existing scene in the story or to create a new scene which they thought could be included in the film. Isak and Jonas decide to re-make a scene where a character is attacked by a vampire in a forest.

When making multimodal texts in the shape of digital stories, the technology is not used to solve problems such as finding answers to questions, but to create texts consisting of spoken words as well as images and sounds. To write and express oneself through language is an important part of language education. By using today's digital technology, it is now possible to create multimodal texts where pupils are able to use different modes, such as images, speech and music, to express themselves, which potentially provides for new practices of reading, producing and disseminating texts (Jewitt 2006:29). As technologies can be seen as mediating tools they impact the way in which learning is mediated as well as the potential practices available for those who use them.

Since Isak and Jonas have individual laptops, which they also use outside of school, they are able to make use of this tool throughout the process of writing their text. In doing so they have opportunities to become accustomed to the computer and learn how to use it in different activities, and are thereby able to appropriate the material tool they are working with. Students who were filmed in other classes, and who did

not have individual laptops, did not have access to computers in all their lessons, nor was it possible for them to become accustomed to the tool they used in the way that the students who had individual laptops could.

Having video-filmed students while they make a multimodal text in a classroom, it is possible to study the situated practice which these students engage in and how they construct their text, using different modes, as well as how they interact with each other, using different modes, in order to co-author a text. It is the activity of making the text which is in focus in the analysis. The process of making the text, however, contains notions of the final product as those involved in the activity have the outcome of it, the product, in mind during the process. The object of the activity is referred to both explicitly and implicitly and the actions are motivated by the object. The final products, the multimodal texts created by the students, are not analysed.

As the use of a computer is crucial when making a multimodal text in the shape of a digital story, both the outcome and the artifact used in the activity system have changed, compared to when writing a story with pen and paper. These alterations also lead to changes in the rules which govern the activity. The interaction is analysed taking into account the activity system of creating a multimodal text in school, but also considering other activity systems which may interact with and influence the creation.

In this case study I will, by analysing the interaction between Isak and Jonas, examine how they make use of the different modes available to them to create their multimodal text and how they, in their interaction, negotiate the content and the form of the co-authored text they are in the process of creating. I will then analyse the activity system of creating multimodal texts within the school context to situate the interactional analysis in a broader context.

## **6.1. Analysis of the interaction**

To exemplify how they worked with their text and how it developed during the lessons, excerpts will be presented starting from lesson one and onwards. As Heap (1989) argues, other people may be related to during the process of writing and in some of these excerpts the voice of the teacher/researcher is heard. Both the students' teacher and I were present during the lessons and we both interacted with the students during these lessons. However, in the excerpts presented here, the students only interact with me. As an active participant during the

lessons<sup>21</sup>, I assisted the students, like their teacher, in creating their multimodal text and thus see us both as enacting the role of teacher in the classroom. I have therefore chosen to label the other voice in the interaction as teacher/researcher.

During the process of creating their story, the students use what they have created in previous lessons as a product which they can reflect upon and improve in various ways. The creation is hence a process which has different phases where different actions are carried out with the goal of creating the object of the activity, the multimodal text.

### 6.1.1. *Setting the scene*

In the first lesson Isak and Jonas have problems getting started and Jonas is mainly focusing on which music to use. He searches for different alternatives on the Internet and they listen to the music together. Isak shows more of an interest in the content of the story. Several times during the lesson they retell their story to each other and to the teacher/researcher, but they do not write the story down.

**Excerpt 1** - Lesson 1, app 17 min<sup>22</sup>

- Isak **och sen så blir det fight mellan eh (.) istället för att hon eh bara**  
*and then there is a fight between eh (.) instead of her just becoming eh just*  
**blir nerspöad (.) så kör vi fight mellan eh Elli och den eh bruden som går**  
*become beaten up (.) we'll do a fight between Elli and that eh chick who walks*  
**förbi så bitchen hoppar ner från trädet ((rörelse med handen neråt)) vi**  
*past so the bitch jumps down from the tree ((moves his hand downwards)) we*  
**filmar fotar när jag sitter uppe i trädet ((båda händerna i rörelse uppåt))**  
*film photograph when I sit up in the tree ((moves both hands upwards))*
- Jonas **underifrån**  
*from beneath*
- Isak **ja underifrån alltså sh ((händer som håller kamera riktar**  
*yeah from beneath like sh ((holds hands as if holding a camera pointing*  
**uppåt)) fotar vi sen går vi ner klättrar jag ner å så har jag**  
*upwards))we take a photo then we'll go down I climb down and then when I have*  
**landat på ((rörelse så att höger hand landar på vänster arm)) jag har**  
*landed on ((moves his hand so that the right hand lands on his left arm)) I have*  
**landat på motståndaren ((håller kvar händerna och skakar dom när han**  
*landed on the opponent ((keeps his hands like before and shakes them as he*  
**säger på igen)) å så fotar vi där (.) å så puttär hon e((rör**  
*repeats on)) and then we take a photo there (.) and then she pushes e ((moves*  
**båda händer från sig som om puttär något)) som blir påhoppad**

<sup>21</sup> My part as an active participant is further discussed in chapter 4.1.

<sup>22</sup> In appendix 1 there is a key to the transcript notation that has been used. All excerpts have been translated and will here be shown both in the original Swedish and the English translation. Lingual nuances are sometimes difficult to translate and certain idiomatic phrases may therefore have been lost in translation.

*both hands away from himself as if pushing someone)) who gets attacked (rör händer mot sig och sen från sig som om ger någon en knuff) puttar av vampyren å så blir det värsta fighten (.) så bara push)) pushes of the vampire and then there's a real fight (.) and then just like what he fuck (.) så skriker hon bara shhh (.) ögon å sånt lyser (.) å what the fuck (.) she just screams shhhh (.) the eyes and things glow (.) and the tänderna bara shh ((visar med fingrarna på ögon och vampyrtänder när teeth just shhh ((points to eyes and makes vampire teeth with his fingers as han säger det)) riktigt riktigt fult (.) å så går det så blir det lite fight mellan he says it)) really really ugly (.) and then it becomes then there is a fight between dom (.) å så kommer det kommer det en till han han eh ((knäpper med them (.) and then arrive another arrives another one arrives he he eh ((snaps his fingrarna)) vad hette han Göran Jonas Göran så han in så blir det fingers)) what's his name he Göran Jonas Göran then he arrives then it becomes dom två så drar dom unnan hon (.) å så tejpar dom fast hon i en stol those two and then they pull she away (.) and then they tie she with tape to a chair*

Jonas **henne tror jag ((ler))**  
*her I think ((smiles))*

Isak **eller nej dom binder fast henne i ett träd åså bara å vad fan e du vad för nåt or no they tie her to a tree and then just what the hell are you and va fan e du för nånting men hon eh hon sliter sig ändå hon sliter sig från what the hell are you but she eh she gets off anyway she tears herself away from repen ((drar till sig höger arm som om slitit sig loss)) the rope ((pulls his right arm towards himself as if he has torn himself away)) åså bara tjum ((snabb rörelse med höger hand uppåt)) klättrar hon upp i and then just tjum ((moves his right arm quickly upwards)) she climbs up trädet och sh hoppar hon undan ((rör arm uppåt framåt)) hade inte det the tree and sh she jumps away ((moves arm upwards and forwards)) hadn't that vatt riktigt fett (.) sluta zooma mannen been really cool (.) stop zooming man**

During this extract Jonas is filming Isak with the video-camera which was supposed to film the computer screen. He is zooming in on Isak's hands and movements as he tells the story. Isak is hence not only telling the story to Jonas but also performing in front of the camera and thereby enacting the story as he tells it. He may therefore frame his actions as "telling a story" and/or "performing a story". In the telling of the story Isak makes use of gestures to accentuate his words and sometimes he uses sounds rather than words to further accompany his gestures. The sound "tjum" is, for example, used together with a quick hand movement upwards which is then followed by the words "she climbs up the tree". Gestures are, in part, organised with reference to the talk in which they are produced and as such they become visible displays of meaning as suggested by Goodwin (2000). The word up, and the upward movement of the arm could be seen as a type of iconic gesture as the gesture depicts a spatial element and is linked to the lexical component which it regularly occurs in connection to. As Schegloff (1984: 275-279) points out, and which is the case here, these gestures occur in a

regular order where the movement precedes the lexical component. Since the movement precedes their lexical affiliate, it does not achieve its affiliation by means of co-occurrence. Instead Schegloff suggests that the lexical item is “in play” as early as the onset of the gesture is constructed. By the use of his hand Isak then presupposes the word “up” and by his fast movements and the sound he makes, he tries to embody the speed and the sound of the movement he is talking about.

