

Interactional resources used in dialogues between pupils with profound and multiple learning difficulties and staff in the special school

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ABSTRACT

Much of the research on school settings for pupils with profound and multiple learning difficulties (PMLD) has focused on the pupils special needs as learners and on what special skills teachers need to work effectively with the pupils (Ware, 2005¹; Nind, 2007²). In a Swedish context there has been some research from an interaction point of view on pupils with PMLD focusing the interaction with their parents (Wilder, 2008³), some research (Anderson, 2002⁴) with a focus on interaction between pupils and staff has been made in a training school context. In the work with my thesis the overall aim is to explore, describe and analyze the use of interactional resources in everyday life in the special school and to explore how the pedagogical praxis is constructed out of the use of the participants' interactional resources. The study also tries to explore what kind of learning- and socialization processes the special school setting offers the participants.

This paper tries to explore interactional resources used by staff (teachers and assistants) and pupils with PMLD in everyday life situations in special school classrooms with a focus on what resources is used when members of the staff or pupils are trying to initiate and maintain interaction with each other.

The study draws on a theoretical framework that is influenced by ethnomethodological work, where the participant's social actions and the participant's methodical ways of making sense in a social setting are in focus.

The design of the project is inspired by an ethnographic approach and is constructed as a classroom study. The empirical material is collected by participatory observations, by video recordings and by focus group sessions with the members of the staff. The data presented in this paper derive from video recordings that were made during spring 2009 in two training school classes and all together eight pupils (age 8-17 - two boys and six girls) and 10 members from the staff (two special teachers, music teacher, psychical education teacher and six assistants - all women) participated in the study. In this paper a small portion of the total video recordings (about 50 hours) is transcribed and analyzed. Detailed transcripts have been made out of the data from video recordings using conversation analytic notations considering both verbal and non verbal actions in the interaction between pupils and staff members. The analytic approach is inspired by Conversation Analysis (CA) and provides detailed analysis of the use of interactional resources used when the participants in the material initiates and tries to maintain interaction with each other.

The results in this study are supposed to be of relevance for the understanding of the pedagogical praxis in the special schools and by studying interaction between pupils and staff in the special schools this paper also intend to explore patterns in the interaction and bring new perspectives on teaching and interaction in the special school for pupils with profound and multiple learning difficulties.

¹ Ware, J. (2005). *Profound and multiple learning disabilities* in Lewis, A. & Norwich, B. (2005). *Special teaching for special children?*. Berkshire: Open University press.

² Nind, M & Thomas, G. (2007). *Reinstating the value of teachers' tacit knowledge for the benefit of learners: using 'Intensive Interaction'*. Journal of Research in Special Educational Needs Volume 5 Number 3 2005 pp. 97-100.

³ Wilder, J. (2008). *Proximal processes of children with profound multiple disabilities*. Stockholm: Stockholm University, Department of psychology

⁴ Anderson, L. (2002). *Interpersonell kommunikation: en studie av elever med hörselnedsättning i särskolan*. Diss. Lund : Univ., 2002

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1 Introduction and aim

Every day in Sweden during the semesters about 950 000 pupils goes to the compulsory school for pupils from the age of 6 to the age of 16. Of these 950 000 pupils about 4 000 pupils (2500 boys and 1500 girls) get their education in the training school (for pupils with severe and profound learning difficulties⁵) (Träningskola) which is a part of the special school for pupils with learning difficulties (Särskola). Since 1994 the special schools are governed by the same steering documents as the compulsory school. The special school for pupils with learning difficulties is divided into two forms, the compulsory special school (grundsär) in which the pupils are offered more or less the same subjects as in the compulsory school. The group of pupils who are assessed to not have the abilities to manage the teaching provided in the compulsory special school goes to the training school. There are no clear definitions made in the curriculum (Lpo 94) or in the school law (1985:1100) about which pupils have the right to go to the training school, but according to the Swedish board of education (2001) the training school is for the pupils who cannot participate in compulsory special school.

