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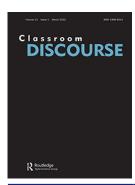
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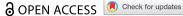
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Conversational functions of 'I know', 'you know' and 'we know' in collaborative writing of primary school children

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ABSTRACT

This paper discusses how primary school students, who are writing together in the context of inquiry learning, explicitly orient to knowing of oneself and others within the peer group. Using Conversation Analysis, we disclose the conversational functions of assertions holding 'I know', 'you know' and 'we know'. First, students position themselves as knowledgeable, to (i) express a preannouncement of a proposal, (ii) respond to a request for information and (iii) reinforce an assertion with use of an evidential. Second, students claim equal epistemic access, as a response to an action that conveys epistemic authority of a peer. Third, students indicate shared knowledge with other participants, to (i) pursue agreement, (ii) check the epistemic status of a co-participant, (iii) reject a proposal for grounds of relevance and (iv) mark shared. newfound knowledge. The different practices are discussed in terms of epistemics in conversation and dialogic writing.

KEYWORDS

Epistemic access; epistemic stance; collaborative writing: peer talk; conversation analysis

1. Introduction

The aim of this study is to understand how primary school students (aged 8–12 years old), who are writing together in the context of projects for inquiry learning, orient to knowing of oneself and others within a peer group. Focusing on how students relate to 'having knowledge' will help make a significant contribution to our current understanding of how orientations to epistemic access and stance function in the design of actions in peer talk and more specifically in the context of collaborative writing. When students expose what they know by producing epistemic displays (Herder et al. 2020), both symmetries and asymmetries of knowledge (Heritage and Raymond 2005; Heritage 2012a; Mondada 2011) may become apparent, since each student brings in her/his own knowledge, that originates from experiences both within and outside the classroom (Hedegaard 2008; Houen et al. 2017). In our data, we noticed how students explicitly designate 'knowing' of oneself and others, by use the epistemic verb (Kärkkäinen, 2003) 'to know' in various linguistic constructions. The children refer to their own knowledge with 'I know', and to knowing of peers with 'you know' and 'we know'. This is an interesting phenomenon to study in more detail, since knowledge has important implications for managing social relationships: 'In social interaction people orient to asymmetries in their relative rights to know about some state of affairs (access) as well as their relative rights to tell, inform, assert or assess something, and asymmetries in the depth, specificity or completeness of their knowledge' (Stivers, Mondada, and Steensig 2011, 13). The current study aims to understand how moral facets of having and sharing knowledge within a peer group are made relevant by the 8- to 12-year-old participants, and intends to contribute to conversation analytical research on epistemics in interaction (Heritage and Raymond 2005; Heritage 2012a), which provides the theoretical and methodological grounds for this study. According to Stivers, Mondada, and Steensig (2011), our current knowledge about how epistemic positions are taken through language and embodied action is largely based upon studies that have been carried out from the tradition of Conversation Analysis (Sacks, Schegloff, and Jefferson 1974), henceforth CA. The specific context of collaborative writing events in the context of inquiry learning is particularly interesting for analysing the occurrences with 'know', since the participants have to share and discuss their knowledge (see also the section on Data and method), in order to reach agreement on text content and linguistic translation (Flower and Hayes 1980; Vass et al. 2008) and accomplish their joint writing goals. Although several studies have established that writing in small groups or dyads can be beneficial for content learning (Rojas-Drummond, Albarrán, and Littleton 2008; Rojas-Drummond et al. 2020; Donahue and Lillis 2014; Klein and Boscolo 2016; Van Steendam 2016), up till now no explicit attention was payed to how participants relate to 'knowing' of oneself and others within these contexts, and thus to how moral dimensions of knowledge may play a role in the interaction. In the following, we will first provide background information on these dimensions, after which we will focus more specifically on previous studies on the use of 'know', as an introduction to our analysis of 'I know', 'you know' and 'we know'.

1.1 Dimensions of knowledge in interaction

Within the strand of CA research, three dimensions of knowledge are identified to be treated as salient by interactors: epistemic access, which refers to knowing and degrees of certainty, epistemic primacy; concerning the relative rights to know or claim; and epistemic responsibility, which has to do with social norms regarding, for instance the obligation to know what is in the domain of shared epistemic access or common ground (Clark 1996; Heller 2018), that are conveyed through recipient design of actions and turns (Stivers, Mondada, and Steensig 2011). Early studies of Goffman can be considered as groundwork on rights and territories of knowledge in interaction. Goffman (1967) explained how participants do interactional work to maintain 'face': their own face (self-respect) and the face of others (considerateness). Conversational partners are not only attentive to each other's face, but also to the distribution of knowledge among their addressees, and they tailor their utterances accordingly (Laury and Helasvuo 2016). Stivers, Mondada, and Steensig (2011) clarify how this is done in terms of alignment, cooperative responses that facilitate the proposed activity or sequence, matching the formal design preference of the turn, and affiliation, responses that cooperate at the level of action and affective stance. In the course of an interaction, participants may take on different epistemic positions on a gradual axis from 'unknowing (K-)' to 'knowing (K+)' (Heritage and Raymond 2005;

Heritage 2012a), which is generally referred to as epistemic stance. Epistemic stance 'concerns how the participants make relevant and manage epistemic states as part of constructing themselves as knowing and unknowing' (Melander 2012, 234), which includes degrees of certainty of knowledge and degrees of commitment to the truth of propositions (Enfield 2011; Morek 2015; Pomerantz 1984). For instance, an authoritative, expert-like epistemic stance is in essence interactively organised (Kärkkäinen 2003), and has proven to be highly routinised in terms of linguistic forms (Fox Tree and Schrock 2002; Keisanen 2007; Schleppegrell 2001; Sidnell 2012). Heller (2018) demonstrated how gaze and embodied stance are conveyed in peer talk, and concerning the sequential organisation of talk, Heritage and Raymond (2005) established how expressing assertions or assessments in a first position implies a claim of epistemic primacy. The speaker claims first-hand knowledge (Pomerantz 1980) and appeals to the social norm that participants with more detailed and in-depth knowledge on a specific domain have primary rights to make assertions.

Thus, having and sharing knowledge in interaction has moral dimensions in terms of rights and responsibilities. What interlocutors are to each other is presumed to be part of their common ground (Clark 1996); Stevanovic and Peräkylä (2014) explain that this is based on sociocultural knowledge (known information within a given community), personal knowledge (knowledge of which participants assume everyone knows), and local knowledge (resulting from the participants' local interactional contributions). The authors introduced a theoretical framework in which not only knowledge and power are considered for how participants orient to each other in social interaction, but also emotion. The authors contend that three facets of the participants' momentary relationships pertain to the organisation of action: an epistemic facet, a deontic facet that refers to the participants' entitlements to impose actions on their co-participants (Stevanovic and Peräkylä 2012), and an emotional facet concerning the emotions that the participants are allowed or expected to express to their co-participants. The epistemic, deontic and emotional facets are deployed as resources of action recognition, and the authors analyse common ambiguities to demonstrate how social relations are being anchored in these three orders.

Given the moral and social dimensions of having and sharing knowledge, a finegrained analysis of how students make 'knowing' and the right to know interactionally relevant is needed. This may contribute to our understanding of how intersubjective orientations are shaped in writing practices in school settings and generate new insights into the role of epistemics within this dialogic context (Alexander 2008; Wegerif 2011) that aims at reaching shared understanding of a task, sharing ideas, and supporting and encouraging each other to contribute and to value all contributions (Littleton and Mercer 2010; Mercer and Littleton 2013; Rojas-Drummond et al. 2020; Vrikki et al. 2019). CA-informed studies on epistemics in student-student interaction have shown the role of epistemic positioning in the social organisation of an event and in reaching shared understanding between participants (Back 2016; Heller 2018; Kämäräinen et al. 2019; Melander 2012). A relatively large proportion of the studies paid attention to how these trajectories are shaped by initial actions that convey a less knowledgeable (K-) position, for instance how epistemic work is steered and leads to resolving emerging knowledge gaps or epistemic asymmetry by information requests to mobilise help from a peer (Jakonen and Morton 2015; Melander Bowden 2019), by sequential patterns of helpseeking interactions (Svahn & Melander Bowden 2019), or by polar and wh-interrogatives (Kämäräinen et al. 2019). In our study, we will focus on the perspective of 'being knowledgeable' (K+), by analysing how 'I know', 'you know' and 'we know' are used in sequences of peer talk. Although it is evident that interlocutors have a range of options to express their stance towards knowledge of themselves and others, in this study we will focus exclusively on the most explicit way to refer to 'knowing', being the use of the epistemic verb 'know', in positive constructions (having knowledge). In the following, we will discuss earlier studies that have analysed linguistic constructions with 'I know' or 'you know' in data of adult conversations. To our knowledge, no specific CA research was conducted with use of 'we know' as a focal point.

1.2 Previous research on the conversational use of 'I know' and 'you know'

Mikesell et al. (2017) state that earlier studies have shown how I know is used to resist the news value or informativeness of what is being said, or to indicate a general agreement or understanding on the basis of prior knowledge. The authors studied a stand-alone 'I know', as a response to actions in a prior turn that conveys epistemic asymmetry. In these cases, the action of the first speaker, for instance advising, is treated as unnecessary (viz. violating the principle of recipient design, by displaying the presumption of an unknowing recipient), although the grounds of the action are accepted. With an 'I know'-response, the recipient expresses an 'assertion of knowledge or competence' (Heritage and Sefi 1992), claiming to have already independent access to the knowledge at hand. Likewise, responding with 'I know' to an assessment claims knowledge of the propositional content (Enfield 2011) of the assessment, endorsement of the evaluative stance, and access to the ground of the assessment. 'I know'-receipts may also function as a claim of both shared understanding and prior knowledge, and may have a strong function in affiliating with coparticipants (MacMartin, Coe, and Adams 2014). Heller (2018) points to the fact that previous studies are all on 'I know' in responsive positions. However, in her own data, Heller found the use of 'I know' in an opening turn, and explains that, in this case, the speaker displays an already determined and non-negotiable epistemic stance.

