This paper does not necessarily represent the views of the CiCe Network.

Permission to Speak

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Abstract

This paper discusses the possibilities for newly arrived pupils to take part in subject teaching. The significance of the mother tongue while they development of their second language is in its earliest stages will be highlighted. When citizenship is as an expressed goal of education with the aim of stimulating inclusion and critical thought, language plays a decisive role in how all voices can make themselves heard. We invited two preparatory classes to work with teacher students in problem-solving work sessions in the technical workshop. The starting points were a socio-cultural perspective of teaching and the development of knowledge, and that language is discourse. The study illuminates and problemetises a variety of strategies in conversation during problem-solving.

Introduction

The purpose of this paper is to highlight and to discuss the importance of the mother tongue as a support for the successful development of a second language and of knowledge acquisition in school subjects, and to discuss the conditions applying to newly-arrived pupils.[1]

Teacher students' poor level of preparedness for assuming responsibility for language development and early reading and writing skills within the context of all taught subjects has been debated after a critical review conducted by the National (Swedish)Agency of Higher Education of the new teacher education system, was published.

At the School of Education at Malmö University, teacher education is organized into major subject areas as e.g. "Mathematics and Learning", "Knowledge of History and Learning" and "Culture, Media and Aesthetics". During 2005, a review of syllabuses was carried out with a view to bringing forward the issue of language development.

Language development and the political discourse

In the spring of 2002 the national report *Mål i mun* (*Goals for language*) (SOU 2002:27) was published as a proposed plan of action for the Swedish language. The proposal resulted in a language-political proposition (Prop. 2005/06:2) with the title *Bästa språket – en samlad svensk språkpolitik*[2] (*Best language use: a collective policy for Swedish*).

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[1] The paper is written within the framework of the research project Childhood, Learning and Didactics, CLaD. The project has been financed by Malmö University during 2006-2007.
[2] *Bästa språket – en samlad svensk språkpolitik*, (Prop. 2005/06:2) www.regeringen.se

The fourth basic goal formulated is:

- That everyone has the right to language: to develop and to acquire the command of the Swedish language, to develop and use one's own mother tongue and national minority languages and to have the opportunity to learn foreign languages.

In *Dagens Nyheter*[3] *(The Daily News),* two leading Liberal Party politicians in Malmö put forward a proposal to introduce into the local school plan the requirement that pupils should only speak Swedish during their lessons. "Then children from immigrant backgrounds will have better chances to practice their Swedish" is their argument. They also consider it to be self-evident that Swedish is the language to be used in Swedish schools. It would also make it easier for teachers to maintain discipline, they claim. *Sydsvenska Dagbladet*[4] (*Southern Sweden Daily*) refers to a motion from three Moderate party politicians to the Malmö Municipal Council maintaining that if one only speaks Swedish in the preparatory class, one will be able to understand better the teaching in the ordinary classroom. The teachers' union points out that the proposal is at odds with the law that pupils may not be discriminated against on the grounds of ethnicity, and that the mother tongue is the only language that newly-arrived pupils have.

What does it mean when the politicians say that: "During the first year, no other studies should be conducted than those in the Swedish language"? If a 15 year old who has arrived from Iraq is only allowed to speak Swedish, it is obvious that he/she will not gain anything from the teaching in the various subjects. He/she will not understand anything of the discussion about e.g. the Second World War, problems with the environment etc. and the consequences of the demand for *one* language would be that we robbed him/her of a number of years of knowledge acquisition because he/she has to "speak Swedish" before learning anything.

