

## TEACHERS' USE OF REVOICING IN DEVELOPING TOPIC-PREDICATE STRUCTURES IN CLASSROOM CONVERSATIONS

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### Abstract

In the past three decades, research on classroom conversations and talk as a means to collaboratively (re)construct and develop knowledge, has received a considerable amount of attention in educational research (see for example Wells, 1999; Mercer 2000; Cazden, 2001). Studying classroom conversations can support researchers to understand children's beliefs, thoughts, cognitions, and the ways in which teachers and children think together. In this paper, data of a recent research project are presented, that may clarify how teachers and young children (aged 4-6) negotiate meanings within classroom conversations when developing topic-predicate structures. Further, we will show how teachers can use revoicing as a talk tool to encourage children to negotiate the predicates and perspectives that will be accepted to characterize the topic that they develop together.

### Keypoints:

- In this paper we will clarify how teachers and young children think together when developing topic-predicate structures in productive classroom conversations
- Data will be presented that may clarify how teachers' use of revoicing, a specific talk move, encourages children to develop a topic
- We argue that classroom conversations in which children develop topic-predicate structures, significantly influences their oral communicative competence

Keywords: topic-predicate structures, revoicing, classroom conversations, oral communicative competence, productive talk

### CLASSROOM CONVERSATIONS: LEARNING TO TALK, TALKING TO LEARN

Learning in school settings has become increasingly based on the interaction between teachers and children. In order for children to participate in today's educational activities they need sufficient oral communicative skills. Furthermore, previous research has shown that sufficient oral language skills supports children's social participation (Menting, van Lier, & Koot, 2011) and the degree in which they are accepted by their peers (Naerlandt, 2011).

Several scholars in the sociocultural paradigm argue that there is a close connection between children's oral communicative competence and learning (Amsel & Byrnes, 2002; Kleine Staarman, 2008; Mercer, 2000; Mercer & Littleton, 2007; Wells, 1999; Cazden, 2001). This means that better oral communicative skills seems to be related to higher quality classroom dialogues that, in turn, may influence the quality of children's thinking and learning and the extent to which they are able to participate in educational activities.

In productive classroom conversations, children simultaneously have to critically listen to the language of other participants, receive feedback from the teacher on their oral messages and actively, think, reason and produce language themselves. This results in an improvement of children's oral language competency (both skills and knowledge) and, consequently, increases the quality of shared thinking processes and academic learning (cf. Michaels & O'Connor, 2012). In one of our studies (van der Veen, van Oers, & Michaels, in preparation) we were able to show that productive classroom conversations - in which

children are given many opportunities to talk and reason – lead to improvements in children’s oral communicative competence as measured with the Nijmegen Test for Pragmatics (Embrechts, Mugge & van Bon, 2005). A Wilcoxon signed-rank test yielded a significant difference between pre- and posttest scores,  $z = -6.27, p < .001, r = .48$ .

It is, thus, important to involve children in productive classroom conversations from an early age in order to stimulate their oral communicative competence. Productive classroom conversations give children (and teachers) many opportunities for learning to talk and talking to learn.

### DEVELOPING TOPIC-PREDICATE STRUCTURES

Following Vygotsky (1987), the teachers’ and children’s progress in shared thinking in the context of classroom conversations entails a process of producing new predicates and linking them to a topic that is collaboratively developed (see also Dobraev, 1984). In the previous paragraph we argued that this process depends on children’s oral communicative competence. New predicates can be either accepted and included in the topic that the group is developing or can become a new topic for further reflection and negotiation (this latter process might lead to the group’s rejection of certain predicates; see also van Oers, 2012).

In the example below (table 1), one can see how a teacher and a group of eight children (aged 4-6) together develop the topic “electricity”. New predicates are negotiated, clarified, expanded upon and linked to the topic that this group has in mind. In doing so, the group progresses in shared thinking about this topic. For example, in line 16 the predicate ‘electrical power is dangerous’ is added, followed by a specification in lines 19 and 20 that ‘it is dangerous when you touch it’ and only when ‘the power is turned on’.