Some research has been conducted with focus on the special schools for pupils with learning difficulties. Much of the research on school settings for pupils with profound and multiple learning difficulties (PMLD) has focused on the pupils' special needs as learners and on the special skills required for teachers to work effectively with the pupils (Ware, 2005; Nind, 2007). For the last decade researchers also have tried to investigate which pedagogical approaches that effectively include children with learning difficulties in mainstream classrooms (Nind, M., Wearmouth, J. with Collins, J., Hall, K., Rix, J., and Sheehy, K., 2004)

⁵ The terminology used, "severe to profound learning difficulties", is adopted from terminology used in Great Britain. The format of this paper does not allow a deeper discussion on terminology, but I have chosen the term learning difficulties because of the idea of it as learning difficulties puts it in an educational context.

Research from an interactional point of view (Jackson, 1968; Mehan, 1979; Sahlström, 1999, 2008; Evaldsson, 2001) has shown that interaction in pedagogical settings plays an important role for the pupils learning, socialization and construction of identity. From the perspective of special school for pupils with learning difficulties we have some knowledge about pedagogical strategies used by teachers and their aims with the teaching (Berthén, 2007), but we do not know much about the everyday life in classrooms and how interaction routines are constructed by the different participants (pupils, teachers and assistants).

From a Swedish point of view the research, on special schools for pupils with learning difficulties and in particular the training school, with a focus on interaction is limited to a few studies (Göransson, 1995; Anderson, 2002) and from a teaching perspective there are some studies (Berthén, 2007; Ljungblad, 2009). Outside the school context there are some research that explore interaction and communication between parents and children with profound and multiple learning difficulties (Brodin, 1991; Björck-Åkesson, 1993; Olsson, 2006; Wilder, 2008; Hedvall, 2009).

The research review in Göranssons (1995) doctoral thesis shows that interpersonal communication is the result of a complex dynamic interaction between personal and environmental issues and different aspects of communication. The data from the classroom study was collected by different kinds of observations schemes, with different focuses and aims. The classroom study over 12 classes in the special school for pupils with learning difficulties showed that it was unusual that pupils interact with each other during lessons and that the most common way of interaction in the classroom was interaction between pupil and staff (teacher/assistants) which also was the form of interaction that the staff encouraged the most. Göranssons (1995) classroom study also showed that it was unusual that the staff gave the pupils credit and appreciation for interacting with each other.

Anderson's (2002) doctoral thesis provides detailed analysis of videodata that draws interaction between staff and pupils that use sign language or sign supported speech in the special school for pupils with learning difficulties. Anderson was using an ethnographic approach in the research and the results from the micro-analysis of the videodata show that there were formal and informal talk going on in school context and that the staff sometimes had problems with their timing and did not wait for a response from the pupils. But if and when the staff is used a more vertical approach in their interaction with the pupils they had

better possibilities to meet the pupil in the pupils in their proximal zone of development. The results of the micro-analyzis also showed that the pupils participating in the study had different approaches to their use of language, one group were observers, a second group were communicatively active and a third group were linguistically active.

Berthén's (2007) doctoral thesis is a classroom study conducted in two classes in the special school for pupils with learning disabilities, one class is a special compulsory class and the other is a training school class. The data is produced by interviews and by observations that focused on what the pupils were doing, with whom and for how long and where. The data was analyzed from an activity theory perspective and the analyzis shows that there were disparate aims regarding the pedagogical work in the two classes. The teaching in the special compulsory class was preparing the pupils for school related activities and the teaching in the training school class was more related to the life after school and social skills, competence in independency and not to show diverse manners in relation to other pupils.

In an earlier paper some preliminary findings (Östlund, 2009) that draw from a small piece of the data for my thesis has been presented. The data analyzis was based on a 6 minute long sequence where three members of the staff were involved in playing catch with two pupils. This sequence was a representative part of the interaction in the everyday life in training school. What occurred from the analyzis of this sequence was that the interaction seemed to be routinized and the interaction was organized by a pattern that Mehan (1979) describes as I-R-E (Initiate-Respon-Evaluation). The analyzis has showned that in this kind of activity where the pupils were supposed to participate in the game of playing catch, the staff was more active as participants than the pupils were. The staff was using a wide range of interactional resources as raising the voice, doing gestures and signs, joking etc., to initiate and maintain interaction with the pupils. The staffs use of interactional resources was related to getting in contact with the pupils and getting the pupils attention so the teacher or an assistant could initiate an action that was part of the game of playing catch (for example givning one of the pupils the ball).