Instead of emphasising one's own epistemic access with a speaker-oriented stance marker, participants may explicitly address the recipient's knowledge, by using 'you know'. Apart from a literal usage of 'you know', Keevallik (2011) describes three different functions: informing as a pre-announcement, projecting a news delivery, and appealing to the recipients' knowledge and involvement. The latter use has moral aspects in terms of epistemic responsibility, which is also in focus in the study of Asmuβ (2011), who shows the moral aspects of 'you know' in terms of aligning and affiliating actions in an otherwise disaffiliating context. Appealing to shared knowledge with 'you know' draws attention to presupposed knowledge and can be seen as an attempt to locally establish agreement. The appeal to shared knowledge relates to questions of morality, as proposing shared knowledge prospectively implies that the co-participant can agree, and retrospectively implies that she/he probably should have displayed agreement before' (Asmuβ 2011, 234). Asmuß found that different actions are achieved with 'you know' depending on both turn-placement and the sequential location. Exploring the use of 'you know' as an interactional resource in a design workshop, Landgrebe (2018) described how 'you know' invites for further involvement of co-participants and shared epistemic stance.

1.3 The current research

This section has attempted to provide a concise overview of CA literature on the role of knowledge in interaction, demonstrating the moral dimensions of epistemic access, primacy and responsibility, in terms of alignment and affiliation. We focused on studies that explored the use of the epistemic verb 'know' (in positive constructions). The main question is: what is the conversational function of utterances with 'I know', 'you know' and 'we know' in the context of dialogic writing of 8-12 years old? The outcomes intend to contribute to CA research on epistemics in conversation (Heritage and Raymond 2005; Heritage 2012a; Stivers, Mondada, and Steensig 2011), particularly concerning the use of 'know', and to the socio-cognitive field of research on collaborative writing and learning in a dialogic context (Donahue and Lillis 2014; Klein and Boscolo 2016; Rojas-Drummond et al. 2017; Rojas-Drummond et al. 2020), in terms of how explicitly referring to differences and similarities in 'having knowledge' within a peer group may have implications for managing epistemic relationships.

2. Data and method

Data for this study consist of 38 video recordings of small groups of children in grades 2–6 of six primary schools in The Netherlands, engaged in collaborative writing and in the context of inquiry learning (Bereiter 2002; Littleton and Kerawalla 2012). Collaborative writing can be defined as 'all activity and communication surrounding the construction of texts by multiple contributors, whether written or spoken, and whether planned or incidental' (Bremner et al. 2014, 151). These activities were embedded in a larger, multi-annual project (2012–2015), conducted by the Centre for Discourse and Learning of NHL Stenden University of Applied Sciences, organised according to the principles of Educational Design Research (Collins and Bielaczyc 2004; Plomp and Nieveen 2007), and designed to acquire better understanding of how peer talk contributes to language proficiency and to aspects of knowledge building. The students worked in small, mixed age groups on small-scale projects on their own research questions, for about three weeks in two periods each year. A total of 76 students from middle grades (48 participants, aged 8-10 years old) and upper grades (28 participants, aged 10-12 years old) were involved in the writing events. We define a 'writing event' as a series of goal-oriented communicative actions to create a text together.

The research themes of the projects for inquiry learning were for instance: Regional history, Machines and Appliances, Sports and Games. Since almost all writing activities were unplanned but dependent on then and there choices of the students concerning the use of writing, and performed without specific instructions or guidance of teachers, we were able to capture naturally occurring peer talk. When students wrote a letter, the teachers provided them with an instruction-card holding information about structuring a letter. The total time of the recordings is 7 h and 34 m, with an average of around 11 minutes for a writing event. Over the course of 30 events, written products were created using pen and paper. In eight cases students used a word processor or presentation programme on a desktop computer: for writing notes (five events), a report (two events) and for creating a PowerPoint presentation (one event). Table 1 provides an overview of the different writing events, categorised in terms of the intended written products.

All video recordings of the collaborative writing events were transcribed using CA-conventions (see appendix A) and analysed according to the (CA) method of research (Have Ten 2007). All data

Table 1. Overview dataset.

Written products	Main activity	Number of events
Plan of action	Articulating research questions in learning log	6
Reflection	Reflecting on activities or progress in learning log	3
Mind map	Exploring a new research topic	3
List of questions	Formulating questions for an interview	3
Letter	Writing a letter to collect information	6
Notes	Taking notes while reading (online) source texts	8
Story	Writing a story about research findings	2
Report	Writing an informational text about findings	3
Poster	Writing short texts or captions at pictures	3
PowerPoint	Writing short texts in a presentation	1

were anonymised. We first selected the utterances holding the verb 'know', together with the personal pronouns I, you (singular) and we, in all possible, positive conjugations. This enabled us to compile three sub-collections (Clift and Raymond 2018; Mazeland 2006) of utterances, 'I know', 'you know' and 'we know', that were subsequently analysed in terms of linquistic formatting, turn placement (turn-initial, turn-medial, turn-final, as a separate turn; Kärkkäinen 2003), sequential position (Schegloff 2007), and the uptake by co-participants (Enfield and Sidnell 2017). In this paper, the notion practice refers to the verbal, vocal, bodily, or material resources that form and accomplish an action, and actions are what participants do in interaction (e.g. requesting, inviting, proposing, correcting): 'multiple practices of turn design, lexical choice, intonation, and sequential position frequently get orchestrated, in context-sensitive ways, to achieve single practices of action' (Robinson 2007, 68). The analysis of all selected utterances with 'know' disclosed how students accomplish actions and negotiate interpersonal trajectories (Schegloff et al. 2002) when talking and writing together, in other words: why referring to 'knowing' of oneself and others is considered relevant at that specific point in the conversation.

3. Results

We found 94 instances with use of the verb 'to know' (present and past tense) in our data, with the following distribution: 70 instances with 'I know', 16 instances with 'you know' and 8 instances with 'we know'. Different practices can be differentiated, concerning linguistic construction and turn placement, in both initiating and responsive positions, performing various conversational actions. These actions are all embedded in the cyclical process of writing. consisting of the three recursive phases of planning, translating and revising (Flower and Hayes 1980; Hayes 1996, 2011), which is observable in peer talk (Rojas-Drummond, Albarrán, and Littleton 2008; Vass 2007), and strongly driven by sequences of proffering and discussing proposals (Herder et al. 2018a). One type of utterance with 'you know' in an interrogative format was used to invite peers to come up with new ideas (nine instances), for instance: 'do you know one more?' or 'do you know anything else?'. We have excluded these utterances from further analysis in this paper, since we are primarily interested in positive claims with 'know' that are done as assertions, displaying an explicit orientation to knowledge. This limits the dataset for this study to 85 instances, with which we were able to uncover three main categories of how participants relate to each other in terms of epistemic stance, with use of 'know': positioning oneself as knowledgeable, claiming equal epistemic access, and indicating shared knowledge with other participants. In discussing our results, we will take these three categories as a point of departure (see the three main sub-sections), to show how this is accomplished by the students, with use of different conversational practices (see italicised subheadings).

4. Positioning Oneself as Knowledgeable

In this section we will demonstrate three different practices with use of 'I know' in various linguistic constructions, with which students position themselves as a knowledgeable member of the peer group, by (i) producing a pre-announcement to introduce a subtopic, (ii) providing a response to a request for information and (iii) reinforcing an assertion.

4.1 Introducing a Subtopic with 'I know one (more)' or 'I know it/something'

When students are generating ideas for the text, the use of a turn-initial 'I know' was found in utterances that are sequentially positioned as a pre-announcement, functioning as a prelude to a proposal. The most frequent format is 'I know one' or 'I know one more'. Variations are 'I know it' or 'I know something'. This may be done after an explicit request for new contributions, such as 'okay shall we think of some new questions now?', or as an initial action after a short silence or during a non-verbal activity. An example of a plain 'I know one more' can be found in Expert 1, in which two students are generating interview questions for the resident of the oldest house in the village, as part of their research project on local history. In line 24, Jolene proposes the question: in what year were you born? Matt accepts the proposal by nodding his head, and then Jolene start to write down this new question. While she is writing, Matt announces another idea in line 28: 'I know another one' (in Dutch 'Ik weet er nog wel één', in which the adverbs 'nog wel' indicate an accumulation). The utterance occurs in a multiactivity context (Mondada and Svinhufvud 2016), since Jolene is writing at the same time.

(1)

```
2.4
     Jolene
                   in welk jaar bent u ge ↑bo:ren
                   in what year were you ^bo:rn
25
                   [((nods))
     Matt
26
     Jolene
                   [((starts writing))
27
                   (13.0) ((Jolene writes))
                   ik weet er nog wel één ((Jolene schrijft))
28
     Matt
                   I know another one ((Jolene writes))
29
                   (1,0) ((Jolene writes))
30
     Matt
                   ehm (.) hoevee- (.) hoeveel jaren (.) hoeveel eh jaren
                   um (.) how ma- (.) how many years (.) how many um years
31
                   woont u al >in deze boerderij,< ((Jolene schrijft))</pre>
                   have you already lived >in this farm, < ((Jolene writes))
32
                   (.) ((Jolene stops writing))
33
     Jolene
                   onee die vraag hebben we al.o
                   ono we already have that question.
34
                   (21.0) ((Jolene writes))
```

Matt's pre-announcement projects the next action that is performed in lines 30 and 31: proffering a new proposal for an interview question (which is rejected by Jolene in line 33, who claims that they have already written down that question). In the above fragment, Matt does not wait for a response or a continuer after his pre-announcement, but instead continues his action after a short pause (line 29) in which Jolene continues writing. We have observed the same pattern in cases of small groups of three or four students, in which a participant announces a new contribution, while another group member is still writing. What happens next is that the student who performed the pre-announcement gets the conversational floor, immediately after the writing is done. This indicates that accomplishing a pre-announcement with 'I know' during silent writing, which projects a next action of uttering a proposal for the text, is a way to resume the organisational agenda (Boden 1994) of generating ideas for text content, and to secure an extended turn.

4.2 Responding to a Request for Information with 'I know that (already)' or 'I know (that)' + [PART]

In specific contexts of the inquiry learning projects, when students are generating questions (for an interview, a letter, or research questions), new proposals are generally expressed in an interrogative construction. For instance, students do not propose a new interview question as 'shall we ask a question about when the house was built?', but directly as the intended question: 'when was your house built?'. As a response, recipients tend to answer the proposed question, thus treating the proposal as a request for information (Herder et al. 2020). In some cases, the response is initiated with 'I know that (already)', with which a student emphasises her/his knowledgeable position. We will demonstrate how this type of utterance evokes an uptake that is merely focused on moral aspects of knowledge distribution among the participants. Excerpt 2 shows three students who are working on their project on Kings' Day, and creating a PowerPoint presentation that holds a quiz for their class-mates. In this fragment, a proposed question for the quiz is treated as a request for information. In line 42, June proffers to include the question 'which day is Kings' Day?'.