Table 1

*Excerpt of a productive classroom conversation on electricity*

|             | <b>Transcribed utterances</b>                      | <b>Additional comments</b>                                       |
|-------------|--|--|
| 1. Teacher  | Do you know what it is?                            | <i>Refers to a box with electricity experiments for children</i> |
| 2. Pupil 1  | Something with electricity                         |  |
| 3. Teacher  | Something with electricity?                        |  |
| 4. Pupil 1  | Yes  | <i>Nods</i>  |
| 5. Teacher  | Ok. And you have seen it before as well?           |  |
| 6. Pupil 2  | Yes. Also when being in the after-school program.  |  |
| 7. Teacher  | And what do you think it is?                       |  |
| 8. Pupil 2  | The same as Dion [pupil 1].                        |  |
| 9. Teacher  | And what says Dion?                                |  |
| 10. Pupil 2 | Electricity.                                       | <i>Pupil 2 has difficulties pronouncing the word electricity</i> |
| 11. Teacher | Something with electricity?                        |  |
| 12. Pupil 2 | Yes.   | <i>Nods</i>  |
| 13. Teacher | And what is it?                                    | <i>Refers to electricity</i>                                     |
| 14. Pupil 1 | That it is connected with electrical power.        |  |
| 15. Teacher | Electrical power? Ok.                              | <i>Surprised</i>   |
| 16. Pupil 3 | That is dangerous, electrical power.               |  |
| 17. Teacher | Is it dangerous, electrical power?                 |  |
| 18. Pupil 3 | Yes.   |  |
| 19. Pupil 4 | If you touch it.                                   |  |
| 20. Pupil 2 | But first you have to turn it on.                  |  |
| 21. Teacher | So if you touch it, electrical power is dangerous? |  |
| 22. Pupils  | Yes.   | <i>Together</i>  |

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| 23. Teacher | But what is it, electrical power?   |  |
| 24. Pupil 5 | Well, it is blue.   |  |
| 25. Pupil 2 | Yeah, you can...  |  |
| 26. Teacher | Wait a sec. Can Oscar finish his sentence?  | <i>Addresses pupil 2</i>                       |
| 27. Pupil 5 | I know what electrical power is. It is blue [...] I've seen it in a movie.  |  |
| 28. Teacher | Something blue. Can you expand on that?   |  |
|             | Because I don't understand you yet.   |  |
| 29. Pupil 5 | It is blue, electricity.  |  |
| 30. Teacher | Electricity is blue. So you are saying that you've seen blue electricity on the television?   |  |
| 31. Pupil 5 | Yes.  |  |
| 32. Teacher | Can you tell us what it looked like, other than blue?   |  |
| 33. Pupil 5 | When I was watching television, there was electricity. It touches a button and then the electricity came on his fingers.  |  |
| 34. Teacher | So the electricity came on his fingers? Do you understand what he means? Who understand what he means?  | <i>Addresses pupil 6, than the whole group</i> |
| 35. Pupil 2 | Yes.  |  |
| 36. Teacher | Can you expand on it?   |  |
| 37. Pupil 2 | He saw electricity on the television. Blue electricity. And that was it.  |  |
| 38. Pupil 5 | Yes.  |  |
| 39. Teacher | Is she right?   |  |
| 40. Pupil 6 | Yes, I think so. Yes, she is right.   |  |
| 41. Pupil 2 | I've seen electricity as well.  |  |
| 42. Teacher | But how does it look like?  |  |
| 43. Pupil 2 | I ones had electricity. Put it with the animals. And the electricity looked black. But it wasn't switched on yet, but my daddy touched it and he pretended it crinkled. |  |
| 44. Teacher | Do you understand it?   | <i>Addresses pupil 7</i>                       |
| 45. Pupil 7 | No  |  |
| 46. Teacher | Were where you?   |  |
| 47. Pupil 2 | I don't remember anymore.   |  |
| 48. Teacher | But you said something with animals?  |  |
| 49. Pupil 2 | Yes.  |  |
| 50. Teacher | And your daddy switched something on. What did he switch on?  |  |
| 51. Pupil 2 | Nothing. He just touched something like a wire.   |  |
| 52. Teacher | O, a wire? So you are saying, that there was electricity on that wire?  |  |
| 53. Pupil 2 | Yes.  | <i>Nods</i>                                    |
| 54. Pupil 8 | I understand it.  |  |
| 55. Teacher | Can you explain it?   |  |
| 56. Pupil 8 | Well, that the wire is connected with a socket. And electrical power comes from the socket and if you touch it, than it causes convulsions.                             |  |
| 57. Teacher | Convulsions? Ok.  |  |
| 58. Pupil 3 | Convulsion wire   | <i>Refers to an electric fence</i>             |
| 59. Teacher | Convulsion wire? What is it?  |  |
| 60. Pupil 2 | My grandmother has it.  |  |
| 61. Pupil 4 | That is something.  |  |
| 62. Teacher | Can you explain what it is?   |  |
| 63. Pupil 4 | Yes. Well, in the shelter of the goats. There is something like. And then it switches on and if you touch it will cause a convulsion.                                   |  |