1.1 Aim with this paper

As indicated in the short literature review we don't know much about the ongoing interaction between pupils and staff in the every day life in classrooms in the special schools for pupils with learning difficulties. This paper tries to explore interactional resources⁶ used by staff (teachers and assistants) and the pupils in everyday life situations in special school classrooms with a focus on the process of initiating and maintaining interaction and also tries to examine the possibilities for the participants to play an active role in classroom interaction.

2 Theoretical framework

A basic theoretical assumption in this paper is that the world and the knowledge of the world is socially constructed (Berger & Luckman, 1979) together with other people and is inspired by an ethnomethodological approach. In relation to the group of pupils that my research involves the framework of the study take its starting point in the assumption of learning and socialization as socially distributed and is something that is related to relations between people, in my case the relations and ongoing interactions in the everyday life between staff and pupils in training school.

Ethnomethodology refers to a framework developed by Garfinkel (Garfinkel & Rawls, 2002), Schegloff (1996) and Sacks (Silverman, 1998), among others, during the sixties and seventies and has become a way of producing knowledge on social matters in the everyday life settings. In the field ethnomethodology (Garfinkel & Rawls, 2002) and in Conversation analysis (Silverman, 1998) a large amount of studies has focused on the verbal conversations (mis-hearings, slip of tongue etc.) or as in some of Emanuel Schegloffs and Harvey Sacks' early studies: how to close up conversations, turn taking etc. Since the pupils, in the context where I have collected data, are using a verbal language to a little extent, my assumption is that the non-verbal actions in the episodes must be transcribed in a quite detailed way as well as the verbal actions. For example Melander (2004) means that both the verbal and non-verbal actions has been of importance in CA and that body posture, facial expressions and other surroundings can be included in the analysis. Also Pomerantz and Fehr (1997) points out that CA is a lot more than "just talk" and they emphasize that many researcher has "expanded the

⁶The term *interactional resource* refers to what Wertsch (1998) calls mediational means.

scope” (s 65) of CA and also gestures, gazes etc., are included in the analysis. An especially awareness of this is necessary since much of the interaction in the data for my thesis is non-verbal.

3 Design and method of the research

The data presented in this paper draws from fieldwork that was performed during spring 2009⁷ and the design of the study is inspired by educational ethnography (Hammersley & Atkinson, 2007) The data for the ongoing work with my thesis draws from fieldwork from training schools and methods like video recordings, video sessions (stimulated recalls with the staff) individual interviews with school staff, focus interviews with staff and participatory observations in the classroom has been used. In this paper the findings from a small portion of the videodata will be presented.

During the fieldwork I have spented time in two classes and have observed the everyday life in lessons, both as group- and individual work, breaks for pupils and staff, lunchtime etc. In the class where the data used for this paper three of the pupils are using wheelchairs and other kinds of devices for their mobility. One of the pupils, Bob (16 years old), can express himself verbally and talks in short sentences with about two-four words at the time. The other three pupils (Bianca 13 years old, Brenda 12 years old and Beatrice 9 years old) are pre-verbal and communicates in non-verbal forms, but they don't use any general signs or PCS (as pictogram or Widgit) and are dependent in the staffs' abilities to interpret their signals and responses. The teacher has a background in pre-school and has worked in the special school for pupils with learning difficulties for three-four years. The three assistants in the class have been working in the special school for pupils learning difficulties for some years.

According to the training schoolteachers that has been interviewed as a part of the work with my thesis, caring and creating as less stress for the pupils as possible is an important part of the staffs work and the daily routine in the training school. The work is, according to the teachers, organised so there are very little pressure on the pupils during the school day and the learning situations must be organised so the interaction between the staff and the pupils makes the pupils feel that they are understood and that they have an influence on what is going on in the classroom (see also Kirkebæk, 1994). The tempo is slow in the classes and the communication between the members of the staff and the pupils' can be time consuming since

⁷ The data collection had been done considering ethical recommendations from Vetenskapsrådet and all names has been replaced with fictional names.

it sometimes takes a lot of time for the staff to interpret the pupils' both verbal and non verbal actions.