In their interaction Isak and Jonas seldom correct each other’s language use, but in this excerpt Jonas makes a remark in the middle of Isak’s telling of the story, concerning Isak’s use of pronouns. These students are from southern Sweden, where it is a common dialectal feature to use “she” (hon) instead of “her” (henne). That Jonas remarks on this could be because he wants to imply that Isak has a broader southern accent than he himself has. He could also be concerned with using the correct grammatical form in their story. Isak does not appear to take much notice of Jonas’s remark. However, he does, in the next sentence, use the pronoun “her” (henne) instead of “she” (hon), thus correcting himself and following Jonas advice on which pronoun to use. Making this kind of self-repair is, according to Schlegoff et al. (1977), common and is seen as a preference, especially when a correction is initiated by another, which means that a speaker regularly corrects his or her own mistakes.

### ***6.1.2. Making a fight scene***

Early on in lesson one Isak states that they are going to make a fight scene. As a fight scene generally consists of movements, they are both talking about using moving images in their film. Isak has a storyboard in front of him during the first lesson. On the storyboard he can draw the images they want to show and write what they want to say while showing the images. Isak uses the storyboard for drawing rather than writing, however, but he does write down the beginning of the story which he uses when they record their story (see excerpt 7). The pupils seem to have a shared understanding of what they are doing and hence frame the activity in which they take part as “making a film with moving images”. While speaking about the text and telling their story their speech is accompanied by gestures and sounds which enhance the understanding of the text as a fight scene. When they find out that they are supposed to use still images in their story, they do not know how to continue with the scene they have chosen. Their framing of what they



are doing needs to be adjusted since they cannot use moving images. The teacher/researcher points at the storyboard where Isak mainly has been drawing and tells them that they can draw images and use them in their story. This helps them to re-frame the activity, so that they can move forward in their work. Since making digital stories in school is new to them they are unsure of what they can and cannot do. They have been told they cannot use moving images, the teacher/researcher now suggests something they can do and hence clarifies the rules which applies to making digital stories in an educational setting.

**Excerpt 2**, Lesson 1, app 31 min

((Throughout the excerpt, the music they have chosen to use plays in the background.))

- Isak **men nu får hon nu e hon eh Elli svag och xxx xx hon lyckas få bort hon och**  
*But now she gets now eh she eh Elli weak and xxx she manages to get her off and*  
**sen kommer vad heter det åså binder dom henne (.) hon sliter sig**  
*then what 's it called arrives and then they tie her (.) she gets loose*  
 (.) **sticker (.) xx xxx**  
*(.) runs away (.) xx xxx*
- Jonas **e det slut sen**  
*Is it finished then*
- Isak **amen det e inte slutscenen alltså vi kan ju inte bara döda den**  
*but it is not the end scene I mean we can't just kill it*
- T/R **man kan också rita och skanna in sen bilderna ((rör vid ett av paprena**  
*you could also draw and then scan your images ((touches one of the papers in*  
**framför Isak))**  
*front of Isak))*
- Isak **kan man?**  
*you can*
- Jonas **ja kan man inte ha ett snabbt bildspel då (.) alltså precis som att man drar**  
*yes can't you have a fast image show then (.) I mean just like when you flick*  
**du vet så ((håller höger handen som om han snabbt bläddrar igenom**  
*through you know like ((holds his right hand as if he is quickly flicking through*  
**papper)) det har du säkert gjort**  
*papers))you've probably done that*
- T/R **ja då får man göra väldigt många det är svårt ni får men det e**  
*yes then you have to make a lot it is difficult you can but it is*  
 - **((T/R går därifrån))**  
*((T/R leaves))*
- Jonas **det e det att vi kan rita i Paint (.) det behöver ju inte va nåt massivt**  
*it's like we could draw in Paint (.) it doesn't have to be anything massive*  
**((jonglerar med hörlurar i vänster handen)) men vi ritat i paint**  
*((juggles with earphones in his left hand)) but we draw in Paint*  
**streckgubbar så hoppar dom ner från ett träd och sen så slår hon tillbaka**  
*stick figures and then they jump down from a tree and then she hits back*
- Isak **ja**  
*yeah*
- Jonas **alltså man kan ju göra en bild i sekunden va fan((rör knuten höger**  
*I mean you could make like one image per second what the hell ((moves his right*  
**näve framåt, Isak knyter också höger hand gör en hastig kort rörelse mot**  
*fist forward, Isak also makes a fist and moves his left hand quickly towards*  
**sig))**  
*himself))*

- Isak **dt,dt,dt,dt ((rör sin knutna hand ryckigt neråt ))**  
*dt, dt,dt,dt ((moves his fist in short jerking movements downwards))*
- Jonas **eh inte så många va fan ((båda rör knutna nävar framåt samtidigt,**  
*eh not that many what the hell ((both move their fists forwards at the same time*  
**drar tillbaka dom))**  
*and then pulls them back))*
- Isak **men ja du menar alltså man drar dit ((pekfinger pekar framåt)) om man**  
*but yeah you mean like you move that way ((points his finger forwards)) if you*  
**börjar med ingen arm ((tar ner hand under bordet)) så bara sht**  
*start with no arm ((puts his arm down under the table)) and then just scht*  
**((slår ut med knuten näve)) helt plötsligt bara sht ((drar tillbaka arm och**  
*((strikes his fist outward)) and then suddenly just scht ((pulls back his fist*  
**hand under bordet))**  
*under the table))*
- Jonas **å sen så ((har knuten näve vid axel)) en så ((rör näve**  
*and then like this((holds his fist by his shoulder)) one like this ((moves fist*  
**framåt)) en så ((drar tillbaka näve)) en för varje sån stopp ((gör**  
*forward)one like this ((pulls fist back)) one for each stop like that ((makes*  
**citationstecken med fingrar när han säger stopp, vänder sig mot dator))**  
*quotation marks with his fingers when he says stop, turns to computer))*
- Isak **ja det hade vatt fett**  
*yeah that would be cool*

When they decide to make images by drawing on existing photos they initially appear to want to produce a kind of animation where many images are shown in quick succession so that the images appear to be moving. Thus they initially see the drawing on images as a way to achieve a moving image while using still images.

Even though their idea to draw stems from the suggestion they do not draw images and scan them as the suggestion was. Instead they work in the computer program Microsoft Paint and draw figures on photos which they take from the Internet. In altering the suggestion they decide to make use of a program which has not been suggested and by using their knowledge of this program they also show that they will use resources, even though they are not the resources which have been presented in their assignment or in the instructions on how to work. Where they have achieved their skills is not clear but in using them in this situation they show that they are able to use the mediational tool available to them, to accomplish their task and to help them adjust the interpretation of the situation they are in. They also make use of skills acquired in other contexts and hence display their capability of using these skills in different situations.

As previously, their telling of the story is accompanied by gestures and sounds to enhance the notion of a fight scene. Towards the end of the excerpt when they move their fists forwards and backwards they are visualising to themselves the images they want to draw. By making these gestures they negotiate which images, and how many, to draw.

Isak initially depicts them doing a series of images by the downward movement of his fist, but Jonas remarks that they would have to make too many images. This shows that they are thinking of the images they are going to draw as being part of an animation where the rapid showing of several still images will make the figures seem like they are moving.

In lesson two they build on the work done in lesson one and their decision to draw figures on images. Jonas, however, talks about the need for them to have a story. Isak replies that he will take care of the story and then starts telling it to Jonas.