(2)

```
42
                   welke dag is koningsdag,
     June
                   which day is Kings' Day,
43
     Simone
                   \downarrowja maar hebben we daar wel een antwoord op,
                   ↓yes but do we have an answer to that,
44
     Levi
                   ja dat wee- weet ik √al zevenentwintig april.
                   yes I kno- know that ↓already twenty-seventh of April.
45
     Simone
                   dat is toch ^makkelijk
                   that is just Teasy
46
     June
                   ja veel te makkelijk (.) ((gaat voorlezen)) waarom is het
                   yes much too easy (.) ((starts reading aloud)) why is it
47
                   ^koningsdag
                   ↑Kings' Day
```

Simone questions whether or not they have the answer themselves, and then Levi claims with a prosodically marked 'I know', that he knows the answer already, which he demonstrates (Koole 2010) on the spot: on the twenty-seventh of April (line 44). Immediately after this, Simone claims that this is easy, which June confirms, indicating that the question is much too easy. She then initiates a new topic by reading aloud another question, implying that the idea to ask about the date is off the table now (lines 46–47). Surprisingly, the negative assessments of the two girls contradict what they have said previously (lines 42-43). These responses, in which they take an authoritative stance concerning the level of difficulty of the knowledge at hand, with which Simone and June orient to the epistemic order (Stevanovic and Peräkylä 2014), may be triggered by how Levi positions himself as being more knowledgeable than his peers. Thus, emphasising one's own knowing with use of a turn-initial and stressed 'I know' when providing an answer to a proposed question seems to create a competitive context in which other students tend to take a knowing stance as well.

Another type of response to a request for information with use of 'I know' is a linguistic construction in which the verb 'know' is combined with the Dutch particle (PART) 'wel', which in this case indicates the partiality of the response. The student is not able to provide a full answer, which he marks with use of this specific particle. This construction is found in both turn-initial and turn-final positions, but we noticed that this turn-placement is not differentiating for what it accomplishes. An example of this type of response to a request for information, is given in Excerpt 3. The fragment displays four students who are creating a PowerPoint presentation about their Halloween project, and meanwhile looking for information on the internet on a second computer that is operated by student Marian. Ben is creating the PowerPoint presentation and the group's learning log is put in front of his keyboard. Anouk is sitting behind Ben and Marian, together with the fourth student (who does not participate in the conversation that is displayed in the excerpt). In line 74, Ben puts himself in an unknowing position by articulating the question 'who invented it?'. This utterance, positioned as a first-pair part of a question-answer sequence, projects a conditionally relevant next action, being a response containing the name of the inventor of Halloween.

(3)

```
71
     Marian
                  ik °ga even verder lezen en° (dan) uh: ((leest hardop
                  I °will continue reading now and ° (then) um: ((reads
72
                  voor)) >het Ierse woord voor de maand ↓november< (.) het
                  aloud)) >the Irish word for the month ↓November< (.) that
73
                  is een eh: ((stopt met lezen))
                  is an um: ((stops reading))
74
     Ben
                  wie heeft het bedacht, ((gazes in learning log))
                  who invented it, ((gazes in learning log))
75
                  (1.6) ((Ben is typing))
76
                  dat is een ma:n. dat weet ik wel
     Marian
                  that is a ma:n. I know that [PART]
77
     Anouk
                  ja maar daar >moeten we dan nog< meer over vertellen,
                  yes but we >also have to< tell more about that,
```

After a short pause (line 75), Marian aligns with the projected action, by realising the expected second-pair part of the sequence, although she marks that she does not provide a full answer. The turn-final placement of 'I do know that' indicates that she marks herself as 'partially knowing' (Keevallik 2011). However, in line 77, Anouk acknowledges the provided answer ('yes'), and then reminds Marian of a necessitated next step, with which she demonstrates procedural knowledge of the activity and to some extent confirms that the response is not entirely adequate. This excerpt shows how all participants are explicitly oriented to the knowledge that is required to accomplish the collection and writing of information about their research theme, and that participants position themselves in relation to each other with reference to that knowledge (Melander 2012). Also, Marian's response may indicate that she tries to present herself as being a knowledgeable member of the group, despite the incomplete answer, in other words trying to save or maintain 'face': 'the positive value a person effectively claims for himself by the line others assume he has taken during a particular contact' (Goffman 1967, 5).

4.3 Reinforcing an Assertion with 'I know this because ...'

The third practice that conveys and stresses a knowing position is observable when students take an authoritative stance with use of 'I know', by claiming knowledge that accounts for an assertion in an argumentative position. In these contexts, that are particularly found in proposal sequences when generating ideas for the text, 'I know' appears in turn-medial positions, and the utterances are supported by evidentials, in terms of source-based or status-based authority (Enfield 2011). When students account for their knowledge, the utterances are generally formatted with the use of 'because' or 'so', after which an evidential is articulated following the epistemic display. The use of 'I know' in these particular contexts puts emphasis on the truth of an epistemic claim, and is used when participants may be approaching disagreement, or when explicit consent is not yet displayed. An example is shown in excerpt 4, in which 'I know' is expressed in the second independent clause of a compound sentence (lines 316-317). This utterance reinforces the assertion that was done as an other-correction regarding a proposal for the text. The fragment displays three boys who are writing a letter to children of a school in another village to ask for information about the history of that place. Just prior to the fragment, the students have formulated the first part of a question: 'we would like to have information'. In line 306, Elliot proposes a continuation for that question: 'about the history of your sch- of um: Antlersfield'. Travis performs an other-correction, replacing Antlersfield by the words 'your village', which provokes Elliot to question whether or not Antlersfield is a village (line 309).

(4)		
306	Elliot	over de geschiedenis van jullie sch- van eh: Antlersfield
		about the history of your sch- from um: Antlersfield
307	Travis	<u>nee</u> van jullie dorp.
		<u>no</u> of your village.
308		(0.8)
309	Elliot	>is het een dorp dan,<
		>is it a village then,<
310	Mel	<pre>ja tt.tt. ((legt potlood neer))</pre>
		yes tt.tt. ((puts down pencil))
311	Travis	°Antlersfield is [een dorp.°
		°Antlersfield is [a village.°
312	Mel	[Antlersfield is \uparrow <u>su</u> perklein
		Antlersfield is ↑supersmall
313	Travis	ja daar woont mijn [oom.
		yes my uncle lives [there.
314	Mel	\uparrow vroeger niet toen was het heel
		[\uparrow not in the early days then it was
315		groot. (.) groter dan Leopar[dey
		very big. (.) bigger than Leopar[dey
316	Travis	[daar woont mijn oom (.)
		[my uncle lives there (.)
317	\rightarrow	en ik weet dat het een <u>dorp</u> is.
		and I know that it is a vil lage.
318	Elliot	Oké.
		Okay.
319	Mel	°een heel klein dorpje°
		°a very small village°

In this example, Travis claims first-hand knowledge, by referring to the fact that he has personal connections in Antlersfield, since his uncle lives there (line 316), and this functions as an evidential to support his claim that Antlersfield is indeed a village. In doing so, Travis takes a knowing position based on source-based authority (Enfield 2011), which seems to be provoked by the lack of consent from Elliot, who raised doubt (Pomerantz 1984). Travis already claimed that Antlersfield is a village (line 311), and it becomes clear that he knows Antlersfield personally because his uncle lives there (line 313). However, Elliot has not yet displayed agreement, which triggers Travis (despite Mel's supportive contributions) to repeat the grounds for the truth of his claim, and to reinforce it with use of 'I know' (lines 316-317). In the next turn, Elliot does show agreement, leading to a final decision to write down 'village' (not in the transcript). So, in contexts where agreement is not immediately forthcoming or doubt is raised, students account for their knowledge with utterances using 'I know' that reinforce the truth of their epistemic claims.

This section has demonstrated how students claim (partial) knowledge and epistemic authority with use of a turn-initial, turn-medial and turn-final 'I know' in different sequential positions. In the following sections we will focus on how students indicate their epistemic access in relation to the knowledge of their peers, in terms of similarities in epistemic access.

5. Claiming Equal Epistemic Access

A recipient may claim to have equal epistemic access with a first speaker, in utterances that are constructed with 'I know' or 'I know that', 'I know + account', or 'I do know that' in responsive positions. These utterances occur in response to procedural proposals when students discuss the organisation of the task, assertions of fellow students, and instructions or other-corrections (Jefferson 1987) concerning linguistic issues in the written text. We will discuss the different contexts in which students claim to have independent and prior knowledge, and demonstrate that epistemic primacy and responsibility are negotiated within these sequences. 'I know'- responses claim equal epistemic access and mark the given information as 'not new', and as our examples (excerpts 5 and 6) will show, the nature of the knowledge at hand determines the use of a standalone 'I know' or 'I know' accompanied by an epistemic display (Herder et al. 2020), which then functions as an account.

Use of a turn-initial 'I know' in responsive positions may be used to claim equal, independent and pre-existing epistemic access. 'I know'-responses are found when participants respond to an (unsolicited) instruction on procedural or linguistic issues, other-corrections or specific knowledge claims of peers, grounded in the domain of shared epistemic access. An example is given in Excerpt 5. Two girls generate interview questions for the owner of a bar annexe camping, and in line 222 Caren proffers to ask if they had coffee in former times. Maya accepts the idea nonverbally by writing down the new suggestion (Herder et al. 2018a), which is the seventh question (line 224). While she is writing, Caren instructs her to use two d's in the word hadden (had), in line 226. The moment and place at which Caren pronounces this makes it plausible that she is trying to prevent a spelling error here. This analysis is reinforced by the fact that Maya continues to write and does not give the impression that she has to correct an error already made (which is generally marked by a short stop in the writing). To substantiate this viewpoint, it can be seen that in line 224 Caren also gave an instruction as to where Maya should write down the new sentence (being at 'question 7'). The utterance in line 226 seems to be a continuation of her instructing contributions.

```
(5)
222
      Caren
                    hadden jullie vroeger ook (.) koffie.
                    did you in former times also have (.) coffee.
223
                    (4.8) ((Maya is writing and Caren reads along))
224
      Caren
                    bij >°zeven.°< ((Maya schrijft))</pre>
                    at >°seven.°< ((Maya is writing))
225
                    (4.0) ((Maya is writing and Caren reads along))
226
                    dee dee ((dicteert))
      Caren
                    dee dee ((dictating))
227
                    (.)
                    > "weet ik." < ((schrijvend))</pre>
228
      Maya
                    >°I know.°< ((writing))</pre>
                    (22.0) ((Maya is writing and Caren reads along))
229
```

Caren positions herself as knowledgeable (line 226), by performing a spelling instruction that displays the presumption that Maya is unknowing. Maya responds to the spelling instruction with 'I know' (line 228), formatted as a separate turn, resisting the action of Caren, although she acknowledges the accuracy of what is said ('hadden' is indeed with two d's). Thus the initial action of Caren was not recipient designed, since she did not take into account the state of knowledge of her co-participant. In contexts of linguistic and also procedural instructions, for instance about the amount of questions the group has to generate before finishing their task, students mainly respond with a stand-alone, unaccounted 'I know' as a separate turn.