The core of citizen education is being included in democratic decision-making processes. If one sees citizenship as an expressed goal for education with the aim of stimulating critical thought, language plays a decisive role for how different voices can make themselves heard, Giroux (1992, p134). We maintain that the political propositions and demands noted above instead of promoting inclusion act in an excluding way as they derive from a one-sided perspective where second language pupils are only considered to be disadvantaged instead of bringing knowledge and potentials. It also stands in stark contrast to the task given to the National Agency for School Development and which in 2006 resulted in a national strategy for educating newly-arrived pupils in compulsory and senior secondary schools (U2006/5104/S) and comparative forms of schooling.[5] The Agency emphasizes the importance that teaching in mother tongues and the teaching of Swedish as a second language should be parallel processes. In *National School Development – minimizing differences and improving results*[6] it is stated that "The road to a good command of the Swedish language is via the mother tongue and it is therefore

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[3] www.dn.se, 10/1-08

[4] www.sydsvenskan.se, 2/1-08

[5] "newly arrived" means children and young people who begin Swedish compulsory or senior secondary schooling 0-3 years after their arrival in Sweden. See Authority for School Development (Dnr 2006:487).

[6] Nationell skolutveckling- för minskade skillnader och förbättrade resultat (Authority for School Development). www.skolutveckling.se 2007-10-19

necessary to strengthen both instructions in the mother tongue and in Swedish as a second language".

Language is discourse

In the syllabuses for Swedish and for Swedish as a second language, it is expressed that "language has a key role to play in the work in schools". It is through language that knowledge becomes "visible and usable", (pgs 96 and 102). The discourse on language as communication and the enabler of knowledge indicates a process-oriented view of learning and the development of knowledge. Kent Larsson (1995, pg 37 f) emphasizes that: "Language is our life world." This demands the insight that the use of language is much more than a formal technical skill. Language is discourse.

The subject of technology

 "Active citizenship" as well as the influence of technology on the development of society is emphasized in the syllabus. Technology can be described as a subject where practical problem-solving with a theoretical groundwork is central. To ask newly-arrived pupils to solve a problem in the production process in technical workshop, demands interplay between cognitive, manual and language skills, where the practical performance of the task is grounded in theoretical knowledge and vice versa.

Project aims and questions

The project had a number of aims: to stimulate the development of the second language and of knowledge in pupils in the preparatory class through conversation and cooperation in authentic problem-solving situations, through the writing of authentic texts and through reading; and to challenge and support the student teachers' skills in planning and carrying out teaching within the framework of the technical subject that encourages both the development of language in this specific discourse and of knowledge. The study both enlightens and problemizes: the contents of conversations during problem-solving; which initiatives are taken towards conversation by children and students; what the possibilities of problem solving using the second language are; what the texts contain and if they are functional in the sense that it is possible to understand what the pupils wants to convey to the reader.

A socio-cultural perspective on learning

How pupils come to take initiatives in conversation during work is not dependent only on their *language ability* but also upon earlier *experiences* in a similar context and the new social *purpose-dedicated group* they now participate in. They have to feel secure and *accepted* in the university environment they now find themselves in. It also requires *authentic forms of interaction* with a *meaningful* content that stimulates the children in being *active* participants who are able to make use of the different *previous knowledge* they command. New *tools that mediate learning* are introduced. Some of these tools are new for some of the children in the project group. All these things are central to the social-cultural perspective on learning. (Dewey 1938; Dysthe 2003; Lave & Wenger 1991; Säljö 2000; Vygotskij 1978; Wertsch 1991).

In agreement with Hundeide (2003 pg 151ff) we maintain that what is usually called competence or skill is to "master the communicative code in the inter-subjective space that dominates the classroom".