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| 64. Pupil 8 | My brother ones had that.               |
| 65. Teacher | And do you know what your brother felt? |
| 66. Pupil 8 | It was very painful and it also stings. |

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### REVOICING AS A TEACHER TALK TOOL

In developing topic-predicate structures, the role of the teacher is essential as (s)he can orchestrate productive conversations in which children are encouraged to clarify their thoughts, listen to one another, reason, think together, et cetera (for example Michaels & O'Connor, in press; 2012). O'Connor and Michaels (1993; 1996) studied various classroom practices of teachers that were able to establish productive talk with children. One specific talk tool these teachers applied to establish productive conversations was revoicing. Revoicing can be seen as a particular kind of re-uttering of a child's initial contribution by another participant in the conversation (mostly the teacher). We argue that revoicing, as a talk tool, enables the teacher to value and position initial topic-related utterances (i.e. predicates) of children and, thereby, create a space in which these predicates can be negotiated, clarified, expanded upon, et cetera. For example in line 52, by revoicing, the teacher creates a space to further clarify what is being said in lines 43 and 51 about electricity and wires. In line 56, another pupil uses this space to expand on the initial predicate by saying that electrical power comes from a socket.

Further, revoicing might also be a powerful talk tool for establishing productive or exploratory forms of talk in which a topic is developed. This latter function of revoicing can best be explained by the examples of revoicing in lines 30 and 52. In these lines, the teacher explicitly encourages children to develop the topic the group has in mind and, as such, (s)he controls for "the diversity of utterances that can be acceptably produced about the topic" (van Oers, 2012, p.149). In line 30 (and further), the teacher creates a space to say more about what electricity looks like (other than blue). In line 52 (and further), the teacher encourages children to say more about the relation between electricity and wires. As such, (s)he controls for the diversity of predicates and ensures that children talk on-topic and, consequently, develop the topic.

To summarize, revoicing as a talk tool (1) creates spaces in which children can produce new or negotiate initial topic-related predicates and (2) encourages the group to link new predicates to the topic they have in mind and to develop this topic. The excerpt in table 1, illustrates how the teachers' revoicing moves encouraged children to the develop the topic 'electricity' and progress in thinking about it.

### CONCLUSION

In this paper we have argued that revoicing as a teacher talk tool explicitly encourages children to clarify, expand and negotiate what is being said about the topic that they collaboratively develop. Further, it can stimulate the process of shared thinking as children are encouraged to build on each other's predicates and develop the topic they develop. We argued that the quality of shared thinking in classroom conversations and the extent to which the group progresses in thinking, is highly dependent on children's oral communicative competence. Based on an example of a larger research project, we showed how teachers' use of revoicing in classroom conversations can create spaces of negotiation that may lead to the development of new topic-predicate structures. Further, these spaces give children chances to actively use language and, consequently, may improve their oral communicative competence.

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