**Excerpt 3**, Lesson 2, app. 16 min

- Jonas **ja men va ska vi eh hur ska vi göra (1) vi behöver ett manus**  
*yes but what should we eh how should we do it (1) we need a manuscript*  
**manus ((tillgjord röst när han upprepar ordet, vänder sig mot Isak))**  
*manuscript ((disguises his voice as he repeats the word, turns to Isak))*
- Isak **men det fixar vi ju sen**  
*but we'll fix that later of course*
- Jonas **vet vet vi vad vi ska göra ens**  
*do do we even know what we are going to do*
- Isak **vi ska köra fighten från trädet ((rör handen uppåt, håller**  
*we are going to do the fight from the tree ((moves hand upwards, holds his*  
**kupad hand med fingrar utsträckta)) hoppar ner och så det blir**  
*cupped hand with his fingers outstretched)) jump down and then there is a*  
**fight med streckgubbar (.) do you follow me mate (1) hon sitter och väntar**  
*fight with the stick figures (.) do you follow me mate (1) she sits and waits*  
**(.) hoppar ner på virginia (.) Virginia fightar baks tillbaks (.) kommer en till**  
*(.) jumps down on Virginia (.) Virginia fights ba back (.) another one arrives*  
**(.) dom slåss riktigt**  
*(.) they really fight*

As in lesson one, they are telling the story to each other rather than writing it down, and every time they tell the story it changes and evolves. Isak is usually the one telling the story and could be seen as enacting the position of the more competent storyteller and thereby taking the main responsibility for the creation of this mode. By retelling the story Isak reassures Jonas that he, as the more competent storyteller, will take care of this. Similarly, Isak lets Jonas do the drawing in Microsoft Paint and thereby shows that he trusts Jonas's abilities in creating this mode. Collaborative writing can, according to Storch (2005), be characterised by different degrees of cooperation or collaboration. If students write a text collaboratively, they are involved in a joint writing process where they negotiate their writing together. If they write a text cooperatively, they then lace individually written sections of text together. I consider what Isak and Jonas are doing to be something in-between. As their text consists of different modes they take the main responsibility for the creation of a certain mode within

their text. However, they both take part in the creation of these modes so that what Isak says is negotiated with Jonas just as the drawings Jonas makes are negotiated with Isak. Since the different modes are, to a large extent, created simultaneously they also affect each other and are negotiated in relation to each other.

Later on in lesson two they talk to the teacher/researcher about their story and question the possibility of adding dialogue to a fight scene. Making a fight scene seems to suggest to them that a dialog is out of the question but in their understanding of what a manuscript is, a dialogue is needed. When they find out that a dialogue does not have to be included in their story, this appears to solve their problem.

**Excerpt 4**, Lesson 2, app. 27 min

((throughout the excerpt they have the image in which they are drawing the stick figures on the computer screen))

T/R **men ni vet att ni kan skriva här om ni så att ni liksom så att ni får nån**  
*but you know that you can write here if you so that somehow you get some*  
**story ((visar på storyboard))**  
*story ((shows the storyboard))*

Jonas **jo men liksom en dialog**  
*yeah but a dialogue you know*

Isak **det går inte**  
*It doesn't work*

Jonas **de vi får inte in någon dialog på denna**  
*they we can't have a dialogue on this*

Isak **det är en "fighting scen"**  
*it's a "fighting scene"*

T/R **men ni måste inte ha dialog men**  
*but you don't have to have a dialogue but*  
**[eh ni ska] ni ska berätta nåt**  
*[eh you have to] you have to tell something*

Jonas **[så man]**  
*[so yo]*

Isak **ja vi kan ju berätta [alltså man kan ju berätta romanen]**  
*yes we can tell something [like you can tell the novel of course]*

Jonas **[jaha men berätta kan vi ju göra]**  
*[oh but telling something we could do of course]*

**ja då kan vi va tredje person**  
*yes then we could be a third person*

T/R **ja det kan ni ju göra**  
*yes you could do that of course*

Isak **vi kan va en liten falk som bara ((rörelse med hand som fågel som flyger**  
*we could be a little hawk flying which just ((moves his hand like a bird flying*  
**förbi)) schha svävar förbi**  
*past))schha glides by*

T/R **ni kan berätta hur ni vill det var en gång eller vad ni vill**  
*you can tell it however you like once upon a time or whatever you like*

Jonas **eh det var en stig hur blir det då ((rynkar på näsan))**  
*eh once upon a time there was a path what will it be like then((frowns))*

Isak **det var en trästig**  
*once upon a time there was a wood path*

As in excerpt 2 the teacher/researcher assists them in re-framing their activity by clarifying that a dialogue does not have to be included, and by suggesting other ways of telling a story and confirming their suggestion to use a narrator. When the teacher/researcher says that they could use “once upon a time” and thereby frame the story as a fairy-tale, they jokingly attempt this framing but then go back to the framing of the story as a fight scene. The students demonstrate that they realise stories can be told in different ways, but as they are not sure of what kind of story they are expected to tell in this particular situation, they seek confirmation of what their multimodal story can and cannot contain.

In the beginning of the excerpt the teacher/researcher points out to Isak and Jonas that they can write their text on a storyboard in order to “get” a story. Here, the teacher/researcher is trying to make them write down their story and also suggests that they need to do so, otherwise they will not have a story. Even though they can, and are seen to work with other modes, this suggests that it is essential that they use the mode of writing when creating a story and it simultaneously marginalises the other modes (cf. Jewitt & Kress 2004, Kress 2009, Jewitt 2006). Though Isak’s and Jonas’s preferred modes appear to be speech and images, they are encouraged by the teacher/researcher to use the mode of writing. Hence, while mainly working with speech and images they also make use of the mode of writing.

### 6.1.3. Experts of different modes

In lessons two and three much of their time is spent making the images they are going to use by drawing on existing photos in the program Microsoft Paint. Even though it is Jonas who draws the images they are both very much involved in creating them. Isak closely watches what Jonas is doing and gives suggestions of what to do and what not to do.

**Excerpt 5**, Lesson 3, app. 20 min

- Isak **kan du få så den blonde ligger med huvet upp så hon tittar mot den gråhåriga så blir det me så blir det lättare ”fighting scen” när hon greyhaired that makes it wi then it is easier with the “fighting scene” when she ska putta bort henne (3)**  
is going to push her away (3)
- Jonas **men hur fan va det ((8, börjar rita)) det här blir ju så vackert alltså**  
but how the hell was it ((8, starts to draw)) this just becomes so beautiful really  
(.) **vi zoomar in den så får vi ((zoomar in ännu mer))**  
(.) we zoom in on that one so we’ll get ((zooms in even further))
- Isak **vänta xx xxx vi kan ju inte ha där vid stigen ju för bitchen kommer flygande så**  
wait xxxxx we can’t have it there by the path because the bitch comes flying and then

**blir det ju inputtat här lätt så ((pekar på skärm))så hon ligger där vid det trädet**  
 it easily gets pushed in here ((points at the screen)) then she lays there by the tree  
**så tar hon upp pinnen så bara hon bom ((skrattar) \*respekt\***  
 and she picks up the stick and she just boom ((laughs)) \*respect\*

Jonas **hon får ligga här då ((ändrar position på figur))**  
 she'll lay here then ((changes the position of the figure))  
 Isak **ja dra in kroppen i gräset ((Jonas börjar rita figuren))**  
 yes drag the body into the gras ((Jonas starts drawing the figure))

When they have finished drawing on the photos they tell their story again to the teacher/researcher, but this time the telling of their story is accompanied by the images they have created. Whereas Isak has previously been the one telling the story it is now Jonas, who has done the drawings, who is the principal storyteller. He mainly speaks of the actions depicted in the images so that his story acts as an explanation of the images and how they relate to the story. Jonas, as the more competent in drawing images, mainly relates to the modes of images but as he is talking about them he also engages in telling the story even though it is Isak who is considered to be the more competent storyteller.

That the modes influence each other is seen in that the story has changed so that what they say is also shown in the images. A stick, for example, used in the fight has been added and the third person, who would come and help the one attacked, is no longer part of the story.

**Excerpt 6**, Lesson 3, app. 25 min

Jonas **först så står hon där (. ) hon kommer gåendes (. )**  
*first she stands there (. ) she comes walking (. )*  
 T/R **um**  
*um*  
 Isak **fulingen där ((pekar på skärm))**  
*the ugly one there ((points at screen))*  
 Jonas **hon står där ((pekar på skärm, klickar till ny bild))**  
*she stands there ((points at screen, clicks to get new image))*  
 T/R **ja**  
*Yes*  
 Jonas **åså kommer hon längre fram**  
*then she moves further ahead*  
 T/R **um**  
*um*  
 Jonas **åså blir hon på hoppad**  
*and then she 's attacked*  
 T/R **um ((Jonas klickar fram ny bild) um**  
*um ((Jonas clicks to get new image)) um*  
 Isak **slår till**  
*hits*  
 Jonas **å så slår hon tillbaka**  
*and then she hits back*  
 Isak **pinne ((mumlar med handen för munnen))**  
*stick ((mumbles with his hand over his mouth))*  
 Jonas **man ser det mer där**