Swedish as a second language and communicative competence

Viberg (1993) uses the terms foundation and extension to define the two components in the development of language. When, for example, a Swedish-born child starts school, the foundation comprises that the child has mastered the sounds, system of conjugation and syntax of the mother tongue. The school assists in the extension of language in the form of subject and content-related language and the further development of grammatical and written language skills. Hyltenstam (1996 pg 31) maintains that in fact it takes a number of years before the second language functions as well in the learning process as the first language. Cummins (1981) has shown that it takes 5-7 years to develop the second language to the level required for it to function in learning processes that are cognitively demanding. A sudden transition to a new language makes the learning process more difficult. The school has to handle the difficulty of allowing the children to successively grow into a second language at the same time as the school workday risks being experienced as boring and uninteresting if there is not much to talk about, because "they can't speak Swedish yet". The children in the preparatory class work with foundation and extension language in parallel. Cummins (1996) uses the term BICS (Basic Interpersonal Communicative Skills) and CALP (Cognitive Academic Language Proficiency) to differentiate the use of various skills in the use of language. BICS is used in connection with the fundamental skill of communication, most often in context-dependent everyday situations. CALP-skills come much later and qualify the user for context-independent and cognitively more demanding learning.

The syllabus for Swedish as a second language directs that the language must be used in a variety of contexts and have meaningful content. This encourages the development of both thought and language skills.

> That which is typical for the subject may give opportunities for thought and communication on a knowledge or concept level which often is higher than the level of Swedish language. In this way the interplay between mother tongue and other subjects is important. (pg 104)

Project time, participants and work sessions

The project was carried out during a two-month period in 2006. Two preparatory classes (A and B) from two compulsory schools in one of Malmö's suburbs, and the preparatory class teacher school A, participated in the project. In each group there were 10 pupils aged 8 – 12 years. One pupil was 15. The pupils had arrived in Sweden relatively recently and most came from Afghanistan, Bosnia, The Philippines, Iraq, Iran, Kurdistan, Palestine, Poland, Serbia and Somalia.

The work was carried out by Malmö University in the School of Education's technical workshop located in the building known as Orkanen. 13 student teachers who at the same time were following the course in technical education were present alternately as teachers and observers.

Five different themes were prepared by the teacher students: boat building, strength/bridges, electricity, vehicle/Lego and parachutes.

Documentation

Six plus seven students worked on the evaluation of pupil group A + B, whereof half worked as teachers and the other half as observers with the task of watching and documenting the discussions. The observations were done mainly on the contents of the discussions, how and what the pupils were communicating about between them and with the student teachers, and the exchange of experiences and construction ideas during the progress of the work, and the problems they confronted. Words and expressions which were used during the work were written on the board. Apart from this documentation, parts of the discussions were recorded on minidisk.

Barnes' (1978) experiences show the difference between speech when it is known and unknown that a recording is taking place. When the pupils were talking without a teacher present, the result was a probing discussion. Barnes describes how the conversation in the presence of a teacher becomes edited. Instead of trying out their thoughts, pupils try to establish what the teacher wants to hear. Both probing and edited conversations were documented in the project.

Discussions in the technical workshop

The morning group is called (school) A while (school) B stands for the afternoon group. Boys and girls in school A are denoted by B1 – B7 and G1 – G4. School B pupils are denoted by g1 – g6 and b1 – b4. The preparatory class teacher is denoted by tea, while the student teachers are denoted by stud1 – 5. The University's project leader is p-lead.

Three forms of discussion situations give focus on content and the construction work. Parallel with this, social conversations are exemplified under the final heading *When conversation stops*, where the differences between forms of conversation are obvious.

- *What is it called in Swedish? The adults are frustrated by not being able to understand* (Mostly conversation in the mother tongue)
- *The electricity has to go around or the lamp doesn't go on.* (Cause and effect)
- *When conversation stops.* (Short utterances, encouragement, humming, gestures)

What is it called in Swedish? The adults are frustrated by not being able to understand
This group contains the conversations that are carried out mostly in the mother tongue. The preparatory class teacher and one student in a supervisory role are obviously frustrated by the children they have difficulty in getting to speak Swedish.

There is also an example here of two girls who take the initiative to open a discussion with each other. They speak Swedish, but do not use the terminology that the supervising student has indicated is appropriate. Instead they paraphrase with the help of everyday words, where for example "shiny stuff" means aluminium foil.