The reason for choosing the episode "Differencies in talk on vehicles and Danne Stråhed" is made from my impression that this is a very common activity in training school classroom. The performed activity is an activity that takes place almost everyday, of course with some variations, but the impression after spending time in training school is that this episode is representative for the everyday life in classrooms. This episode has also been picked of because of its dynamic in interaction and the differences shown in interaction depending on what topic is in focus for the interaction. As pointed out in a previous presented paper (Östlund, 2009) there were differencies in activity and way of being an active participant between the staff and the pupil in the game of playing catch. The staff appeared to play a more active part in the game than the pupils which played a more passive role in the game by only responding to the staffs actions and did only to a little extent trie to initiate an interactional process with someone else that was participating in the game.

3.1 The work with data

In the analysis of the episode I believe that there could be several perspectives that could be used to get a deeper knowledge about the everyday life in the classroom with a focus on interactional resources used by the participants. I have choosen the path of microanalyzis and have made detailed transcripts from the videodata. During fieldwork a small Sony digital video camera was used together with a small tripod that made it possible to easily move the camera in the classroom. No extra microphones were used, beside the built in microphone in the camera. The use of external microphones were considered, but after test shooting with the videocamera the sound seemed to be acceptable, hence no extra microphones were used. For the transcriptons the software INQSCRIBE has been used to transcribe the verbal and the non-verbal actions in the data. In the transcription of the episodes transcript symbols adopted from Gail Jefferson (see appendix) has been used. To understand the interaction between the participants in the videodata in general I believe that there must be a specific focus on the non-verbal interaction, since most of the pupils in the data material lack in verbal communication. This I have tried to embed into the transcripts. No specific transcription key has been used for the non-verbal actions, but in the transcripts gazes and gestures, pointing etc. has been noted.

4 Differences in talk on vehicles and talk on Danne Stråhed

The short episodes “*Guiding Bob*” and “*Shut down Danne as well*” is picked out from a 20 minutes long video sequence where Bob, Bianca and Brenda is participating together with two assistants. The leisure-time pedagogy and the class teacher arrive to the classroom after about ten minutes. Three of the pupils are sitting around a table in the classroom, one assistant (A2) is sitting next to Brenda and the other assistant (A1) is sitting between Bianca and Bob. A2 is feeding Brenda with yoghurt, Bianca is looking at and listening to a music-box (speldosa) and Bob is reading a book, (Big wheel book by Nygren, 1992)⁸ with A1. The two assistants are in the classroom the whole episode and the leisure-time pedagogy and the teacher are attending the classroom about ten minutes in to the sequence to pick up Bob for his swimming lesson and leave the classroom again after about 3 minutes. The two assistants and Bianca and Brenda are then carrying on with their routine for about seven more minutes. The interaction that is in progress during these 20 minutes is characterized by its dyadic dialogue between the assistants and the pupils Bob and Brenda. During the sequence one of the assistants (A2) are feeding and talking with Brenda. For the first 10 minutes the other assistant (A1) is having a conversation on a book and also about music with Bob until Bob gets picked up by the teacher and the leisure time pedagogy to go to his swimming lesson. When Bob is leaving the classroom the assistant A1 starts to interact with Bianca who has been listening to a musical box until Bob leaves the classroom and A1 finishes her talk with Bob. For the last 10 minutes of the sequence A1 offers Bianca to play with keyboard that makes all kinds of noises/sounds when keys are being pushed and A1 is also scratching Bianca’s hair and rubbing her ears. There are no recognizable interaction going on between the pupils during these 20 minutes except from Brenda who is sitting in her wheelchair in a way that does not make it possible to see what the other pupils are doing and Brenda is trying to turn her head so she can see what going on behind her back during for almost the whole sequence (after about 15 minutes the assistant, A2, notices her efforts to see what is going on and turn the wheelchair around so she gets a good view over the classroom). At some occasions the assistants comments on each others dialogues with the pupils (in a humoristic way), but they are not in direct interaction with each other. The main focus for the analyzis is

⁸ This book is what we in Sweden call a pointingbook (pekbok) – with pictures and short texts.

the first ten minutes of the episode when Bob and A1 are reading the book *The big wheel book* together.