	<i>you see it better there</i>
T/R	<b>ja ja</b> <i>yes yes</i>
Jonas	<b>sen när bilden blir större ((zoomar in på gubbarna i bilden))</b> <i>later when the image is bigger ((zooms in on the stick figures in the picture))</i>
T/R	<b>ni ska zooma in det sen då ja</b> <i>you are going to zoom that in later then yes</i>
Jonas	<b>ja så slår hon tillbaka ((klickar fram ny bild))</b> <i>yes then she strikes back ((clicks to get new image))</i>
T/R	<b>ja</b> <i>yes</i>
Jonas	<b>sen så sticker hon pinnen i henne</b> <i>then she stabs her with the stick</i>
T/R	<b>ok ((Jonas klickar fram ny bild))</b> <i>ok ((Jonas clicks to get new image))</i>
Isak	<b>så går hon</b> <i>then she leaves</i>
Jonas	<b>sen så försvinner hon ((klickar fram till första bilden)) [så eh::]</b> <i>then she disappears ((clicks to get the first image)) [so eh::]</i>
T/R	<b>[ok] och sen är det klart</b> <i>[ok] and then it's finished</i>
Isak	<b>sen är det shhh</b> <i>then it's shhh</i>

Isak and Jonas are telling, and showing, their story to the teacher/researcher who mainly confirms their statements. It seems like this time, the main reason why they show the pictures and tell the story, is to exhibit what they have done and to get approval. Lilja & Lindström (2002:53) writes that, in a school context, a task commonly has “a right answer” and what students do is usually done in relation to the teacher. Because of this, even when assignments are more open-ended students tend to seek the approval of the teacher since that is how they have learned to act within the school context (ibid). Since making multimodal text in a school context is new to them, getting approval of the teacher may be a way for them to assure themselves that they have done what is expected of them. Taking part in a new activity means that the rules for this activity are not yet established, and confirmation and adjustments to which rules apply is hence necessary to a greater extent than when engaging in an established activity within the school context.

When they are showing their images they simultaneously tell the story. This suggests that the mode of image needs to be assisted by language, as in speech. This in turn confirms the tendency to see language as central to meaning-making and to regarding other modes as marginal (cf. Jewitt & Kress 2004, Kress 2009, Jewitt 2006). Since the established practice of making a text in a classroom relies on typographical texts, it is not surprising that the students, in telling their

story, make use of language, as in speech, rather than letting the images speak for themselves.

#### 6.1.4. Assembling the story

Later on in lesson three, which is a double lesson, Isak and Jonas record their soundtrack by telling their story to the images. Isak has during the previous lessons written down the start of the story in a storyboard, but he appears to be improvising when telling the story. He wants to see the pictures while he records his voice in order to know what to say. It is hence the images that guide his storytelling rather than a written script. In the following excerpt Isak does not know how to continue the story so together they agree on what Isak should say.

**Excerpt 7**, Lesson 3, app. 32 min

- Isak **Helene är på väg hem från en tebjudning hon går ensam på stigen (.) när Helene is on her way home from a tea party she walks alone on a path (.) when hon plötsligt blir attackerad av något litet djur (.) djuret hoppar på she suddenly is attacked by some small animal (.) the animal attacks henne och slår ner henne ((vänder papper)) och försöker även bita henne her and beats her to the ground ((turns over paper)) and tries to bite her i halsen (.) Helene får bort djuret med en pinne ((tittar på datorn, throat (.) Helene gets the animal off her with a stick ((looks at the computer, lägger ner pappret)) hon slår till den i huvet ((vevar med handen för att puts the paper down)) she hits it in the head ((waves his hand so that Jonas ska trycka fram nästa bild, han gör det)) sen va fan ska jag sen säg Jonas will show the next image, he does that)) then what the hell should I say ((skratt)) amen vad fan ska jag säg till det ((pekar mot dator)) then ((laughter)) but I mean what the hell should I say to that ((points at the computer))**
- Jonas **men bara fortsätt but just go on**
- Isak **hon sticker pinnen i hjärtat nej i magen she stabs the stick in the heart no in the stomach**
- Jonas **nej hon lyckas brotta ner henne å eh no she manages to wrestle her down and eh**
- Isak **hon lyckas brotta ner henne å sticker sen pinnen i magen på djuret she manages to wrestle her down and stabs the stick in the animal's stomach eh kör att hon blir (.) djuret blir medvetslöst ((1, tittar på Isak)) eh do that she becomes (.) the animal becomes unconscious((1, looks at Isak))**
- Isak **djuret blir medvetslöst av att av slaget i huvet i huvudet ska jag the animal becomes unconscious by the blow to the head to the head should I säga det på svenska ((skratt)) djuret blir medvetslös av slaget i say it in Swedish ((laughter)) the animal becomes unconscious by the blow to huvudet (.) som avslutning sticker Helene pinnen i magen på djuret the head (.) to finish it off Helene stabs the stick in the stomach of the animal och går sedan därifrån ((Jonas trycker på stopp på datorn)) ska and then walks away from there ((Jonas pushes stop on the computer)) should vi spela upp allt we replay all of it**



Jonas **fy fan vad bra det va ((skratt)) a du ja men du är som gjord för detta**  
*damn that was so good ((laughter)) eyh you yeah you are like made to do this*

When they are now telling the story in order to create their soundtrack they start to negotiate the exact wording. Whereas Jonas in the previous excerpt told the story by describing what happened in the images, Isak is acting as the more competent in telling stories and tries to create a story rather than to relate a sequence of events depicted in the images. Even though Isak is considered to be the more competent in telling the story, he is assisted by Jonas who suggests how to improve the story. Although they divide what to do so that Jonas draws the pictures and Isak invents their spoken story, they are still very much involved in each other's work and give each other feedback both by suggesting improvements and by giving praise to the work they have done.

As well as constructing the story while they record it they also negotiate which words to use as in the following excerpt. They are speaking about how to manipulate the images by zooming in on certain parts at a certain moment. The different modes of the story are continually, and in unison, evolving and changing.

**Excerpt 8**, Lesson 3, app. 38 min

- Isak **Helene**  
*Helene*
- Jonas **ja först så kommer musiken till denna ((Isak sings du du du)) sen så (.**  
*yes first the music to this ((Isak sings du, du,du)) and then (.*
- Helene är på väg hem från tejudningen så kommer det upp text där**  
*Helene is on her way home from a tea party then the text comes up there*
- dyssh ((mot skärm)) helene vrmmmm ja**  
*dyssh ((towards the screen)) helene vrmmmm yes*
- Isak **Helene är på väg hem**  
*Helene is on her way home*
- Jonas **ja**  
*yes*
- Isak **Helene är på väg hem från en tejudning med sina vänner hon går**  
*Helene is on her way home from a tea party with her friends she walks*
- Jonas **ehh men hon ser inte (.**  
*eh but she does not see(.*
- Isak **hon går ensam på stigen ((tittar på Jonas))**  
*she walks alone on the path ((looks at Jonas))*
- Jonas **men hon ser inte det som skymtar i ehh**  
*but she does not see what glimpses in eh*
- Isak **ska jag säga skymtar helt seriöst ((skratt))**  
*should I say glimpse seriously ((laughter))*
- Jonas **hon ser inte det som**  
*she does not see what*
- Isak **hon hon eh märker [inte av]**  
*she she eh does [not notice]*
- Jonas **[så zoom]ar vi in på den bara bjuu ((rör hand mot skärm))**  
*[and we zoom]then in on that bjuu((moves hand towards screen))*
- Isak **ja kan vi göra det helt seriöst**

- yes could we seriously do that
- Jonas **ja jag tror det**  
yes I think so
- Isak **fan vad fett å bara schhhehh ((handen svävar runt, drar sen hastigt tillbaka den)) blir det xx xxx Helene är på väg hem från en tejudning (.)**  
*pulls it back)) it's like xx xxx Helene is on her way home from a tea party (.)*
- Jonas **hon går ensam på stigen (.)** **hon anar inte faran som lurar**  
*she walks alone on the path (.)* *she does not suspect the danger which lurks*
- Isak **ja ta det ((skrattar, Jonas pekar mot Isak)) ta det ta det**  
*Yes that's it ((laughs and points at Isak)) that's it that's it*
- Isak **hon anar inte faran som lurar bakom nästa hörn (.)** **när hon**  
*she does not suspect the danger lurking around the next corner (.)* *when she*
- Jonas **vilket jävla hörn ((skratt))**  
*which bloody corner ((laughter))*
- Isak **där är en pinne där va fan ((pekar mot skärm))**  
*there's a stick there what the hell*
- Jonas **nä nästa sväng**  
*ne next curve*
- Isak **bakom nästa sväng bakom mmmn man kan inte säga sväng bakom nästa**  
*behind the next curve behind mmmn you can't say curve behind the next*
- krök**  
*bend*

At the start of the excerpt, Jonas is referring to the music as well as the writing which they are going to use in the preface to their film. By interrupting Isak's telling of the story, he seems to want to set the scene by announcing what will occur in their film before Isak's voice will be heard. As they have not yet started to put together their film, Jonas is referring to something which they will create once they are finished with recording the soundtrack. In making this remark, he shows that although their main concern at the moment is to record a soundtrack which fits with the images they have created, he is at the same time planning how they will put together all the modes in order to make the final product, the film.