> g1: It shines more with that shiny stuff in it
> g2: why?
> Stud4: What is this called? (Holds a piece of aluminium foil to a torch)
> g1: Don't know

g2: Glitter
Stud4: No, not glitter. That's what you have in your hair when you are
Lucia at Christmas. Have you seen this? What is it?
g1: Don't know
g2: what do you do with the wire?
g1: it has to go there. There should be a circuit.
g2: Hmm
Stud4: Listen! Alu…
g2: Alu?
Stud4: Yes, and a bit more. Alumi…
g1: Alumi.
Stud4: Aluminium. Can you say that?
g1 and g2: Alumini..
Stud 4: ..um

The children continue working.

Stud4: What's the name of the thing you have there?
g1: Battery
g1: Do you have a paperclip? I have to connect the wire.
Stud4: Good! Battery. (To g2): Can you say battery?
g2: Battery
Stud 4: Battery, yes. Good!
g2: do you understand? Mine doesn't work.
g1: no, the wire is off there.

The girls are engaged in conversation, sometimes in their mother tongue and sometimes in Swedish, about how to make their torch work when they are interrupted by the student who wants to check if they know to say "aluminium" instead of "shiny stuff". One of them has picked up the term "circuit" during the introductory discussion and uses it in the discussion. As soon as they have answered the student they return to their own conversation. They are interrupted again when the student wants to make sure they know what a battery is.

In the next example, two Arabic-speaking boys concentrate on making a boat. They talk together in Arabic and pass each other the materials they need. The teacher stops beside them, and asks what various items are called in Swedish.

Tea to B5: This is a screw. Can you say "screw"?
B5 looks at the teacher but says nothing.
Tea to B6: Can you say "screw"? No answer
Tea to both: What's this called then? (Holds up the glue gun)
Tea to p-lead: They don't want to speak Swedish. It's a big problem.

P-lead turns to an older Arabic-speaking friend and says:
Can you ask how it is that they find it so easy to use the glue gun? They
seem to have used one before.

The older boy asks the question in Arabic. The boys' faces light up. One of them answers and the older boy translates into Swedish:

> It's easy. They've done it before. Their Dad works with tiles in bathrooms.

The preparatory class teacher sees them from the perspective of disadvantage. The boys, on their part, respond to her negativity with body language and facial expressions.

Bakhtin (referred to in Rommetveit 1998) speaks of "addressivity" which means that what is uttered can be seen as a contribution from both from the one speaking and the one who is listening. In the case of the boys who only "want" to speak Arabic, one can interpret their body language, with bowed heads and voices lowered to a whisper, to mean that they know the adults expect that they "can't". The adults, through their voices, facial expressions and what is uttered become contributors in the boys' presentation of themselves.

Goffman (1959) speaks of identities and the various roles we assume during a conversation and Zimmerman (1998) calls this kind of changed role in conversation *discourse identity*. The older Arabic-speaking boy alternates between his roles as pupil and interpreter. In the pupil role his listens attentively to his supervising student teacher. When he is an interpreter he has a skill the teachers do not. The younger Arabic-speaking boys become strengthened in their identity as competent when they see the teacher's and student's and project leader's happy expressions when they have understood what they can do. The boy who acts as interpreter "grows" when he understands that his identity as bilingual has great importance for the adults.

Teachers are reminded often of Vygotsky's (1978) concept "zone of proximal development" and teacher students learn to repeat its main theme, which is that in order to stimulate the individual pupil further in their knowledge development one must first know to what extent he or she understands the concepts they are working with. In the situation with newly arrived pupils with very modest skills in Swedish it becomes obvious that one cannot live up to this pedagogical creed. In order to help them to deepen their knowledge demands a didactic cooperation with mother tongue teachers.