5.1 “Guiding Bob”

Within this excerpt the main focus is on the interaction between Bob and the assistant (A1), they are sitting on the corner of a big table in the classroom and in front of them lays the book that contains pictures of different kinds of vehicles with short texts.

Excerpt 1 (Class B, 2009-05-28)

12. [00:32.] A1: Who is coming there? ((A1 is holding on to the book with her left hand and is pointing at something in the book))
13. [00:38] A1: A big (1.0)?
14. [00:39] Bob: <Bike>
15. [00:40] A1: Oh no, look at the picture, what is it?
16. [00:46] A1: A big (1.0)?
17. [00:47] Bob: <Bike>
18. [00:48] A1: >What is it there<?
19. [00:49] Bob: <Bus>
20. [00:51] A1: Bus (0.5), yeah, that was no bike (0.5), it was a bus that came driving by

Comment/analysis:

From the beginning of the episode Bob and A1 is looking into a book together. For about 8 minutes the conversation goes on about the content and the illustrations in the book, which is a book with many kinds of vehicles and wheels in. The structure in the interaction is what Mehan (1979) would describe as I-R-E where the assistant is leading Bob through the content in the book by asking questions and as in lines (13, 16) giving Bob a little extra help by giving extra guidance by adding the prefix ‘big’ into the question and then evaluating Bobs answers. When Bob gives the wrong answer A1 evaluates his answer by addressing a new question to Bob (line 15 and 18). The conversation is also characterized by, what Mehan (1979) calls, QWKA (questions with known answers). The resource used by the assistant in the episode is guidance or scaffolding, where she by questions tries to help Bob to deliver the right answer on her questions. In line 12 and 15 and 18 she is addressing similar questions to Bob where she wants Bob to answer what is on the picture that they are looking on in the book. The

verbal interaction is built up and structured by the assistant who is addressing questions on the content of and the pictures in the book and to all questions asked there is a correct answer. As Anderson (2002) research shows the talk differs from the more formal situations to the more informal situations and from that point of view this is an example over more formal interaction where it becomes clear that the assistant is focused in adressing questions that Bob are supposed to answer in certain way.

5.2 “Shut down Danne as well”

About 8 minutes into the episode Bob and A1 has reached the end of the book and that opens up for a change in topic for their conversation and Bob grabs this opportunity.

Excerpt 2 (Class B, 2009-05-28)

149. [08:08] A1: That´s the end ((Bob is closing the book))

150. [08:10] A1: Do you want to read a new book?

151. [08:14] Bob: <Thorleifs⁹>

152. [08:16] A1: Where do you find Thorleifs? Is Thorleifs on the radio? ((A points at the cover of the book that they just read, where there is a picture of a farmer and his red tractor)) In the tractor?

153. [08:19] Bob: *eehh*

154. [08:23] A1: I don´t think so, I believe they are playing Sven-Ingvars¹⁰ ((A1 picks up the book and starts turning pages in it again))

155. [08:27] Bob: *Come on*

156. [08:28] A1: >Turn the volume down, turn the volume down<

157. [08:31] Bob: Searchlights also ((Bob is leaning forward and is pointing at the cover of the book))

158. [08:32] A1: Yes it has searchlights, Thorleif in the tractor, ((A1 shakes her head)) that sucks

159. [08:37] Bob: *Hehe* ((hits on the table with his right hand and is moving back and forward with his upper body))

160. [08:39] A1: >Put the volume down on Thorleifs and shut down Danne¹¹ as well<

⁹ Thorleifs is a famous Swedish oldschool danceband who are characterized by their use of saxophones in their music.

¹⁰ Sven-Ingvars are also a famous Swedish oldschool, but more guitarbased, danceband.

161. [08:49] Bob: *Hahehe* ((leaning back on his chair with a big smile))
162. [08:51] A: *This sucks, put on a good record*
163. [08:54] Bob: *EEEHA HAAAA EAAH *((laughing out loud))
164. [08:59] A: What shall he put on?
165. [09:00] Bob: *HAHA, DANNE* ((Spoken out loud with a lot of excitement in his voice))

Comment/analysis:

The approach used by the assistant is quite opposite here compared to the first example – in the first example of interaction between the assistant and Bob, she is the one that initiates and is maintaining the interaction by asking questions on the book that lies before them on the table - in this excerpt Bob is taking initiative to change the subject in their conversation and takes a chance to lead the subject in the conversation on to music. In this excerpt the interaction turns out to be quite different from the example “Guiding Bob” as the assistant are instead asking Bob for the “right” answers going into an act where she is using the pictures in the book and her knowledge in Bobs taste in music as a resource to discuss and argue with Bob in a playful way. As the assistant says “That’s the end” in line 150 and in the next line asks Bob if he wants to read a new book, she opens up for Bob to participate in a more active way in the situation. Bob leads the conversation (in line 151) into the field of dance music and in line 152 the assistants build on this topic and relates it to the picture on the cover of the book, asking if Thorleifs is on the radio in the tractor on the cover. What occur from this episode is that the assistant steps out of her role as a teaching person asking questions and a takes a more informal way of addressing Bob and have a humoristic and playful approach in their conversation. Another difference that occurs in this excerpt is the intensity in the interaction. Bob is more intense and seems to be more receptive and is participating with greater engagement when the conversation topic is something that Bob could decide about himself. This shift in structure of interaction – from a situation characterized by QWKA to a conversation that comes more fluent and with a more engaged participation by Bob – points at that the pupils has different possibilities of being an active participant in the social setting that the classroom provides.

¹¹ Danne refers to the southswedish singer-songwriter Danne Stråhed., most famous for his song “När flickor talar skånska”.

5 Discussion and reflections on the findings so far

From the two excerpts above that that derive from a common situation in the everyday life in school, it becomes possible to examine what interactional resources that are being used by pupils and staff and which possibilities the participants has to play an active role in the ongoing interaction. Since interaction not always, like in all social settings, does not always come fluent and by itself both the pupils and the staff take uses of a wide range of resources to maintain the ongoing interaction in the classroom (see also Östlund, 2009).

From the episode “Differences in talk on vehicles and talk on Danne Stråhed” it becomes possible to observe some phenomena that occur from the transcripts. The first example “Guiding Bob” is a representation of the interaction that goes on for the first 8 minutes of the episode which is characterized by the assistant raising questions on the content of the book *the big wheel book* that they are reading together and Bob answers. As shown in Östlund (2009) the teacher was using a similar approach as A1 does in this booktalk and it becomes clear that this approach reduces the interaction into addressing questions verbally and at some occasions pointing in the book and keeping on addressing the pupil until the pupils gives a correct answer. The most important resource for maintaining interaction in the example “Guiding Bob” seems to be the content of the book and to address questions on the content of the book to Bob. The attention from the pupil is not something that, as has been showned in the first excerpt, that always comes fluent and by itself. So, to initiate something or to be able to address a question, the teacher or assistant first has to establish a connection and the assistants’ efforts to guide Bob through the *The big wheel book* can be described as a systematic method of involving Bob in the activity. Maybe, Bob’s inactive way of participating in the book talk can be seen as a form of resistance against the limitations in interaction when he is asked questions with known answers.

In the last example “Shut Danne down as well” theres a change in the way Bob and the assistant interact with each other:

- First of all Bob is changing the topic of the conversation which leads to a change in structure in the conversation and the go from a structure of I-R-E to a more equal way of addressing each other.

- Second, as an effect of Bob changing topic, the assistant leaves the idea of just asking questions from the book and have a more free and playful approach to Bob and argue with Bob about his choice of music in a humoristic way.
- Third, the conversation is moving from a concrete level that derives from the content of the book to a more abstract level where the talk is on a more imaginary level.

In the transcript “Shut down Danne as well” both Bob and the assistant has a humoristic and debating approach in their interaction which seems to be resource and through their talk they maintains the social order in their interaction. As Göransson (1995) has shown in her study it is more common that the pupils interact with the staff than with each other, which is something that differs from classroom studies in the compulsory school (Lindblad & Sahlström et al. 2001) there interaction between peers is more common and part of the every day life for pupils. In the training school classes the staffs become teachers, playmates and caregivers that guide the pupils through the landscape of interaction and processes of learning, socialization and constructing identity.