When responding to an epistemic claim of a peer, students use linguistic constructions with 'I know that' or 'I know' plus in most cases an account that acknowledges the truth of the initial claim. In the previous example (Excerpt 5), with the use of 'I know', student Maya orients to both the deontic order and the epistemic order (Stevanovic and Peräkylä 2014) of the social relationship. This indicates that the responsive 'I know' is in essence produced in an argumentative context. The following example will however demonstrate that the use of a responsive 'I know' is also used in more affiliating contexts. Excerpt 6 displays a fragment of the interaction between Liz, Owen, Jesse and Abby, who are generating research questions about 'farms in former times'. Previous to this fragment, Jesse proffered to ask which farm animal is the most famous, but Liz pointed out that this is similar to a question they have already written down: 'which animal is the most suitable for a farm?'. In line 152, she repeats the core of that question, and then Owen claims that the most suitable animal is a chicken.

(6)

```
152
                 het meest °geschikt voor een boerderij.°
      Liz
                 the most "suitable for a farm."
153
                 (.)
154
      Owen
                 da's een ↑KIP
                 that's a TCHICKEN
                 (0.9) ((Liz gazes smiling at Owen))
155
156
      Liz
                 wij hebben ook kip- eh: kippen ^hoor,
                 we also have chick- um: chickens TPRT,
157
                  (.)
158
      Owen
                 ja dat √weet ik (.)ik [ben een keer bij jullie
                 yes I ↓know that (.) I [have been at your
159
                 ↓thuis geweest.
                 ↓house once.
160
                  [((cackles like a chicken))
      Abby
161
      Jesse
                 [ik heb ze ook zien schreeuwen (.) eh kakelen.
                  ((glimlachend))
                  [I have also seen them scream (.) um cackle. ((smiling))
```

In line 156, Liz expands on the subject of chickens, by saying that she and her family have chickens at home, followed by 'hoor' (literally 'hear'), a Dutch utterance-final pragmatic particle (represented in the transcript as PRT) that has been described as 'retroactively reinforcing or emphasises an aspect of the preceding utterance' (Mazeland and Plug 2010, 162). Owen then affiliates with Liz' utterance, by responding with 'yes I know, I have been to your house once'. The responsive, turn-initial 'I know that' is complemented with an account, claiming source-based authority, which in this case proves the fact that he has equal epistemic access to the fact that Liz has chickens at home. Jesse confirms this as well, by indicating that he has seen the chickens cackle (line 161). In this example, Liz obviously has primary rights to the knowledge, yet the other students claim equal access, treating the information as 'not new'. The two boys accordingly confirm Liz's statement, which in this case seems to create an environment of confidentiality and solidarity among the three participants. This social affiliation is reinforced by the fact that the children are smiling at each other when they make their statements. Thus, the responses by Owen and subsequently Jesse seem to address the lack of newsworthiness of the initial utterance by Liz (with the use of an evidential as an overt orientation to the epistemic order of their social relationship), but can also be interpreted as affiliative displays of agreement (displaying an orientation to the emotional order). This ambiguity may be caused by the fact that Liz' utterance ('wij hebben ook kippen') is done in a quite defensive manner (with use of the emphasising adverb 'hoor'), which may 'lead the recipients to wonder what their responses actually need to deal with, in order to count as adequate responses' (Stevanovic and Peräkylä 2014, 196).

So, students use 'I know', whether or not complemented with an account for their claim of equal access, as a response to a knowledge claim of a co-participant. In all these cases, responding with 'I know' performs two different actions, addressing both the propositional content of the assertion and the moral dimension of the distribution of knowledge. Use of 'I know' then acknowledges the truth of what was said by a co-participant and validates what is in the shared domain of knowledge, but also addresses the relative rights of participants to assert something. In addition to this, we noticed in other cases how students may revoke an earlier statement with use of 'I know', as a response to a disagreement with their statement or a disaffiliating response in cases of assessments. For example, when one student claims that the blue colour of the Dutch flag may differ in hue and that this is a strange phenomenon, an assessment for which he solicits agreement with a tag question, another student provides an explanation ('because not everyone has dark colours'). This utterance confirms the truth of the initial observation, but disaffiliates with the assessment. The initial speaker then immediately responds with 'I know', with which he invalidates his earlier statement that this is strange. Revoking or nuancing an earlier statement after disagreement or rejection of a peer was observed recurrently, which indicates that 'I know' in these cases does not address the knowledge at hand, but merely functions on the level of epistemic status.

In this section, we have demonstrated how students claim having equal epistemic access, as a response to an utterance of a peer who takes (more or less explicitly) a knowledgeable stance. In the following section, another way of referring to epistemic symmetry is in focus, that is when a student addresses shared knowledge of all participants, with use of 'you know' or 'we know'.

6. Indicating Shared Knowledge with Other Participants

The third main use of 'know' that displays a knowledgeable position, and shows how students relate to each other in terms of epistemic stance, aims at orienting coparticipants to knowledge that is in the shared domain. We distinguished four different practices in which referring to shared epistemic access is made relevant. A speaker may address presupposed knowledge of other participants with use of 'you know' (i) to pursue agreement, or (ii) to indicate that certain knowledge is presupposed. Specific linguistic constructions with 'we know', explicating a mutual stance, are used (iii) to reject a proposal on grounds of relevance or (iv) to refer to shared, newfound knowledge.

6.1 I Pursuing Agreement with 'you still know' or 'you just know'

Participants may explicitly call on shared epistemic access of a recipient, by referring to specific knowledge that is supposed to be in the shared domain of knowledge. In these cases, a turninitial 'you know' is used to call on mutual knowledge of all participants. This is done to pursue agreement in proposal sequences, as we will demonstrate with Excerpt 7, that displays four students who are writing a story about a specific stone pole with historical value, in their village Eastingstones. At this point, a small boy who stumbles is introduced to the story, and the students start thinking about what will happen next, after Alisia reads aloud what they have written down so far (line 177). In line 180 Jonas suggests that this boy went to the attic, which is

rejected by Frances (line 181). Jonas then points Frances to the fact that she does not have the deontic rights (Stevanovic and Peräkylä 2012) to decide this, which is interrupted by Alisia who calls on her peers to *remember* specific information concerning the story line (see line 183, which we have translated as 'you still know', to emphasise the use of the epistemic verb 'know').

(7)

```
177 Alisia
                   √nou (.)((leest voor)) er was eens een jongetje.
                   ↓well (.) ((reads aloud)) once upon a time there was
                   a little boy.
178 Megan
                   ja. (.) hij ↑struikel[de
                   yes. (.) he \frac{1}{s}tumb[led
179
    Alisia
                                      [ehm hij kwa:m ((schrijvend))
                                      [um he ca:me_ ((writing))
                   naa:r de ↑zo:lder
180
    Jonas
                   to: the \(^a:\)ttic
181
     Frances
                   √nee (.) °(daar ging hij niet) door°
                   ↓no (.) °(he didn't go through) there°
                   ja (.) maar jij [°>bent niet de ↑baas<° dus::
182
    Jonas
                   yes (.) but you [°>are not the ^boss<° so::
183 Alisia
                                    [weet je ↑nog (.) weet je nog ↑jongens
                                    [you still Tknow (.) do you still know
184
                   (.)((stopt met schrijven)) wat ehm dan was ↑meester het
                   ↑guys (.) ((stops writing)) what um then ↑schoolmaster
                   jongetje, (.) en Mary en zo die vertelde het verhaal,
185
                   was the little boy, (.) and Mary and all was telling the
186
                   (.) >weet je nog, < dan was meester het ↑jongetje en hij
                   story, (.) >you still know,< then schoolmaster was the
187
                   eh pakte twee ^bakken (.)>twee pannen zeg maar< waar dat
                   little Tboy and he um took two Tbins (.) >or let's say
                   pans<
188
                   paaltje van Eastingstones, (.) dus dat gaan we niet
                   ↓doen
                    where that little pole of Eastingstones, (.) so we won't
                   be doing ↓that
                   (0.8) ((Jonas screeches))
189
                   zo is het echte verhaal.
190 Alisia
                   that is the real story.
```

Alisia asks her peers if they still know what their schoolmaster and Mary once told and acted out, concerning the real story about the little pole (lines 183-188). The turn-initial placement of 'you know' serves as a projection for displaying agreement by the other participants, with her statement that they won't be following the suggestion of the attic, since that does not agree with the real (original) story (line 190). Her way of describing the shared memory as visually as possible and asking her fellow group members three times if they also still know that this event took place strengthens the persuasiveness and invites to affiliate with the story. Moreover, the addressees are made accountable for their state of knowledge about the little pole, assuming that everyone knows the 'original story', which should provide the grounds for accepting the story line as suggested by Alisia, and to disagree with Jonas' idea of the attic. Alisia tries to establish a 'common ground' by drawing on the socio-cultural knowledge (Stevanovic and Peräkylä 2014) of her classmates: because it concerns a story that is obviously shared in the context of school, she expects every participant to know it. Thus, calling on presupposed knowledge of peers, which addresses epistemic responsibility of peers, is a way to pursue agreement. This use of 'you know' was predominantly observed in (potentially) conflicting contexts.

Another way to refer to shared knowledge in argumentative positions is in a linguistic construction with 'you just know', referring to general, well-known knowledge. This may be done for instance to account for a rejection of a proposal, as we will illustrate with Excerpt 8, showing four students who are generating interview questions for a hammer smith. Unusually, all students write down the generated questions in this event, on separate sheets of paper. Previous to the fragment, Mike proposed to ask if the hammer smith produces dogs' trays, but Liam displayed his disapproval of that suggestion. However, Olivia supports the idea, and then Mike proffers to write it down (line 159), explicitly inviting Liam to join. However, Liam still disagrees with the proposed question and asks (line 161): 'what does it actually mean?', with a strong negative undertone. Mike repeats this utterance, most likely as a repair-initiation (Jefferson 1987), and then Liam provides an account for his disaffiliating action, in lines 163-164.