Cause and effect

The second discussion situation is characterised by cause and effect reasoning. The children in the example below speak Swedish during the whole recorded sequence. When they communicate the instructions are often followed by "because …", "otherwise …", "if we don't … then …" They discuss and negotiate their way to how one best gets the boat to float even in strong wind.

> G3: I have to tape, no glue, the straw here.
> G4: why?
> G3: Yes, because the balloon with air goes in and makes speed.
> G4: Yeees, for the sail … I don't get this.
> G3: What? This straw is for motor boat and this for sailboat.
> G4: Why is this sail not good?
> G3: I think too narrow. The wind is outside the sail.
> Stud1 to G3: Why didn't it work with the small sail, did you say?

G3: It is narrow sail. We have to have one of those too … ah – keel. It's up there (board), otherwise the boat falls over.
Stud1: OK. Have you checked what works instead?
G4: Yes, with big sail. Lot of wind there. It's better.
G3: Yes, there is more speed.
Stud1: Clever! How did you work that out?
G4: We try the small one you know … it wasn't good. So I thought there's more room for wind with a big.
Stud 1: Good explanation! Room for more wind.

The student takes note of their conversation and challenges their thinking by – asking questions of the sort "how did you work that out" and encouraging them to talk about other possible solutions.

When conversation stops

When the third work session with lego and the drawings takes place, what is said around the work in hand decreases in some cases to very short expressions or humming. The observations of the project leaders during the progress of the work confirm that more non-verbal communication took place in the form of gestures. One looks at the drawing, takes the pieces one needs and continues the construction while using short expressions such as "mhm", "that one", "yes". Several students, like the children, return the pupils' expressions with "that's right, that one", "mmm, good".

In between, the recordings show that the same children in parallel are involved in social conversation which has more content and has the character of full sentences. The first example below has the social conversation in italic text to the right of the expressions that concern the work.

b3: Not that one
b4: yes!

b4: *What are you doing?* (calling to others) *Our car's going to win!*

b3: check the picture
b4: Aha
b3: that?   b3: *This is really fun!*
Look what I tried!
b4: Give it here!
Stud 4: Check the picture
b3: Ah… but   b3: *have you tried this?* (asks others) *Does yours work?*

b4: Take it!
Stud 4: That's it, that one.
b3: OK   b3: (to others) *Ha ha. Yours isn't as good, is it? Ours is so cool!*

We're trying the ramp now. We'll see it work.

How do we understand what we hear?

Communicative questions

All the pupils, with the exception of the two Arabic boys in Class A, have the ability in varying degrees to use Swedish as a lingua franca to communicate with each other. They have reached the level of what Cummins (1996) terms BICS (Basic Interpersonal Communicative Skills). They most often use an everyday language in the second language and revert to their mother tongue when the second language proves insufficient. The word "shiny stuff" or "glitter" instead of aluminium is used in order to explain the function of it rather than giving the correct word. In this context where the students' initiatives take the form of questions in the form of "the teacher wants a particular response" - for example "what is this called in Swedish?" the children's use of language takes on the form of edited speech.

The adults' attitude

In one discussion where a boy shows that he both can use the correct term "circuit" and explain how it functions, the student teacher asks if he means metal and why he needs a circuit-breaker. The boy knows what function the paperclip will have, but wants to have the word for why in particular a paperclip can conduct electricity. The student cooperates with the boy and asks him the question "Do you mean metal?" A new concept, "circuit-breaker" – is used without explanation. The boy has shown with his explanation that he has understood anyway.

By contrast, instead of supporting thought processes they can be interrupted, as seen in the example of the student who in her eagerness to get the children to say a word correctly focuses her efforts on the pronunciation of the words "aluminium" and "battery". She concentrates on language formalities and overlooks the importance of noting the content and reflection the children are expressing.

The permission to use the mother tongue gave the children a better possibility to try out their hypotheses and help each other. It is also clear that the presence of teachers of mother tongue languages was just as needed in the project as in the ordinary preparatory classroom. Then pupils with obvious need of support in their mother tongue would have had an equal opportunity to be included in the activities, and we would have been able to understand the content of their conversations and their reflections around the work in hand in a deeper and more meaningful way.