Comparing their telling of the story here to how they told the story in excerpts 1 and 2, it is possible to notice a difference in the language they use. This difference reflects the distinction made by Barnes & Todd (1995), between talk to explore new ideas, and talk to present ideas in a public manner. When they, in the earlier excerpts, tried out ideas they used speech which accompanied what they did at that moment. When they decide on what to say in their final multimodal, and hence are getting close to presenting their text in a public manner, they reflect on what they have said earlier and thereby produce more formal language. Gibbons (1998) suggests that the use of modern technology blurs the distinctive characteristics of spoken and written language, and suggests referring to texts as more spoken-like or more written-like. As the

students are here recording their voices for the soundtrack of their film, the text they produce may be influenced both by spoken and written language. The students' earlier speech was informal and familiar but when they are recording their story they tell it in a more formal fashion, thereby showing their understanding of the difference between formal and informal language and their knowledge of when to use which.

Another difference in their telling of the story in the beginning of creating the multimodal story and towards the end, is that they, in the beginning, used gestures when they spoke so that they enacted their story both in spoken words, sounds and movements. When they are telling the story to the images, these have replaced the sounds and movements so that the spoken word together with the images are sufficient for telling the story.

The following excerpt is taken from the start of the last lesson when the students are just starting to mix their music with their soundtrack into one sound file. In this excerpt the teacher/researcher is asking the students how they are able to remix several audio files into one.

**Excerpt 9**, Lesson 4 Start of lesson

- Jonas **jag kan nog kopiera denna klipp ut** ((skärmen på datorn visar  
*I think I can copy this one cut it out ((screen on computer shows*  
**ljudprogram där tre olika filer syns)**  
*audio program and three different files))*)
- T/R **hur mixar du ihop dom tre då eller dom mixar ihop sig själv eh**  
*how do you mix those three then or will they mix themselves eh*
- Jonas **dom här**  
*these ones*
- T/R **spelas samtidigt liksom**  
*be played simultaneously somehow*
- Jonas **ja ja**  
*yes yes*
- T/R **ok**  
*ok*
- Jonas **nej men man kan trycka så tyst så**  
*no but you can push like that quiet like that*
- T/R **ja ja**  
*yes yes*
- Jonas **e jag har tryckt tyst på den**  
*eh I have pushed so that that one is quiet*
- T/R **ja**  
*yes*
- Jonas **så kan jag ta bort den ene**  
*then I can remove one of them*
- T/R **aha så gör du det så istället så slipper du en till**  
*aha so you do it like that instead and then you get rid of one*
- Jonas **så** **så markerar jag här uppe det jag vill ha**  
*like that* *then I mark here above what I want*  
**((markerar översta klippet)) sen så klipper jag ut åså klistrar jag in i den**  
*((marks the file on top)) then I cut out and then I copy it*  
**här nere**

- down here*
- T/R **ja ok så vad har ni där då både vad ni säger och musik eller**  
*yes ok so what have you got here then what you say and the music or*
- Jonas **nej inte än**  
*no not yet*
- T/R **nej inte än**  
*no not yet*
- Jonas **men sen så slänger vi in musik åså**  
*but later we will throw in the music as well*
- Isak **ska vi göra det?**  
*are we going to do that?*
- T/R **ni kan göra det i i programmet med bara att ni sparar som film och**  
*you are able to do it in the program as well if you just save it as a film and*  
**sen lägger till musik det får ni själv**  
*then you add the music that you yourselves*
- Jonas **nej men kolla**  
*no but look*
- T/R **men kan du det så**  
*but if you are able to do that then*
- Jonas **ja ja alltså det är**  
*yes yes I mean it is*
- Isak **Jonas min hightech stjärna**  
*Jonas my high tech star*

In the excerpt above, Jonas is the expert trying to explain to the teacher/researcher what he is doing. The teacher/researcher is at first listening and asking questions so as to understand what they are doing and how, but she then states that they could do the same thing in the program they are using to edit the film. Jonas, however, rejects this solution and the teacher/researcher concludes that if he is able to do it his way then he can do that. The rules of making a multimodal text within a school context are not set and neither the teacher/researcher nor the students are able, in advance, to exactly state what to do or how to do it. Instead they have to negotiate which rules apply and what the making of a multimodal text within a school context entails.

## 6.2. Creating multimodal texts within the context of schooling

In analysing the activity of making a multimodal text within the school context, it is important to stress the fact that this activity, in this context, is new to the students. They are used to creating texts in language education with pen and paper or writing the text in a word processing program on the computer, but in creating a multimodal text in the shape of a digital story, both the object of the activity and the mediating artifacts have been altered. The activity in which the students take part has, as an object, to create a multimodal text with the mediating artifact

of a computer and certain programs which enable them to create their multimodal text. While the students also use other mediating artifacts, the computer is vital in the production of the multimodal text. Altering the object and the mediating artifact in the activity system also affects the rules which govern the activity. The rules are not yet set, which means that the pupils negotiate with their teacher and/or their peers as to which rules apply in this activity.

Using computers outside of school is common to most teenagers, so it is likely that the pupils are accustomed to using the computer as a mediating artifact in their spare time. The components in the activity system would be different when the students use the computer outside of school, but the activities they partake in then may affect the activity they partake in when making multimodal texts. By crossing the boundaries of different domains, ideas and experiences from one activity system may hence be used in another.

Considering that many youngsters,<sup>23</sup> especially boys,<sup>24</sup> watch filmclips on sites such as YouTube, it is probable that Isak and Jonas are used to watching, and maybe also producing, home-made short films when they are on the Internet. Though familiar with multimodal texts outside of education, when asked to create one within this context the object of the activity could be considered to be unknown to the students. Their familiarity with short films, as those which they have watched on the Internet, is, however, likely to impact the way in which they envision the outcome of the school activity of producing a film. Isak and Jonas clearly envision their multimodal text as a fight scene with moving images at the start of the project. Both of these features originate in films and activities outside of school. In the process of creating their text, they alter their initial vision of what a multimodal text is so that it becomes a plausible object of a school activity. To make the multimodal text however, Isak and Jonas also make use of knowledge and skills which are not connected to the immediate school context when, for example, they use other computer programs than those suggested by their teacher.

The creation of a multimodal text requires them to cross boundaries between different contexts. To watch or create a digital story outside of

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<sup>23</sup> In a survey done by Medierådet (2008) 75% of the youngsters between 12-16 years of age stated that they watched film clips on You Tube or similar sites while they were on the Internet.

<sup>24</sup> According to the study done by Medierådet (2008) 76% of the boys and 64% of the girls, in the age group 9-16 years, watch film clips on sites such as You Tube when on the Internet.

school would be an informal activity done together with or for peers to watch. In school, the activity becomes more formal as it is governed by norms and social relationships within that community. The multimodal text thus becomes a boundary object which students recognise from activities outside of school, but which they are now being asked to create within the school context. As a boundary object, the multimodal text has different meanings in different social worlds, but because the structure of the object is common enough, it is, according to Star & Griesemer (1989:393), recognised. Like Star and Griesemer (*ibid*), I see boundary objects as bridges and they may hence be key factors in developing coherence between intersecting social worlds. When envisioning the object of their activity and in creating the actual text, the students draw on their experiences of multimodal texts outside of school. Creating multimodal texts within the context of schooling thus connects educational practices to practices outside of schooling.

As Engeström (2009) points out, it is possible to explore the contradictions and tensions between different activity systems when looking at interacting activity systems. As boundary objects are recognised in different activity systems, they may promote a horizontal expertise where boundaries are crossed in order to make use of information, ideas and tools in the different systems. The digital story as a boundary object enables the students in case two to connect different social worlds as well as overcoming constraints within the school setting. Since they are told to use still pictures rather than moving images, and speech rather than sounds in their multimodal text, they create their own images by drawing on existing images and their own soundtrack by mixing speech and music into one audio file. By doing this they keep within the borders set up by the context of schooling. However, by using their knowledge and computer skills using the laptop and its affordances, they manipulate the resources available to them in order to suit their needs and to come closer to their image of how to depict a fight scene. Just as their image of what the outcome of the activity would be, has had to adapt to the school context, they similarly attempt to adjust what the making of a multimodal text in a school context entails, by using the mediating artifact in a way which incorporates competence acquired in other contexts. The activity of creating a text has been altered, but the change also depends on the users of the tool, their skill in using the tool and the context in which the action takes place. The students have appropriated their mediational tool so that they can use it productively in the situated activity of creating a multimodal text within the context of schooling, but they also use the

tool in a way which goes beyond what they are asked to do within the school context. By boundary crossing they make use of their extensive knowledge in several contexts and practices.