(8)

```
159
   Mike
                  >zullen we< nee gaan we opschrijven toch ^Liam
                  >shall we< no we're going to write it down right \Liam
160
                  (2,0) ((Mike starts writing))
161
    Liam
                  wat stelt het eigenlijk ↓voo:r. ((fronsend))
                  what does it actually √mea:n. ((frowning))
162
    Mike
                  ((stopt schrijven)) wat stelt het eigenlijk Tvoor
                  ((stops writing)) what does it actually \textsquare
163 Liam
                  want je weet gewoon dat ze hondenbakjes maken, want
                  because you just know that they produce dogs' trays,
```

```
een smid maakt alles wat van <u>ij</u>zer is.

because a hammer smith makes everything made of <u>iron</u>.

165 Olivia hondenbakjes kunnen †ook van ijzer zijn.

dogs' trays can †also be made of iron.

166 Mike ja. †en van <u>steen.</u>

yes. †and of stone.

167 Liam ja steen.

yes stone.
```

Liam claims that 'you just know' that a blacksmith produces everything that is made of iron, including dogs' trays. The 'you' in this linguistic construction refers to a general 'you' as in 'people know', with which Liam designs his account as a generalised assertion (Morek 2015), taking an authoritative stance. Similar to what we noticed in contexts of reinforcing claims with use of 'I know' accompanied by accounts, students take an authoritative stance by using generalised assertions with 'you just know', in conflicting contexts where agreement does not seem to be reached immediately.

6.2 Ii Indicating Presupposed Knowledge from a Co-participant with 'you know this + [TAG]'

Use of 'you know' in a turn-initial position in the first-pair part of an insertion sequence may be used by a speaker to indicate that he presupposes that a recipient shares specific knowledge. This is demonstrated in Excerpt 9, displaying Caren and Maya who we introduced in Excerpt 5. The students have discussed a theatre or dance hall at the camping/bar, and have just written down the eighth interview question 'can we see the dance floor?'. Then Maya mentions the presence of a disco ball (line 308), and Caren starts writing, which suggests she will write a question about a disco ball. While Caren is writing, Maya initiates her utterance (line 313) with 'you know that + [TAG]?', which indicates that she supposes that her co-participant knows what a disco ball is. The communicative function of the Dutch particle 'hè' is to solicit agreement and strongly prefers a confirming response (Enfield, Brown, and De Ruiter 2012).

```
(9)
307
    Caren
                  nja eh: ja nege[n-
                  myeah um: yes ni[ne
308
                                  [er is ook een discobal bij.
    Maya
                                    [there is also a disco-ball.
309
    Caren
                  nja. ((begint te schrijven))
                  myeah. ((starts writing))
310
                  (2.4) ((Caren is writing))
311 Caren
                  <he:bben> ((schrijvend))
                  <ha:ve> ((writing))
```

```
312
                  (4.6) ((Caren is writing))
313 Mava
                  je weet wel hè, (.) [zul]ke vierkantjes zijn op de
                  you know that [TAG], (.) [such] little squares are on the
314
    Caren
                                       [mm hm]
                                            [mm hm]
315 Maya
                  vloer [.h] en daar geven ze dan lich[t.
                  floor [ h] and there they give l[ight.
316 Caren
                         [ja.]
                                                        [maar ik weet wel dat
                                                   [but I know that they
                         [yeah.]
                  ze daar een discobal hebben 'ja'. (.)het is gewoon een
317
                  have a disco ball over there °yes°. (.) it is just a
318
                  goeie vraag.
                  good question.
```

In line 314 Caren produces a minimal response token (mm hm), and after Maya explains what a disco ball is, Caren responds with 'yeah', which is an acknowledgement token, displaying positive alignment (Gardner 2001). She then takes the floor and claims to know that there is indeed a disco ball, which is a type of use of 'I know' that we discussed in the section on claiming equal epistemic access. Caren concludes with a positive assessment of the proposed question. As this example demonstrates, soliciting confirmation that certain information is in the domain of shared knowledge, in this case personal knowledge (Stevanovic and Peräkylä 2014), may be done to ensure that the interlocutors are 'on the same page', especially when a recipient does not affiliate with the initial utterance.

6.3 Iii Rejecting a Proposal with 'we already know (that)'

In an earlier study that we conducted on the same dataset as for this current study, we found that students refer to shared knowledge of all participants with use of 'we know' as a means to reject a proposal for a research or an interview question (Herder et al. 2018b). We will address this type of utterance again in the current paper, as part of our collection of utterances with 'know' and the personal pronoun 'we'. Claiming that certain knowledge, being the answer to a proposed question (for instance for an interview), is already in the common ground, marks a proposal for a question as irrelevant. An example is given in Excerpt 10, which represents an earlier moment from the conversation introduced in Excerpt 9. The students have just written down the interview question 'how do they make tools?', and after Paula finishes her writing (lines 24), Liam introduces the topic 'how the fire-machines get started' (lines 26-27), most likely as a lead-up to formulating a proposal for the next interview question. However, when Mike rejects the knowledge claim of his peer (lines 28-30), Liam withdraws his earlier statement, by indicating that they don't have to ask a question about this, because they already know the answer (line 32).

(10)

```
24
     Paula
                 punt. ((stopt met schrijven))
                 full-stop. ((stops writing))
25
                 (5.8) ((Olivia is writing))
26
    Liam
                 ik ↑w:eet hoe die machines van vuur aangaan daar >gooien
                 I \(^\text{kn:ow how those fire-machines get started >they}\)
27
                 ze gewoon ko:len in, < en steken ze 't aan.
                 just throw coa: ls in it, < and light it.
                 nee hoor, daar zit gewoon een s:oort lu:chtventilatie (.)
28
    Mike
                 no actually, there is just some ki:nd of ai:r ventilation
29
                 om het vuur wat ^ho:ger te blazen. (((beeldt uit met
                 (.) to blow the fire a little hi:gher. ((depicts with
30
                 handen)) ((Olivia is gestopt met schrijven))
                 his hands)) ((Olivia stopped writing))
31
                 (0.2)
             → maar we hoeven die vraag niet, want we weten het al.
32
    Liam
                 but we don't need that question, since we already know it.
                                               ).< ((boze blik naar Liam))
33
    Mike
                 >maar hoe (
                 >but how (
                                            ). ((angry gaze at Liam))
34
    Liam
             \rightarrow weet niet, (.) maar als we het al \uparrowweten hoeven we het
                 don't know, (.) but if we Tknow it already we don't need
35
                 niet te te vra:gen.
                 to to a:sk.
36
    Mike
                 we weten het niet helemaal prefcies want misschien
                 we don't know exa:ctly, because maybe
37
                 (doet die machine) wel ↓anders (.) dat weten we
                 (that machine operates) ↓differently (.) we don't know
38
                 he:lemaa:l niet precies.
                 that precisely a:t a:ll.
39
     Paula
                 >maar moeten we dat dan ^opschrijven<
                 >but do we have to write that \down<
40
    Mike
                 ((starts writing))
```

In line 34 Liam repeats his statement (after responding to a suggestion by Mike that was not entirely audible, due to loud background noises), referring to 'that question', although an interview question had not yet been put into words (which supports the analysis that the utterance in lines 26–27 is a pre-announcement for a proposal). Mike then suggests that they do not *exactly* know how this works, which finally triggers Paula to ask her fellow students if they need to write down a question about this, showing that a clear decision has not yet been made. Thus, although in this case a lack of complete



knowledge leads to writing down the suggested question, collectively knowing the answer to a proposed question provides grounds for rejection, which is linguistically constructed with utterances holding 'we know' and 'already'.

6.4 Iv Claiming or Establishing Shared Knowledge with '(now) we know'

Students use 'we know' in a turn-initial position to refer to shared epistemic access of all participants. The utterances generally close a sequence, holding a positive assessment of what is jointly achieved, and provide a concluding statement about newfound, shared knowledge, which is positioned in post-expansions. As regards the writing the students are engaged in, this type of utterances occurs when students review what has been written down so far, or in response to reading new information in (online) source texts. Excerpt 11 exemplifies how Megan positively assesses the shared knowledge as an accomplishment of the group (line 146), evoked by the previous statement that the sheet of paper is almost completely filled with their mind map on horse riding.

(11)

```
143 Lauren
                  hij is bijna Thelemaal VOL
                  it is almost \(^{\completely}\) FULL
                  [((laat papier zien))
144 Lauren
                  [((shows paper sheet))
145 Ivy
                  [£hoe[hoe::£
                  [£whoo[hoo::£
146 Megan
                        [£hoe hoe:£ (.)£wij weten veel over paardrijden.£
                         [£whoo hoo:£ (.) £we know a lot about horse-riding.£
147
                  (3.8)
148 Ivy
                  ze zijn heel erg lief,
                  they are very sweet,
```

Megan's statement claims epistemic symmetry from the perspective of all participants, and has a strong affiliating function, which is highlighted by the joint laughter of lvy and Megan. The positive assessment closes the sequence: after a short silence, lvy proposes a new idea (line 148).