Why is it so quiet sometimes?

What was it about the work with Lego and the drawings that reduced the conversation about the construction and problem-solving to absolute minimum for some of the children? Was it perhaps that the drawing simplified the work and that one didn't need dialogue with others to solve the problem one confronted?

Vygotsky (1978) speaks of challenging children's thought processes. This requires an active adult. The example above shows that the student's input is restricted to utterances that are just as short as the children's; "Check the picture". The children are not told why they should do this nor are they given a challenging question.

Hägerfeldt (2004) has documented the same type of short staccato conversations and long sequences of silence during science laboratory work. Hägerfeldt maintains that it is "natural" that there is less conversation and says that "all factual procedures like this mean that the pupils during laboratory sessions don't need to be as linguistically active as during other conversations." (pg126.)

This needs however to be discussed from the point of view of the aim of the work and the way it is to be carried out. Areskoug & Eliasson (2007) speak of "the number of degrees of freedom" or "the amount of open dimension" in an experiment. When pupils in a traditionally formal laboratory session just follow an instruction and complete a form, there is not much to talk about. If one instead chooses to allow the method and the measurements to be open for creative ideas, conversation is stimulated. The conversation in the technical workshop is hindered in that the instructions tell the pupils that they should follow a certain number of points in a drawing. The project group has created silence instead of – in accordance with the aim of the project – stimulating conversation.

Conclusion

The aim of the project was to stimulate language and knowledge development in pupils in the preparatory class through conversation and cooperation in authentic problem-solving situations and through authentic writing of texts within the subject of technology. The aim was also to support and challenge student teachers' skills in planning and carrying out teaching within the subject technology which leads to development in both language and knowledge. We have chosen to emphasize and discuss the significance of the mother tongue as support for the successful acquisition of a second language and the development of knowledge in school subjects.

Both children and the students use various "strategies" in conversation, with different consequences for the processing of knowledge. A number of students had difficulties in staying within the boundaries of authentic learning. Insecurity and lack of routine in teaching pupils with Swedish as a second language led them to falling into what is normally defined as the traditional teacher role. They took over and changed the pupils' conversations to "the teacher asks and the pupil answers". The questions used on those occasions were closed – that is to say there was a correct answer that the child was expected to elicit. The conversation became asymmetrical: on the adult's conditions. Other situations show the opposite. The children are involved in a probing conversation and the supervisory students intuitively or consciously sensitively enter the conversation on the children's conditions.

At the same time, we see that giving them permission to use their mother tongue and as needed allowing them help with interpretation from an older friend, gave them self-confidence and security in that they could participate and carry out the work.

Vygotsky's theory on the proximal zone of development includes the interaction between the children's level of development and the social rooms they are participatory in. The pupils are involved in a process where they do not yet command the Swedish language on either a foundation or extension level. The work and conversations in the technical workshop are the rooms that offer meeting places for the children's individual

and collective zones of development: collective, as the conversations and interaction in the work sessions offer an exchange of meaning and access to the other's perspective. To understand the knowledge development of the individual child, we must therefore understand what we do when we organize activities in various social rooms. The project has shown clearly the need of didactic cooperation with the mother tongue teachers, partly so that the work with newly-arrived pupils with very modest command of Swedish does not remain as formalised second language training, and partly so that the work becomes a link in the chain of knowledge development that starts in the mother tongue.

The students have become aware of the significance of language development within the framework of the subject and they have increased their experience of leading and organizing, observing and documenting practical work with groups of pupils.

Active citizenship as well as the influence of technology on the development of society has been emphasized in the syllabus. The project shows that true inclusion, with the democratic possibility for all pupils to participate and make their voices heard, demands that they are permitted to speak irrespective of the language they employ.