### **6.3. Summary**

In this case, the students create their multimodal text by continually working with different mediational means and modes. The initial framing of what they are doing is “making a fight scene with moving images”. In framing their task accordingly, the students relate to the modes of images rather than writing. This is also noticeable in that they show little interest in writing down their story and only write down parts of it. Instead of writing, they make use of the mode of speech as they tell and retell their story to each other and to the teacher. Every time they tell their story it changes, and instead of finalising one mode and then moving on to another, the students let the modes influence each other as their story evolves. While they are drawing their images for instance, they adjust their story so that the images and the story suit each other. The way the modes in their interaction change and evolve in unison appears to be an important feature of their collaboration.

In their interaction they hardly negotiate language issues as such, however, they do alter their speech significantly during the process of creating their multimodal text. In the beginning of their interaction they use informal speech but when deciding on how to phrase their final story, they use language which is formal and more written-like. Their spoken language has thus changed from the context-embedded language of face-to-face interaction to a language which is closer to the written form. In doing this, they show an awareness of how to use spoken language for different purposes and in different situational contexts. The development of the language they use in their soundtrack becomes an integral part of the development of the story and is thus not negotiated separately but in unison with the progress of creating a multimodal text.

When collaborating to create their story, the students accept the main responsibility for different modes and acts as more competent in creating these modes. The different modes hence allow them to divide the work but at the same time they are involved in the creation of the different modes since they continually suggest how the story could be improved and give each other positive feedback on what they have created. To be able to work in this way, the students make use of

additional computer programs, thereby showing that they are familiar and confident in using their computer, and they use different resources in order to produce their own media.



## **7. Conclusion and discussion**

In the following section I will conclude by summarising the answers to my research questions. The summary will be followed by a discussion of the implications of the study and how the issues raised may be explored further.

### **7.1. How do the students position themselves in their interaction, in relation to each other and in relation to a wider context?**

When co-authoring the text, the students in the two case studies continually relate to each other and position themselves and each other in different ways. The social aspects of writing, which Heap (1989) argues need to be included in theories of writing, are evident as the writers orient to their co-authors and to other people in the classroom who, in turn, may positively or negatively affect the writing process. In their interaction, by positioning themselves in certain ways, they show how they identify themselves in the socio-cultural traditions of schooling and the situational context.

The students in the cases position themselves as more or less capable peers both in relation to each other and in relation to the context in which the activity is situated. In Vygotsky's (1978) theory on the zone of proximal development (ZPD), the assistance of others is crucial for the development within the ZPD. Mercer (1994b) sees the ZPD as attributed to an event as it is the product of a particular, situated pedagogical relationship. In so doing, you also avoid it becoming attributed to individual learners as "new tasks with new teachers may generate quite different "zones" for the same group of children" (ibid:103). The theory of ZPD presupposes an expert to guide the learner. It could, however, be put into question if there is always an expert who guides the other participants. The positions of novice and expert could instead be flexible so that it is possible for pupils to guide each other or at times to guide their teacher. Knowledge may also be gained whilst performing the task. This occurs in particular when the

task is new in that certain context, and hence does not yet have established rules as to how it should or could be performed.

In case two, the students position themselves as experts in regards to certain modes and by doing this they divide the work and take on the main responsibility for different aspects of their story. They do, however, create the different modes collaboratively, so the work they do as experts in a certain mode is still done in collaboration with their co-author. In so doing they maintain the sense of control and joint responsibility which, as shown by for example Storch (2005) and Onrubia & Engel (2009), may be lost if the participants do not engage in a joint writing process.

When creating their multimodal text, the students in case two make use of resources, such as different computer programs, which they were not expected to use. By using these additional resources the students may seek to position themselves as experts. In positioning themselves as experts, they may challenge the established roles within education and thus also position themselves in relation to the context in which the activity takes place. Since their expertise is likely to stem from activities outside of school, to acknowledge them as experts also recognises their out-of-school knowledge as relevant within the school context. Drawing on Engeström et al (1995), definition of boundary crossing as horizontal expertise where crossing boundaries between different domains is necessary in order to “find information and tools wherever they happen to be available” (ibid:332), the students, by making use of skills acquired in other settings, cross boundaries in order to achieve their assignment.

In case one, the students, when negotiating the content of their story, do not seem to position themselves as experts or novices, but rather they express different views on the subject and relate to each other’s viewpoints in order to create a collaborative text. They do so by discussing each other’s opinions and incorporating their different views in the text they finally create. As they focus on the task of creating a text, their different viewpoints on the subject of adoption are not dwelled upon and thus do not cause arguments, which may have made it difficult to co-author their collaborative text. The positions of capable peer, or expert, are instead mainly negotiated in relation to language-related episodes. The non-native speaker’s position as a knowledgeable peer was not acknowledged since her suggestions on language-related issues were ignored or silently accepted. To have first and second language students cooperate may seem like a way to scaffold language learning for the second language speaker but the interaction in case one

depicts quite the opposite. The native speaker does not position herself as an expert who scaffolds the learning of the non-native speaker. In this case, it is rather the non-native speaker who scaffolds the native speaker, although she is not recognised as doing such by her peer. According to Goffman (1990:25), any situation is likely to relate to several frameworks, but one framework may be principally relevant to answering the question of what is going on in a particular situation. The native speaker appears to relate to the overall framing of “doing a school assignment” and thus discussing language issues is not her main concern. Her position as a student and what this position usually entails within the context of schooling may not promote scaffolding between students. The position of a student, within an educational context, could partially be seen as fulfilling tasks whereas the teacher takes care of the teaching of the subject, in this case Swedish. To scaffold language learning may thus not seem to be part of what the position of a student entails in the educational context, and therefore the students do not mutually engage in scaffolding each other’s language learning. It may need to be articulated by the teacher that they, as students, actively may engage in scaffolding each other’s language as part of their collaboration.

In relating to each other, the students mainly appear to negotiate the positions of more or less capable peer but in relating to the context of schooling, their position as pupils are contested in different ways. The students negotiate different positions within the educational context. Some positions contest what being a student involves but simultaneously it also questions what being a teacher entails and the relation between the two. Whereas the students in case two contested their positions as students by enacting the position of expert when applying different computer programs, the native speaker in case one resists negotiating language issues as she is focused on fulfilling a school assignment. On the other hand, to attend to the fulfilling of the school assignment appears to be a way for the students in case one to overcome their different viewpoints when discussing the content of their story. Instead of dwelling upon their differences they focus on the school task of co-authoring a text where they incorporate their different views.

***7.1.1. Do the positions of native and non-native speaker affect their interaction and if so, in what respect and to what extent?***

In case one, the positions of native and non-native speaker affect the interaction between the students when they are negotiating language-related issues, as there then appears to be a discrepancy between the positions the students would like to be able to engage, and the positions assigned to them based on their language background. The non-native speaker's suggestions in language-related issues and her correction of the native speaker's language use are largely ignored. She is hence not able to enact the position of a more capable peer in language-related episodes. Though the native speaker at times appears to doubt her expertise in language issues, she still tries to position herself as the expert native speaker. Several studies have shown that multilingual students often are seen as in need of help in Swedish schools, particularly when it comes to the Swedish language (cf Gruber 2007, Lindberg 2009, Runfors 2003). The native speaker's attempt to position herself as more knowledgeable in negotiations about language is therefore not surprising. That the students, as first and second language speakers, do not fully identify with positions they are expected to take puts a strain on their collaboration and the work they create.

The normative conditions in the educational context make it difficult for them to position themselves, as their notions of themselves do not fully comply with the positions assigned to them in the school context. The non-native speaker resists the position assigned to her based on her language background. In attempting to position herself as a more knowledgeable peer in relation to the co-author and native speaker she opposes her position as a non-native speaker who lacks abilities in the Swedish language. Doran (2004) and James & Well (2004) write about a resistance to comply with identities imposed on individuals by hegemonic discourses of the mainstream, which leads to the construction of a third space in which it is possible to negotiate identities distinct from the presupposed category. It is possible that the non-native speaker, in resisting the identity imposed on her, also tries to negotiate a third space in which she can combine being a second language speaker and a capable peer in language issues.