Utterances with 'we know' accompanied with 'now', initiating a post-expansion, emphasise a shift from an unknowing (K-) to a knowing position (K+) of the group. This transition is thus marked explicitly, as we will demonstrate with Excerpt 12, displaying two students who are taking notes while alternately reading aloud from a text-book about sluices. The first part of the fragment (lines 203-210) shows how Polly and Wesley are reading aloud together (not marked explicitly in the transcript for reasons of readability), when Wesley reads 'polder' and asks what that is (line 209). Polly doesn't know either, and later in the conversation (from line 282 onwards) the students are still reading aloud and taking notes, when they discover what a 'polder' is (lines 285–286).

```
(12)
```

```
de hoeveelheid,
203
    Polly
                  the amount,
204
    Weslev
                  de hoeveel h heid "water" (.) in (.) een rivier of,
                  the amou h mount of "water" (.) in (.) a river or,
205
    Pollv
                  in (.) een
                  in (.) a
                  in een pro- [pol::]der.
206
    Wesley
                  in a pro- [pol::]der.
207
    Polly
                               [°polder°]
                             [°polder°]
                          ((Wesley stops reading and gazes at Polly))
208
209
                  wat is dat eigenlijk,
    Weslev
                  what is that actually,
210
    Pollv
                  °hmm weet ik niet.°
                  °mm I don't know.°
((72 lines omitted))
282 Polly
                  ((wijst aan in boekje en gaat voorlezen)) het is een
                  ((points out in text-book and reads aloud)) it is a
283
                  sluis die zorgt dat ergens water uitgaat.
                  sluice that ensures that water comes out somewhere.
284
                  (1.7) ((Wesley gazes in the book and starts reading
                  aloud))
                  °<water uit komt mee[stal>° is dat een polder.
285
    Wesley
                  °<water comes out gene[rally>° that is a polder.
    Polly
286
                                       [meestal is dat een po:lder. (.)
                                         [generally that is a po:lder. (.)
287
    Polly
                  To:h nu weten we wat een polder is. (.) >dat wisten we
                  \hat{T}o:h now we know what a polder is. (.) >we did not know
288
                  even niet Thè<
                  that momentarily \right<
289 Wesley
                  nee.
                  no
```

After reading aloud together (lines 282–286), Polly displays the change-of-state token (Heritage 1984) 'oh', and states that *now* they know what a 'polder' is, which neither of them knew before. In Dutch, oh-prefaced declaratives are generally used to claim that the speaker now understands something he earlier did not understand or had misunderstood, and confirmation is treated as a relevant response (Seuren, Huiskes, and Koole 2016). The use of 'oh' and 'now' in line 287 (and the time indication 'momentarily') marks

a transformation in epistemic stance, and Polly's tag question 'right?' invites Wesley to affiliate with this utterance, which he does in line 289. This emphasises Polly's orientation towards the importance of shared knowledge in a cooperative participation framework, to bring their research project to a successful conclusion. The use of 'we' may also be regarded as having an affiliating function, since the use of this personal pronoun indicates symmetry in participation (Heritage 2004).

Taken together, shared stance taking with linguistic constructions holding 'you know' or 'we know' is employed to pursue agreement and give a positive assessment about (newfound) shared knowledge, in contexts that display a transition from an unknowing to a knowing position, which is in that case explicitly marked.

7. Discussion

The present study has focused on the conversational functions of 'I know', 'you know' and 'we know', and was designed to gain a better understanding of how primary school students, who are engaged in joint writing activities in the context of inquiry learning, explicitly orient to 'knowing' in peer talk. The analysis of the design of actions and turns of these utterances displayed various manners in which the participants relate to each other in terms of epistemic stance, divided in three main categories: (i) positioning oneself as knowledgeable, (ii) claiming equal epistemic access and (iii) indicating shared knowledge with other participants. We will discuss our findings from these perspectives.

Students position themselves as (more) knowledgeable, with use of 'I know', to perform different actions, displaying an ascending degree of taking a K+ status as a speaker: (i) doing a pre-announcement, (ii) responding to a request for information (with a partial or a complete answer) and (iii) reinforcing an assertion with use of an evidential claiming epistemic authority. A pre-announcement with 'I know' resumes the organisational agenda (Boden 1994) when generating ideas, and seems to secure an extended turn. Interestingly, utterances with a turn-initial 'I know' indicate an authoritative stance (Heller 2018; Kärkkäinen 2003), but this is not the case with pre-announcements in this specific context. When students respond to a request for information, we observed two types of responses with 'I know': linguistic constructions with 'I know that (already)' conveying a knowing stance, and constructions with which a student claims partial knowledge. A participant then aligns with the initial action by providing a type-conforming response, although he cannot fully meet the required action. This may be an indication of how an interlocutor tends to 'save or maintain face' (Goffman 1967), when sensing that she/he is likely to feel inferior with regard to her/his reputation as a knowledgeable participant. When students provide a complete answer to a request for information with use of a turn-initial 'I know', they adopt an overt knowledgeable stance, which creates a competitive context. Other students then tend to take a knowing stance as well, even when this contradicts their earlier assertions concerning the knowledge at hand. The fourth type of action to explicitly position oneself as knowledgeable is found in proposal sequences. When proposals are rejected or acceptance is not yet displayed by others, disagreement may be looming and students then claim epistemic authority by use of evidentials ('I know this because.'). This supports earlier findings by Pomerantz (1984) and Enfield (2011), who have shown how participants make use of evidence, based on first-hand knowledge or second-hand knowledge (Pomerantz 1980) to reinforce the truth of their statements.

In our data, source-based evidentials were only found in contexts where students use (online) textual sources, and the referred information was present in the immediate context. Use of evidentials from personal experiences, conveying status-based authority, was found more often and occurred to reinforce an account for a proposal and thus to pursue agreement.

Secondly, students claim equal epistemic access with use of a responsive 'I know', in a linguistic construction with an account or as a single turn. The latter type was predominantly found as a response to procedural or linguistic instructions. When students write down new content, one participant is writing while the others are closely monitoring how this is done and provide unsolicited spelling instructions. Giving instructions to a peer violates the principles of epistemic congruency and recipient design (Laury and Helasvuo 2016), since a lack of knowledge of the recipient is presumed (which is a facethreatening context). Similar to what Mikesell et al. (2017) demonstrated in their study, these 'I know'-responses acknowledge the accuracy of the action, but resist the authoritative stance of the co-participant. The utterances claim pre-existing knowledge or competence, and address social norms regarding the obligation of interlocutors to know what is in the common ground (epistemic responsibility).

Third, students use specific linguistic constructions indicating or establishing shared knowledge, with use of utterances holding 'you know' or 'we know' to (i) pursue agreement, (ii) indicate a presupposition of shared knowledge, (iii) reject a proposal (on terms of relevance) and (iv) claim shared, newfound knowledge. Linguistic constructions with use of 'you know' are used to pursue agreement, referring to shared or general knowledge. Students hold each other accountable for having specific knowledge, and use of a generalised assertion ('you just know') displays an authoritative stance by the speaker, who consequently reinforces his appeal to co-participants to show agreement. Claiming that something is in the domain of well-known knowledge creates a moral obligation to agree for co-participants, since common knowledge is difficult to reject. Furthermore, students use linguistic constructions with 'you know' to indicate a presupposition of shared knowledge with a co-participant, for which they seek explicit consent. The way in which 8-12 year old children use linguistic constructions holding 'you know', aiming at shared knowledge in (potential) argumentative, disaffiliating contexts, resembles the findings by Asmuß (2011) on the data from adult conversations. To conclude, students use a responsive 'we know' in order to reject a proposal ('we know that already') or to claim shared, newfound knowledge. In the latter use, a turn-initial 'we know' is used to positively assess a mutual state-of-knowledge, and to mark a transition from an unknowing to a knowing position together. Positive assessments address shared written outcomes and are done in sequence closing positions, which emphasises that students consider generated knowledge as a joint interactional accomplishment (Rojas-Drummond et al. 2010). We noticed that utterances holding 'now we know', explicitly indicating a shift to a knowing stance, were only present in contexts of dialogic reading (Maine 2013), in which students make use of textual sources to find new information on their research topic. Shared stance marking that includes all participants calls attention to the shared objectives and mutual responsibilities, which may contribute to a cooperative environment and thus to completing of the joint writing activity.

Students aged 8-12 years old who are creating one written product together in a content-based environment explicitly orient to similarities and differences in epistemic access, and to the relative rights to know or to claim knowledge within the peer group.

Although the students in our data are of a relatively young age, the findings do not indicate in any way that the students are not yet fully competent (as may be the case for even younger students; see Abbeduto and Rosenberg 1985; Bassano 1996; Hickman & Bassano, 2016) in using positive linguistic constructions containing the epistemic verb 'know'. The students use 'know' to position themselves as being well-informed, and they also employ this verb to hold fellow students accountable for recognising what is in the domain of shared (common) knowledge, or to rejoice in the acquisition or establishment of knowledge as a mutual achievement. To create or (re-)establish a common ground (Clark 1996), the students refer to elements of both sociocultural knowledge and personal knowledge (Stevanovic and Peräkylä 2014). In addition to their explicit orientation towards the epistemic (and in some cases deontic) order as resource for action recognition, the emotional facets of the participant's moment-to-moment relationships also seems to play a role. Responses with 'I know' then have an affiliating function, contributing to the emotional facets of the social relationship. Our data thus Although how students are oriented to shared knowledge with their peers, but at the same time it is noteworthy that linguistic constructions with 'know' holding the personal pronoun 'l' were produced to a much larger extent than utterances holding 'you' and 'we'. And although the use of 'I know' performs various functions, it may be hypothesised that being a knowledgeable member of the peer group is particularly important to the students, especially when a face-threatening action is conducted by a classmate.

Regarding the main activity of collaborative writing, the study has demonstrated how the different moral aspects of sharing and discussing knowledge with peers were triggered by this specific context, and seemed to impact the outcomes in terms of discussing and making joint decisions on text content. The 'l/you/we know'-constructions in argumentative contexts are mainly employed to convince co-participants of the relevance or truth of an idea for the text (e.g. to provide an evidential for a proposal, or to call on shared knowledge of fellow students). This has deepened our understanding of how moral dimensions of 'knowing' may play a role in learning and writing together, which makes a contribution to the existing literature on how writing in small groups may benefit content learning (e.g. Rojas- Drummond et al., 2008; Rojas-Drummond et al. 2020). In a more general sense, the conversational functions of utterances with 'know' demonstrate how dialogic practices (Kim and Wilkinson 2019; Vrikki et al. 2019) become apparent in educational dialogue or 'accountable talk' (Michaels et al. 2008), that includes supporting each other to contribute, making (partial) concessions, providing reasons for (dis)agreement, and providing evidence for expressed ideas. In a community of practice (Lave and Wenger 1991), learning and knowing are regarded as relations among people who are engaged in activities within specific sociocultural contexts. Insight into the different practices of children, which demonstrate how they relate to differences and similarities in knowing within a peer group, including how they employ this understanding to establish a common ground, contributes to our understanding of how such a community of practice is brought into being in peer talk. Taken these findings as a point of departure, future work may further scrutinise how dialogic (writing) events, in which students share and discuss knowledge as they talk and write together, may be optimised, taking also the moral dimensions of 'knowing' into account.



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References

Abbeduto, L., and S. Rosenberg. 1985. "Children's Knowledge of the Presuppositions of Know and Other Cognitive Verbs." Journal of Child Language 12 (3): 621-641. doi:10.1017/ S0305000900006693.

Alexander, R. 2008. Towards Dialogic Teaching: Rethinking Classroom Talk. Cambridge: Dialogos.