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References

- Anderson, Lotta (2002). *Interpersonell kommunikation: en studie av elever med hörselnedsättning i särskolan*. Diss. Lund : Univ., 2002
- Berger, Peter L. & Luckmann, Thomas (1979). *Kunskapssociologi: hur individen uppfattar och formar sin sociala verklighet*. Stockholm: Wahlström & Widstrand
- Berthén, Diana (2007). *Förberedelse för särskildhet: särskolans pedagogiska arbete i ett verksamhetsteoretiskt perspektiv*. Diss. Karlstad : Karlstads universitet, 2007
- Tillgänglig på Internet: <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-899>
- Brodin, Jane (1991). *Att tolka barns signaler: gravt utvecklingsstörda flerhandikappade barns lek och kommunikation = [To interpret childrens signals] : [play and communication in profoundly mentally and multiply handicapped children]*. Diss. Stockholm : Univ.
- Björck-Åkesson, Eva (1993). *Communicative interaction between young nonspeaking children with physical disabilities and their parents: a longitudinal study*. Jönköping: Högsk Curriculum for the compulsory school system, the pre-school class and the leisure-time centre Lpo 94 [Elektronisk resurs]. (2006). Stockholm: Swedish National Agency for Education (Skolverket) Tillgänglig på Internet: <http://www.skolverket.se/publikationer?id=1070>
- Evaldsson, Ann-Carita (red.) (2001). *Introduktion och forskningsöversikt. Interaktion i pedagogiska sammanhang / Sverker Lindblad, Fritjof Sahlström (red) ; Karl-Georg Ahlström S. 9-35*
- Garfinkel, Harold & Rawls, Anne (2002). *Ethnomethodology's program: working out Durkeim's aphonism*. Lanham, Md.: Rowman & Littlefield Publishers
- Goodwin, C. (1994). *Professional vision*. *American Anthropologist*, 96(3), 606-633.
- Göransson, Kerstin (1995). *De liknade varandra men inte mer än andra: begåvningshandikapp och interpersonellt samspel = "They looked alike, but no more than others do" : intellectual disability and interpersonal interaction*. Diss. Stockholm : Univ.
- Hammersley, Martyn & Atkinson, Paul (2007). *Ethnography: principles in practice*. 3. ed. Milton Park, Abingdon, Oxon: Routledge
- Hedvall, Per-Olof (2009). *The activity diamond: modeling an enhanced accessibility*. Diss. (sammanfattning) Lund : Lunds universitet, 2009
- Jackson, Philip Wesley (1968). *Life in classrooms*. New York: Holt, Rinehart & Winston
- Jones, Phyllis. (2005). *Teachers' views of pupils with profound and multiple difficulties*. *European Journal of special needs education*. Vol 20, No. 4, November 2005 pp. 375-385. Taylor and Francis.

- Macbeth, D. (2003). *Hugh Mehan's Learning Lessons reconsidered: On the differences between the naturalistic and critical analysis of classroom discourse*. American Educational Research Journal, 40(1), 239-280.
- Nind, M., Wearmouth, J. with Collins, J., Hall, K., Rix, J., and Sheehy, K. (2004) *A systematic review of pedagogical approaches that can effectively include children with special educational needs in mainstream classrooms with a particular focus on peer group interactive approaches*. In Research Evidence in Education Library (London: EPPI-Centre, Social Science Research Unit, Institute of Education). Available online at: <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=331>, accessed November 18, 2006.
- Nygren, Tord (1992) *Stora hjul-boken (The big wheel book)*. Stockholm: Rabén & Sjögren
- Olsson, Cecilia (2006). *The kaleidoscope of communication: different perspectives on communication involving children with severe multiple disabilities*. Diss. (sammanfattning) Stockholm : Stockholms universitet, 2006
- Högsk.Skolverket. (2001). *Special school - could it be something for my child?*. Stockholm: Liber Distribution, Publikationstjänst.
- Kirkebak, Birgit. (1994). *Skrøbelig kontakt. For tidlig fødte børn og deres samspil med omgivelserne*. Danish Psychology Press and The Resource Centre for Young People with Multiple Disabilities and without Spoken Language, 1994.
- Ljungblad, Ann-Louise (2009). *Mathematical Communication in "Träningskolan"* Paper presented at NORSMA -Nordic Research Conference in Special Educational Needs in Mathematics at Island in October 2009
- Mehan, H. (1979). "What time is it, Denise?": *Asking known information questions in classroom discourse*. Theory into Practice, 28(4), 285-294.
- Melander, Helen, Pérez Prieto, Héctor, Sahlström, Fritjof & Lindblad, Sverker (red.) (2004). *Sociala handlingar och deras innebörder: lärande och identitet*. Uppsala: Pedagogiska institutionen, Univ.
- Nind, M & Thomas, G. (2007). *Reinstating the value of teachers' tacit knowledge for the benefit of learners: using 'Intensive Interaction'*. Journal of Research in Special Educational Needs Volume 5 Number 3 2005 pp. 97–100.
- Pomerantz, A. & Fehr, B.J. (1997) *Conversation Analysis: An Approach to the Study of Social Action as Sense Making Practices*. In van Dijk, T. A. (Ed) *Discourse as Social Interaction*. London: Sage Publications, 64-91.