## **7.2. How does the story develop in the interaction between the students?**

The findings in this study indicate different ways in which students may undertake the task of creating texts consisting of different modes in language education. The interactions of the students reveal that they, when making their text, discuss the content of their text as well as the different modes that they use. How to phrase what they want to say, how to create or chose the images they want to show and whether their text should contain music and different effects such as written text on images, are all aspects of their text which the students relate to, negotiate and decide upon. The assemblance and the arrangement of the different ways of expression give raise to negotiations. In their interaction, the students show their linguistic skills as well as their skills in ICT.

In case one, the students are focusing on creating and writing down the story which they are later going to record as a soundtrack to their multimodal film. They negotiate what the story should be about, but also engage in language-related episodes where they negotiate how to phrase their collaborative text. That they are in the process of making a multimodal story does not seem to affect their interaction to any great extent. As writing typographical stories is a familiar activity within language education, it is not surprising that the students focus on this and only later consider the other modes which are then mainly used to accompany or illustrate the written, and later spoken, text. Their way of focusing on certain actions at certain points in the process of creating the multimodal text follows a pattern revealed in most of the interactions which I have filmed. Similarly to what Lantz-Andersson (2009) shows in her study, this indicates that although multimodal texts may offer new ways of working, the students may also proceed as they are used to. The computer was mainly used to find and copy images which were used to accompany the story. If students have learned from experience that ICT, within education, is used to find and copy information or images then their actions may relate to the habits connected to ICT in an educational setting as discussed by Almqvist (2005).

The students in case two deviate from the pattern found in the other groups as they tended to work with several modes simultaneously. What they were going to say as well as what their images were going to look like were negotiated continuously so that the different modes influenced each other. The development of the spoken language they use in their soundtrack became an integral part of their development of the story and

was thus not negotiated separately but together with other modes in the progress of creating a multimodal text. Similarly to the findings of Vigmo (2010), speech was important throughout the process of making the multimodal text and the students continually changed which mode was in focus. The students in case two did not use writing to any large extent, instead their spoken language developed by retelling the story and gradually exchanging the initial usage of informal language and gestures with more written-like language and the images used in the film.

Since creating multimodal texts in language education is an emerging practice it is still not embedded in its own rules and expectations of how it should or could be done. As such it may be compared to what Engeström & Sannino (2010) calls expansive learning, where the learners are “involved in constructing and implementing a radically new, wider and more complex object and concept of their activity” (Engeström & Sannino 2010:2). When people learn new forms of activity they simultaneously create and learn and in such learning processes there are no experts. In Vygotsky’s ZPD the teacher knows the advanced practices and thus has the task of teaching the students, but in expansive learning the ZPD is instead seen as a target unknown to everyone, as stated by Tuomi-Gröhn (2003). In an emerging practice the target is unknown, even though students, as well as teachers, may have a notion of what the outcome of the activity should or could be. Though creating a multimodal text within education is an emerging practice, it has emerged in a context where there is already an established practice of writing texts, mainly typographical texts with pen and paper or on a computer. I do not compare these practices as this study does not contain an analysis of the practice of writing typographical texts. However, there is a history within language education to write texts typographically which, implicitly or explicitly, will serve as a point of reference to the participants. The rules and traditions of this practice may influence and guide the participants when partaking in the emerging practice but the emerging practice, may also allow for other rules and traditions to emerge.

### ***7.2.1. How is the activity of creating texts in language education affected by the emerging practice of making multimodal texts?***

By examining what students do when creating a multimodal text, it is possible to explore how the students articulate themselves through

spoken and written language, as well as with other forms of expression. Working with a multitude of modes gives the students a choice of how to express the message of their story, but it also means that they have to relate the different means of expression to each other. As stated by Rasmussen (2005), integration of different resources seems to be important in environments where the amount of information increases due to the use of ICT. They can work with assembling the different modes in a number of ways but regardless of how they do it, the arrangement of the modes in relation to each other and the message of the story calls for reflection and negotiations.

The students in case two tended to work with several modes simultaneously so that the modes were developed together and hence affected each other. The students resisted writing down what they were going to say in their soundtrack but instead used the mode of speech to tell and retell their story as well as to develop and alter it during the process.

To be able to relate the analysed interactions to a wider context, activity theory and the concept of activity systems have been used. Here I will attempt to apply the activity system as described by Engeström (2009) to the context of schooling in general and to the activity of creating multimodal texts in particular.

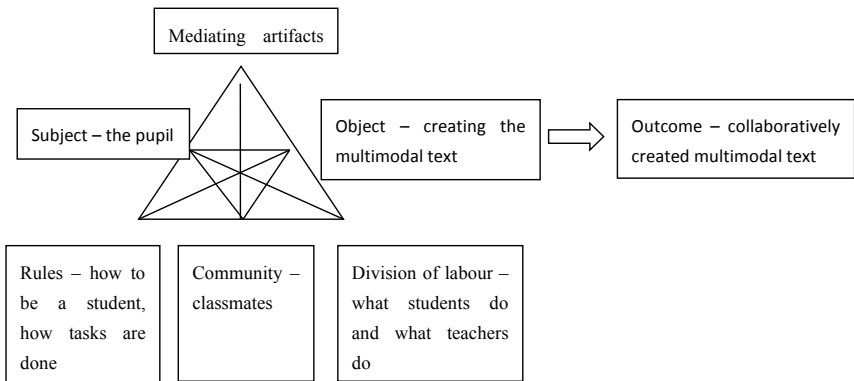


Figure 2 Activity system applied to the making of a multimodal text

Several components in the activity system have, in this study, been altered if one compares the co-authoring activity of creating a multimodal text with the often individual creation of a typographical text. The object and the outcome of the activity of creating a text have been altered from a typographical text to a multimodal text, or film. The mediational means have also been altered, or expanded, to include computers and the use of different programs and the Internet. That the mediational means shape actions is an important aspect in a socio-cultural perspective on learning, so much so that Wertsch (1991, 1998), claims that agents involved could be seen as “individual(s)-acting-with-mediational-means” rather than just “individual(s)”. The alteration of mediational means as well as the outcome of the activity could thus be seen as creating a new activity.

In the lower part of the triangle in the activity system are factors related to the context in which the activity takes place, which in this case, is the context of schooling. When a new or emerging practice is introduced, the rules and divisions of labour will have to be negotiated in order for the participants to establish what is, and is not applicable in the new practice. In an emerging practice, the rules of what to do and how to do it are still negotiated and may therefore be more open to influences from contexts outside of education. In case two, the students are negotiating what a multimodal text made in school could entail when, for example, they want to use moving images. They seek clarification as to which rules apply, but they also seek approval once they have started creating their text, to make sure that what they have done is what is expected of them.

Though the multimodal text may be new in a school context, it is likely to be familiar to the students in other contexts. Erstad & Silseth (2008:213-214) argue for digital storytelling as a way of bypassing divisions between formal and informal paths of learning, since it enables students to blend informal codes with more formal ones in their own learning processes. The students in case two are, in a similar fashion, connecting what they do in the classroom to activities outside of school in several ways. Their choice to make a fight scene relates to experiences of similar scenes which are more prominent in informal settings outside of school in, for example, films. The students also make use of skills connected to the mediational means of ICT when they use the tool in ways which exceed the expectations within the school setting. Being familiar with how to use the mediational means in one context thus facilitates the use in other contexts and reinforces the process of appropriating mediational means. The multimodal text then serves as a



boundary object, enabling extended learning across contexts for the students since the multimodal text as well as the mediational means used when creating it, facilitate the usage of abilities acquired outside of education in an educational setting.

### **7.3. Discussion**

To create multimodal texts, within the context of schooling, is still something of a novelty for many upper-secondary school pupils. Even though new technology is introduced in classrooms in many parts of the world there is not a significant amount of knowledge as to if, and in that case how, this may affect students' work at school. In this study I have, by describing and analysing particular situated practices where students create multimodal texts in language education, aimed at illuminating what this emerging practice may involve. Emerging practices are still finding their shape, and by studying them insights may be gained as to how they relate to the institutional settings in which they occur, and in what ways they may contribute to the development of these settings.