Asmuß, B. 2011. "Proposing Shared Knowledge as a Means of Pursuing Agreement." In The Morality of Knowledge in Conversation, edited by T. Stivers, L. Mondada, and J. Steensig, pp. 207-234. Cambridge: Cambridge University Press.

Back, M. 2016. "Epistemics and Expertise in Peer Tutoring Interactions: Co-constructing Knowledge of Spanish." Modern Language Journal 100 (2): 508-521. doi:10.1111/modl.12334.

Bassano, D. 1996. "Functional and Formal Constraints on the Emergence of Epistemic Modality: A Longitudinal Study on French." First Language 16 (46): 077-113. doi:10.1177/014272379601604605. Bereiter, C. 2002. Education and Mind in the Knowledge Age. Routledge.



- Boden, D. 1994. Business of Talk. New Jersey: Wiley.
- Bremner, S., A. Peirson-Smith, R. Jones, and V. Bhatia. 2014. "Task Design and Interaction in Collaborative Writing: The Students' Story." *Business and Professional Communication Quarterly* 77 (2): 150–168. doi:10.1177/2329490613514598.
- Clark, H. 1996. Using Language. Cambridge: Cambridge University Press.
- Clift, R., and C. Raymond. 2018. "Actions in Practice: On Details in Collections." *Discourse Studies* 20 (1): 90–119. doi:10.1177/1461445617734344.
- Collins, A. J. D., and K. Bielaczyc. 2004. "Design Research: Theoretical and Methodological Issues." *The Journal of the Learning Sciences* 13 (1): 15–42. doi:10.1207/s15327809jls1301_2.
- Donahue, C., and T. Lillis. 2014. "Models of Writing and Text Production." In *Handbook of Writing and Text Production*, edited by E. Jakobs and D. Perrin, 55–78. Nijmegen: De Gruyter. doi:10.1515/9783110220674.55.
- Enfield, N., P. Brown, and J. De Ruiter. 2012. "Epistemic Dimensions of Polar Questions." In *Questions: Formal, Functional and Interactional Perspectives (Language Culture and Cognition*, edited by J. De Ruiter, 193–221. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139045414.014.
- Enfield, N. J. 2011. "Sources of Asymmetry in Human Interaction: Enchrony, Status, Knowledge and Agency." In *The Morality of Knowledge in Conversation*, edited by T. Stivers, L. Mondada, and J. Steensig, pp. 285–312. Cambridge: Cambridge University Press. doi:10.1017/ CBO9780511921674.013.
- Enfield, N. J., and J. Sidnell . 2017. "On the Concept of Action in the Study of Interaction." *Discourse Studies* 19 (5): 515–35. https://doi.org/10.1177/1461445617730235
- Flower, L., and J. Hayes. 1980. "Identifying the Organization of Writing Processes." In *Cognitive Processes in Writing*, edited by L. W. Gregg and E. R. Steinberg, 3–30. N.J.: Erlbaum, Hillsdale.
- Fox Tree, J., and J. Schrock. 2002. "Basic Meanings of You Know and I Mean." *Journal of Pragmatics* 34 (6): 727–747. doi:10.1016/S0378-2166(02)00027-9.
- Gardner, R. 2001. "When Listeners Talk: Response Tokens and Listener Stance." Pragmatics & Beyond. New Series, Vol. 92. Amsterdam: Benjamins.
- Goffman, E. 1967. *Interaction Ritual; Essays on Face-to-face Behavior ([1st Ed.] Ed., Anchor Books, A596)*. Garden City, N.Y: Doubleday.
- Have Ten, P. 2007. Doing Conversation Analysis. London: Sage.
- Hayes, J. R. 1996. "A New Framework for Understanding Cognition an Affect in Writing." In *The Science of Writing. Theories, Methods, Individual Differences and Applications*, edited by C. M. Levy and S. Randell, pp. 1–27. Mayhwah, New Jersey: Lawrence Erlbaum.
- Hayes, J. R. 2011. "Kinds of Knowledge-Telling: Modeling Early Writing Development." *Journal of Writing Research* 3 (2): 73–92. doi:10.17239/jowr-2011.03.02.1.
- Hedegaard, M. 2008. "Children's Learning through Participation in Institutional Practice: A Model from the Perspective of Cultural-historical Psychology." In *The Transformation of Learning: Advances in Cultural-historical Activity Theory*, edited by B. V. Oers, W. Wardekker, E. Elbers, and R. van der Veer, 294–318. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511499937.019.
- Heller, V. 2018. "Embodying Epistemic Responsibility." *Research on Children and Social Interaction* 2 (2): 262–285. doi:10.1558/rcsi.37391.
- Herder, A., J. Berenst, K. De Glopper, and T. Koole. 2018a. "Nature and Function of Proposals in Collaborative Writing of Primary School Students." *Linguistics and Education* 46: 1–11. doi:10.1016/j.linged.2018.04.005.
- Herder, A., J. Berenst, K. De Glopper, and T. Koole. 2018b. "Reflective Practices in Collaborative Writing of Primary School Students." *International Journal of Educational Research* 90: 160–174. doi:10.1016/j.ijer.2018.06.004.
- Herder, A., J. Berenst, K. De Glopper, and T. Koole. 2020. "Sharing Knowledge with Peers: Epistemic Displays in Collaborative Writing of Primary School Children." *Learning, Culture and Social Interaction*, 24 24: 100378. doi:10.1016/j.lcsi.2020.100378.
- Heritage, J. 1984. "A Change-of-state Token and Aspects of Its Sequential Placement." In *Structures of Social Action*, edited by J. M. Atkinson and J. Heritage, pp. 299–345. Cambridge, England: Cambridge University Press.



- Heritage, J. 2004. "Conversation Analysis and Institutional Talk: Analysing Data." In *Qualitative Research: Theory, Method and Practice*, edited by D. Silverman, pp. 222–245. London: Sage Publications.
- Heritage, J. 2012a. "The Epistemic Engine: Sequence Organization and Territories of Knowledge." *Research on Language & Social Interaction* 45 (1): 30–52. doi:10.1080/08351813.2012.646685.
- Heritage, J. 2012b. "Epistemics in Action: Action Formation and Territories of Knowledge." *Research on Language & Social Interaction* 45 (1): 1–29. doi:10.1080/08351813.2012.646684.
- Heritage, J. 2013. "Epistemics in Conversation." In *The Handbook of Conversation Analysis*, edited by J. Sidnell and T. Stivers, pp. 370–394. Chichester, West Sussex, UK: Wiley-Blackwell.
- Heritage, J., and G. Raymond. 2005. "The Terms of Agreement: Indexing Epistemic Authority and Subordination in Talk-in-interaction." *Social Psychology Quarterly* 68 (1): 15–38. doi:10.1177/019027250506800103.
- Heritage, J., and S. Sefi. 1992. "Dilemmas of Advice: Aspects of the Delivery and Reception of Advice in Interactions between Health Visitors and First-time Mothers." In *Talk at Work*, edited by P. Drew and J. Heritage, 359–417. Cambridge: Cambridge University Press.
- Hickmann, M., and D. Bassano. 2016. "Modality and Mood in First Language Acquisition." In *The Oxford Handbook of Modality and Mood*, edited by J. Nuyts and J. van der Auwera, 1–16. Oxford University Press/Oxford Handbooks. doi:10.1093/oxfordhb/9780199591435.001.0001.
- Houen, S., S. Danby, A. Farrell, and K. Thorpe. 2017. "Web Searching as a Context to Build on Young Children's Displayed Knowledge." In *Children's Knowledge-in-interaction*, edited by A. Bateman and A. Church, 57–72. Singapore: Springer Science+Business Media. Retrieved from. doi:10.1007/978-981-10-1703-2 2.
- Jakonen, T., and T. Morton. 2015. "Epistemic Search Sequences in Peer Interaction in a Content-based Language Classroom." *Applied Linguistics* 36 (1): 73–94. doi:10.1093/applin/amt031.
- Jefferson, G. 1984. "Transcript Notation." In *Structures of Social Action: Studies in Conversation Analysis*, edited by J. Maxwell Atkinson and J. Heritage, ix–xvi. Cambridge: Cambridge University Press.
- Jefferson, G. 1987. "On Exposed and Embedded Correction in Conversation." In *Talk and Social Organization*. (*Pp. 86-100*), edited by G. Button and J. R. E. Lee, 86–100. UK: Multilingual Matters Clevedon.
- Kämäräinen, A., P. Björn, L. Eronen, and E. Kärnä. 2019. "Managing Epistemic Imbalances in Peer Interaction during Mathematics Lessons." *Discourse Studies* 146144561982923. doi:10.1177/1461445619829236.
- Kärkkäinen, E. 2003. "Epistemic Stance in English Conversation: A Description of Its Interactional Functions, with A Focus on I Think." Pragmatics & beyond, new ser. 115. Amsterdam: John Benjamins Pub.
- Keevallik, L. 2011. "The Terms of Not Knowing." In *The Morality of Knowledge in Conversation (Studies in Interactional Sociolinguistics*, edited by T. Stivers, L. Mondada, and J. Steensig, 184–206. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511921674.009.
- Keisanen, T. 2007. "Stancetaking as an Interactional Activity. Challenging the Prior Speaker." In *Stancetaking in Discourse: Subjectivity, Evaluation, Interaction*, edited by R. Englebretson, pp. 253–281. Amsterdam: John Benjamins.
- Kim, M., and I. A. G. Wilkinson. 2019. "What Is Dialogic Teaching? Constructing, Deconstructing, and Reconstructing a Pedagogy of Classroom Talk." *Learning, Culture and Social Interaction* 21: 70–86. doi:10.1016/j.lcsi.2019.02.003.
- Klein, P. D., and P. Boscolo. 2016. "Trends in Research on Writing as a Learning Activity." *Journal of Writing Research* 7 (3): 311–350. doi:10.17239/jowr-2016.07.03.01.
- Koole, T. 2010. "Displays of Epistemic Access: Student Responses to Teacher Explanations." *Research on Language and Social Interaction* 43 (2): 183–209. doi:10.1080/08351811003737846.
- Landgrebe, J. 2018. "'I Think You Know' Two Epistemic Stance Markers and Their Significance in an Innovation Process." Source Språk Och Interaktion 3, Nordica Helsingiensia 30: 107–131.
- Laury, R., and M. Helasvuo. 2016. "Disclaiming Epistemic Access with 'Know' and 'Remember' in Finnish." *Journal of Pragmatics* 106: 80–96. doi:10.1016/j.pragma.2016.07.005.