Sahlström, Fritjof (2008). *Från lärare till elever, från undervisning till lärande [Elektronisk resurs] : utvecklingslinjer i svensk, nordisk och internationell klassrumsforskning.*

Stockholm: Vetenskapsrådet

Tillgänglig på Internet: http://www.cm.se/webbshop_vr/pdf/VR9_2008.pdf

Sahlström, Fritjof (1999). *Up the hill backwards: on interactional constraints and affordances for equity-constitution in the classrooms of the Swedish comprehensive school.*

Diss. Uppsala : Univ.

Silverman, D. (1998). *Harvey Sacks: Social science and conversation analysis.* Cambridge, MA: Polity Press.

Ware, J. (2005). *Profound and multiple learning disabilities* in Lewis, A. & Norwich, B. (2005). *Special teaching for special children?*. Berkshire: Open University press,

Wilder, Jenny. (2008). *Proximal processes of children with profound multiple disabilities.* Stockholm: Stockholm University, Department of psychology . Diss

Wertsch, James V. (1998). *Mind as action.* New York: Oxford University Press

Östlund, Daniel (2009) *Pedagogical praxis: an example from the training school.* Paper presented at the Nordic Network for Disability Research (NNDR) Conference in Nyborg, Denmark in April 2009.

Transkriptionssymboler

Konventioner inom CA (Jefferson, Gail (2004): Glossary of transcript symbols with an introduction. I: Lerner, G. (ed.) Conversation analysis. Studies from the first generation.)
(hämtad från: <http://www.ling.gu.se/~mattias/taltranskription/Transkriptionssymboler.pdf>)

[ord] Markerar var överlappande tal börjar och slutar

(0.2) Pauslängd i sekunder

(.) En mikropaus, kortare än 0.2 sek

ord Understrykning markerar att stavelsen är betonad

: Markerar en förlängning av det föregående ljudet

ORD Versaler markerar högre volym än omgivande tal

°ord° Markerar lägre volym än omgivande tal

ord Yttras med skratt i rösten, alt. \$ord\$

(ord) Markerar att tolkningen av vad som sagts är osäker

() Något sägs men det är omöjligt att uppfatta vad

(du/nu) Markering av att det som sägs har flera tolkningar

((ord)) Kommentar till något som sker eller en beskrivning av hur något utsägs

- Markerar ett tvärt avbrott i talflödet

hh Markerar hörbar utandning

(h) Markerar skratt eller hörbar utandning i ett ord

·hh Markerar en hörbar inandning

·ord Punkt före ord markerar att ordet sägs på inandning

. Markerar en tydligt fallande grundton i slutet av en intonationsenhet

? Markerar en tydligt stigande grundton i slutet av en intonationsenhet

, Markerar en jämn grundton i slutet av en intonationsenhet

¿ Markerar en svagt stigande grundton i slutet av en intonationsenhet

>ord< Markerar snabbt tal

< ord > Markerar långsamt tal

< Markerar att talet har en hastig start

o:rd Understrykning + kolon markerar en fallande grundton i ett förlängt ljud

nä: Understrykning av kolon markerar en stigande grundton i ett förlängt ljud

- Markerar en kraftigt höjd grundton

˘ Markerar en kraftigt sänkt grundton

= (1) Visar att samma replik sträcker sig över flera transkriptionsrader

(2) Visar att två repliker fälls utan paus mellan dem