The use of technology in mother tongue education is in focus in this study but the technology is not used to solve problems, as in finding answers to questions, but to create texts. If one of the goals of language and mother tongue education is that pupils should be able to express themselves<sup>25</sup>, the notion of multimodality could be seen as a resource, since it becomes possible for students to express themselves through several modes. These modes include language, as speech or writing, but by also using other means of meaning-making the pupil's message could be enhanced. The creation of a multimodal text should not be seen as a threat to the typographical text, rather it may serve as a compliment and as an expansion of the meaning and creation of text within a school context. Given the multitude of media channels in which it is possible to create texts, it seems odd if language education largely ignores most of them and mainly focuses on one way of expression, the typographical text. Communication on the Internet, for example, is to a great extent done by using typographical texts, so consumers certainly need the skills of reading and writing. However, typographical texts are not the only

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<sup>25</sup> In the goals for Swedish as a subject at upper-secondary level it says that the students should want to and be able to express themselves in different situations both verbally and orally and that they should be able to use writing and speech as resources for thinking and learning (Skolverket 2011).

modes used in ICT, which in turn suggests that other modes should also be included in language education so that the students are able to actively involve themselves and express themselves in the modes available to them. Even though multimodality and meaning-making is something which concerns all school subjects, it hits the core of the teaching of language and may therefore be resisted. At the same time, it is equally important, if not more important, to the language subjects to embrace the expansion of literacy and see its potentials. An inclusion of multimodality may facilitate students' connection between the school-subject of language and their use of language and other modes in their "out-of-school world".

Whereas earlier media, such as television, are media which is consumed by viewers, ICT is a media with which one may engage in several ways. To be able to search and evaluate information when working with ICT, is, of course, important. But it is also important to know how to produce your own media in order to become an active participant. As pointed out by researchers such as Gee (2007, 2009), Jenkins (2006) and Livingstone (2004), to participate with ICT often encourages a kind of participation where actors share knowledge in order to learn from each other and where the more experienced scaffold the newcomers so that they are able to partake. Knowledge is then seen as something which is created together and by sharing it one's own as well as other participants' pool of knowledge will increase.

Comparing this kind of participation with the positions given to students in the speech exchange system called IRE (Initiate-Respond-Evaluate), where the students mainly respond to questions initiated by teachers, reveals considerable differences. When youngsters today, from an early age, engage in participatory cultures such as communities related to games or social communities on the Internet, to accept and adapt to a role within education, as a more passive receiver of preconceived knowledge is for many, difficult and not very appealing.

The gap between the different ways of participating, as I see it, therefore, needs to be narrowed in order for the educational system to appear relevant for youngsters. If writing by hand is something which one hardly ever do outside of school it may not seem to be particularly relevant in the future life. If, however, the hand-writing is done in combination with other ways of creating texts, ways which are used outside of school, it may seem more relevant as one then also may be able to see how one mode connects with another and how knowing how to express oneself in different ways may be of assistance in different contexts. As they are educating the future generation, it is important for

educational institutions to closely follow the development of different aspects of society so that youngsters who attend school today perceive that what they do at school will be of relevance in their adult life. If they do not see school as relevant to their future, the educational system as we know it may be put into question. Just as the industrial revolution paved the way for the formation of the educational systems which the present practice stems from, it may be that the technological developments in recent decades will pave the way for an altered system of education.

It might be argued that not all students have access to the technology needed or the skills needed to use it appropriately. I consider this to be one of the main reasons why the educational system needs to adopt an approach where all students are given the opportunity to appropriate the mediational means with which much communication today is done, so that it becomes a resource which they can use in different contexts and for various means. Adapting to a diversified student population as well as multiple ways of communicating are crucial issues for the educational system today. It may be that these different aspects in some ways intersect. The multitude of ways of communicating allows for interaction between people who, in many ways, are distant from each other. Just as you may connect with someone living far away from you, through communicating and sharing, for example, a common interest, it may be that multimodal representations could enable students who are close to each other geographically, but who do not usually interact, to discover that they have things in common. Film, whether on YouTube or in a cinema, is a mode of expression which most youngsters are familiar with and appreciate. Their familiarity with the media serves as a resource when they create their own films, and it may also serve as a common ground to which peers can relate. Watching films created by peers may therefore be seen as a way of connecting students within a classroom, but also of connecting the classroom to the world outside.

Advocating an increased use of ICT within education does not mean that I see technology as the answer to every question. The technology in itself is not important, but instead it is *how* technology is used which is of importance. To use ICT productively probably implies a restructuring of education to a considerable extent. Incorporating the communal ways of sharing and building knowledge inherent in many communities based on ICT is one way for the educational system to adopt and adapt to another way of practice. To make the knowledge pupils have gained outside of school relevant and appreciated within school is another way,

which also recognises knowledge as distributed and encourages horizontal expertise.

#### **7.4. Didactical issues**

Being set within the context of language education, this study relates to issues of what literacy pedagogy may involve in general and to the creation of multimodal texts and collaborative work in particular. As this study shows, these are complex issues to which there are no comprehensive solutions. I will, however, attempt to outline some dimensions which I consider to be of importance and which, by studying the situated practice of making multimodal texts during this research, I have reached an understanding about.

As shown by Olin-Sheller (2006), students regard it as important to be emotionally involved in texts and they consider multimodal texts to be good at creating this intimacy. To allow students to make multimodal texts as part of language education will, apart from giving them tools with which they may actively engage in a large range of text worlds, also relate to the text world in which Olin-Sheller suggests the students live in outside of the educational environment. If they are able to see the connection between the text worlds, the relevance of the school texts may be clarified. This in turn may lead to an increased motivation to read the texts they are supposed to in school. I consider working with multimodal texts as a way to connect to the students and make them motivated to read and create texts themselves. Being able to relate to an experience of writing texts which was connected to a familiar text world may then serve as a motivating introduction which may later pave the way for the reading and writing of texts more closely related to the text world of schooling.

Though work in pairs or small groups is widely used in language classrooms, getting students to create texts in pairs or small groups is still a fairly novel strategy according to Storch (2005). Seen from a socio-cultural view-point on learning, and in line with Vygotskys theories (1978) we learn when participating in social actions. To compose texts collaboratively, as is done in this study, has advantages as the co-authors actively participate in creating their collaborative text. Although there are occasions when individual students are restrained in the collaboration, the students to a large extent manage to make use of each other as they build on each other's suggestions and knowledge during the creation of the text. In working together the students can

reflect on each other's suggestions acting as an immediate audience, as suggested by Storch (2005) and Dale (1994, 1996). As Fisher (1994) argues, the students take on a shared perspective which means that the story they produce together will differ from individually produced stories. When producing texts together the students will have to address issues concerning the disposition of their text and they may also need to argue for their viewpoint in contested issues. As a teacher, you may point out revisions in order to improve a text, but when writing collaboratively a recursive revising process, which usually novice writers do not adopt when writing alone, is encouraged according to Dale (1996).

### **7.5. Suggestions for further research**

When I ventured into the world of educational science two and a half years ago I was ready to start collecting my data immediately. As I began to learn more about the theoretical, methodological, analytical and practical aspects of doing research I realised that there were more aspects to consider than what I initially thought. In hindsight, although I did not collect my data immediately, there are aspects of the study which I may have done differently if it had been done today. I would, for example, have preferred if the students in the different classes had been given the same assignments as this would have made comparisons between the multimodal texts the students made more relevant. I also would have filmed fewer groups of students and observed these same groups when they made several different multimodal texts. If I had done that, I may have been able to analyse whether their way of working changed as they grew accustomed to creating multimodal texts.

Analysing two case studies can only give a hint at what the practice of creating multimodal texts in the context of schooling may involve. Doing further analysis on a larger number of students may give other implications or strengthen the ones found in this study. Making multimodal texts can also be done in a number of ways, where digital storytelling is just one of them. Analysing the making of multimodal stories in other formats may also shed further light on the practice. As the practice conveyed here is an emerging practice, it would also be interesting to further investigate a more established practice where both pupils and teachers have experience in making multimodal texts to find out whether the practice changes and in that case how and why. The making of multimodal texts could also be incorporated in several

subjects, not only language education, and texts made in different subjects may enable different practices. Collaborations between language subjects and other subjects around the making of multimodal texts could also promote working with content-based language learning. It would then be interesting to investigate if, and how, different subjects may contribute to different aspects of the multimodal texts, and if bringing different subjects together promotes the relationship between content and form.

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## Appendix 1 Transcript Notation

The following annotation conventions are adapted from *G. Jefferson, Transcription Notation, in J. Atkinson and J. Heritage (eds), Structures of Social Interaction, New York: Cambridge University Press, 1984.*

[text]	Indicates the start and end points of overlapping speech.
(# of seconds)	A number in parentheses indicates the time, in seconds, of a pause in speech.
(.)	A brief pause, less than one second.
?	Indicates rising pitch or intonation.
ALL CAPS	Indicates shouted or increased volume speech.
:::	Indicates prolongation of a sound.
(( italic text ))	Annotation of non-verbal activity.
xx xxx xx	Speech which is unclear or in doubt in the transcript.
*	Indicates whisper, reduced volume, or quiet speech.