- Lave, J., and E. Wenger. 1991. "Situated Learning: Legitimate Peripheral Participation." Learning in Doing: Social, Cognitive, and Computational Perspectives. Cambridge: Cambridge University Press.
- Littleton, K., and N. Mercer. 2010. "The Significance of Educational Dialogues between Primary School Children." In *Educational Dialogues: Understanding and Promoting Productive Interaction*, edited by C. Howe and K. Littleton, pp. 271–288. London: Routledge.
- Littleton, K., and L. Kerawalla. 2012. "Trajectories of Inquiry Learning." In *Orchestrating Inquiry Learning. (Chapter 2)*, edited by K. Littleton, E. Scanlon, and M. Sharples, 31–47. Abingdon, NY: Routledge.
- MacMartin, C., J. B. Coe, and C. L. Adams. 2014. "Treating Distressed Animals as Participants: I Know Responses in Veterinarians' Pet-directed Talk." *Research on Language and Social Interaction* 47 (2): 151–174. doi:10.1080/08351813.2014.900219.
- Maine, F. 2013. "How Children Talk Together to Make Meaning from Texts: A Dialogic Perspective on Reading Comprehension Strategies." *Literacy* 47 (3): 150–156. doi:10.1111/lit.12010.
- Mazeland, H. 2006. "Conversation Analysis." In *Encyclopedia of Language & Linguistics*, edited by K. Brown, *second*,153–163.Oxford:Elsevier, doi:10.1016/B0-08-044854-2/00314-X.
- Mazeland, H., and L. Plug. 2010. "Doing Confirmation with Ja/nee Hoor. Sequential and Prosodic Characteristics of a Dutch Discourse Particle." *Prosody in Interaction* 406: 161–188. John Benjamins Pub Co.
- Melander Bowden, H. 2019. "Problem-solving in Collaborative Game Design Practices: Epistemic Stance, Affect, and Engagement." *Learning, Media and Technology* 44 (2): 124–143. doi:10.1080/17439884.2018.1563106.
- Melander, H. 2012. "Transformations of Knowledge within a Peer Group. Knowing and Learning in Interaction." *Learning, Culture and Social Interaction* 1 (3–4): 232–248. doi:10.1016/j. lcsi.2012.09.003.
- Mercer, N., and K. Littleton. 2013. Interthinking. Putting Talk to Work. New York: Routledge.
- Michaels, S., C. O'Connor, and L. Resnick. 2008. "Deliberative Discourse Idealized and Realized: Accountable Talk in the Classroom and in Civic Life." *Studies in Philosophy and Education* 27 (4): 283–97.
- Mikesell, L., G. Bolden, J. Mandelbaum, A. Bolanos-Carpio, D. Searles, W. Wei, and B. Angell. 2017. "At the Intersection of Epistemics and Action: Responding with I Know." *Research on Language and Social Interaction* 50 (3): 268–285. doi:10.1080/08351813.2017.1340711.
- Mondada, L. 2011. "The Management of Knowledge Discrepancies and of Epistemic Changes in Institutional Interactions." In *The Morality of Knowledge in Conversation*, edited by T. Stivers, L. Mondada, and J. Steensig, 27–57. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511921674.003.
- Mondada, L., and K. Svinhufvud. 2016. "Writing-in-interaction: Studying Writing as a Multimodal Phenomenon in Social Interaction." *Language and Dialogue* 6 (1): 1–53. doi:10.1075/ld.6.1.01mon.
- Morek, M. 2015. "Show that You Know Explanations, Interactional Identities and Epistemic Stance-taking in Family Talk and Peer Talk." *Linguistics and Education* 31: 238–259. doi:10.1016/j. linged.2014.10.004.
- Plomp, T., & Nieveen, N. (2007). An introduction to educational design research. Paper presented at the proceedings of the seminar conducted at the East China Normal University, November 23–26, 2007. Shanghai, China. Retrieved from www.slo.nl/organisatie/international/publications
- Pomerantz, A. 1980. "Telling My Side: "Limited Access' as a "Fishing" Device." Sociological Inquiry 50 (3–4): 186–198. doi:10.1111/j.1475-682X.1980.tb00020.x.
- Pomerantz, A. 1984. "Giving a Source or Basis: The Practice in Conversation of Telling 'How I Know'." *Journal of Pragmatics* 8 (5): 607–625. doi:10.1016/0378-2166(84)90002-X.
- Robinson, J. D. 2007. "The Role of Numbers and Statistics within Conversation Analysis." *Communication Methods and Measures* 1 (1): 65–75. doi:10.1080/19312450709336663.
- Rojas-Drummond, S., F. Maine, M. Alarcón, A. L. Trigo, M. J. Barrera, N. Mazón, M. Vélez, and R. Hofmann. 2017. "Dialogic Literacy: Talking, Reading and Writing among Primary School Children." *Learning, Culture and Social Interaction* 12 (C): 45–62.



- Rojas-Drummond, S., M. J. Barrera Olmedo, I. Hernández Cruz, and M. Vélez Espinosa. 2020. "Dialogic Interactions, Co-regulation and the Appropriation of Text Composition Abilities in Primary School Children." *Learning, Culture and Social Interaction* 24: 100354. doi:10.1016/j. lcsi.2019.100354.
- Rojas-Drummond, S. M., K. Littleton, F. Hernández, and M. Zúñiga. 2010. "Dialogical Interactions among Peers in Collaborative Writing Contexts." In *Educational Dialogues, Understanding and Promoting Productive Interaction*, edited by K. Littleton and C. Howe, 128–148. London: Routledge.
- Rojas-Drummond, S. M., C. D. Albarrán, and K. S. Littleton. 2008. "Collaboration, Creativity and the Co-construction of Oral and Written Texts." *Thinking Skills and Creativity* 3 (3): 177–191. doi:10.1016/j.tsc.2008.09.008.
- Sacks, H., E. Schegloff, and G. Jefferson. 1974. "A Simplest Systematics for the Organization of Turn-taking for Conversation." *Language* 50 (4): 696–735. doi:10.1353/lan.1974.0010.
- Schegloff, E. 2007. "Sequence Organization in Interaction." A primer in conversation analysis, 1. Cambridge: Cambridge University Press.
- Schegloff, E. A., I. Koshik, S. Jacoby, and D. Olsher. 2002. "Conversation Analysis and Applied Linguistics." *Annual Review of Applied Linguistics* 22: 3–31. Cambridge University Press. doi:10.1017/S0267190502000016.
- Schleppegrell, M. J. 2001. "Linguistic Features of the Language of Schooling." *Linguistics and Education* 12 (4): 431–459. https://doi.org/10.1016/S0898–5898(01)00073 –0
- Seuren, L., M. Huiskes, and T. Koole. 2016. "Remembering and Understanding with Oh-prefaced Yes/no Declaratives in Dutch." *Journal of Pragmatics* 104: 180–192. doi:10.1016/j.pragma.2016.02.006.
- Sidnell, J. 2012. "Who Knows Best? Evidentiality and Epistemic Asymmetry in Conversation." *Pragmatics and Society* 3 (2): 294–320. doi:10.1075/ps.3.2.08sid.
- Steendam, E. van. 2016. "Editorial: Forms of collaboration in writing." *Journal of Writing Research*, 8 (2), 183–204. https://doi.org/10.17239/jowr-2016.08.02.01.
- Stevanovic, M., and A. Peräkylä. 2012. "Deontic Authority in Interaction: The Right to Announce, Propose, and Decide." *Research on Language and Social Interaction* 45 (3): 297–321. doi:10.1080/08351813.2012.699260.
- Stevanovic, M., and A. Peräkylä. 2014. "Three Orders in the Organization of Human Action: On the Interface between Knowledge, Power, and Emotion in Interaction and Social Relations." *Language in Society* 43 (2): 185–207. doi:10.1017/S0047404514000037.
- Stivers, T., L. Mondada, and J. Steensig. 2011. "Knowledge, Morality and Affiliation in Social Interaction." In *The Morality of Knowledge in Conversation*, edited by T. Stivers, L. Mondada, and J. Steensig, 3–24. Cambridge: Cambridge University Press. doi:10.1017/CBO9780511921674.002.
- Svahn, J., and H. Bowden. 2019. "Interactional and Epistemic Challenges in Students' Help-seeking in Sessions of Mathematical Homework Support: Presenting the Problem." *Classroom Discourse* 2019. doi:10.1080/19463014.2019.1686998.
- Vass, E. 2007. "Exploring Processes of Collaborative creativity—The Role of Emotions in Children's Joint Creative Writing." *Thinking Skills and Creativity* 2 (2): 107–117. doi:10.1016/j.tsc.2007.06.001.
- Vass, E., K. Littleton, D. Miell, and A. Jones. 2008. "The Discourse of Collaborative Creative Writing: Peer Collaboration as a Context for Mutual Inspiration." *Thinking Skills and Creativity* 3 (3): 192–202. doi:10.1016/j.tsc.2008.09.001.
- Vrikki, M., L. Wheatley, C. Howe, S. Hennessy, and N. Mercer. 2019. "Dialogic Practices in Primary School Classrooms." *Language and Education* 33 (1): 85–100. doi:10.1080/09500782.2018.1509988.
- Wegerif, R. 2011. "Towards a Dialogic Theory of How Children Learn to Think." *Thinking Skills and Creativity* 6 (3): 179–190. doi:10.1016/j.tsc.2011.08.002.



Appendix A

Transcript notation, based on Jefferson (1984) and Ten Have (2007).

[word overlapping speech; point at which an ongoing utterance is joined by another

[word utterance

word= break and subsequent continuation of contiguous utterances

=word

(0.4) pause (in seconds)

(.) micro pause (less than 0,2 seconds)

stopping fall in tone (not necessarily at the end of a sentence)
 continuing intonation (not necessarily between clauses of sentences)

rising inflection (not necessarily a question)animated tone (not necessarily an exclamation)

flat intonation

↓ marked falling shift in intonation
 ↑ marked rising shift in intonation
 £word£ smiley voice or suppressed laughter
 -word- talk that is quieter than surrounding talk
 WORD talk that is louder than surrounding talk

word emphasis

: extension of the sound that follows (0,2 seconds for every colon)
>word< speech is delivered at a quicker pace than surrounding talk
<word> speech is delivered at a slower pace than surrounding talk

wo- cut-off (often audibly abrupt)

(word) transcriber is in doubt about the accuracy of the transcribed stretch of talk

() transcriber could not achieve a hearing for the stretch of talk

((word)) description of a phenomenon, of details of the conversational scene or other

characterizations of talk