A case study of emergent leadership in whole-class discussion of controversial issues

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ABSTRACT

Teachers are increasingly called on to employ dialogic practices to promote active and equitable student participation in academically challenging classroom discourse. However, vocal students who dominate whole-class discussions might threaten or even overthrow the ideal of equitable participation. Situated in a fourth-grade Chinese elementary classroom participating in an intervention seeking to implement dialogic teaching of controversial issues in Morality and Law, the current study examined the discursive patterns of an emergent student leader to reveal her attempts and struggles to actively take part in discussions, the teacher's management of her dominant participation, and the scaffolding she provided for her less capable peers. We suggest that future professional development on dialogic teaching should better prepare teachers to effectively manage discrepancy in students' oral participation, focusing on both vocal and silent students. We also call for more research to investigate the possibilities and strategies for students and teachers to share or co-manage leadership in dialogic teaching.

Introduction

Democratic and equitable participation constitutes one of the key ideals of dialogic pedagogy (e.g. Howe and Abedin 2013; Alexander 2018; Hennessy et al. 2023). While prior research has predominantly focused on strategies to invite reticent or marginalized students to contribute more (e.g. Segal et al. 2016; O'Connor et al. 2017; Snell and Lefstein 2018; Sedova and Navratilova 2020), very limited research has investigated the possibility that overly active students who tend to dominate discussions might threaten or even overthrow the democratic ideal of dialogic pedagogy. We present here a case study to examine a Chinese fourth-grade girl's attempts to actively take part in whole-class discussion of controversial issues in Morality and Law and the teacher's struggles to constrain her participation to make room for others. Examination along this line is critical, as students who talk frequently and eloquently might be equally, if not more, challenging for teachers' enactment of an inclusive discourse community than students who talk 'too little'. By interpreting the girl's dominance through the lens of emergent leadership, the present study also extends the examination of

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emergent leadership from small-group tasks (e.g. Li et al. 2007; Sun et al. 2017) to whole-class discussions. Specifically, it examines the discursive patterns of an emergent student leader, the teacher's management of her talk turns, and the proximal influence of her talk on the ongoing discussion processes.

Dialogic teaching of controversial issues

Dialogic pedagogy or dialogic teaching is teaching that affords opportunities for students to express diverse thoughts and ideas; to inquire, challenge, clarify, or build upon others' ideas; and to reason about and weigh multiple arguments and solutions (Nystrand et al. 2003; Michaels et al. 2008; Mercer et al. 2009; Resnick et al. 2015; Wilkinson et al. 2017; Barak and Lefstein 2022). According to Alexander (2018, 2020), classrooms embracing dialogic teaching are collective, reciprocal, supportive, cumulative, purposeful, and deliberative, in which teachers facilitate multiple, and even competing, student voices and in which students play a more active and agentic role (Wells and Arauz 2006; Howe and Abedin 2013; Hennessy et al. 2023).

The present study follows the line of research that sought to engage students in talk-intensive pedagogies involving controversial issues to prepare them for civic participation in deliberative democracy. Controversial issues are social and political problems upon which a social agreement has not yet been reached (Hess 2004; Ersoy 2010; Bickmore and Parker 2014). Dialogic pedagogy is a particularly appropriate instructional approach for the teaching of controversial public issues as the pedagogy aims to create equitable, constructive, and scaffolded deliberation opportunities to nourish students' exposure to and exposition of alternative, conflicting viewpoints to reach consensus or joint decisions (Kelly 1986; Asimeng-Boahene 2007; Avery et al. 2013).

Emergent leadership and equitable participation

A common obstacle facing teachers who seek to implement talk-intensive pedagogies is cultivating an inclusive environment that invites equitable participation of all students (O'Connor et al. 2017). While disagreement exists on whether uneven distribution of turns was always a problem and whether equitable participation of all students was a worthwhile or even feasible goal to pursue (Alexander 2014), for the classroom examined in this study, discrepancy in students' oral participation was a particularly pronounced issue for the teacher: she expressed frustration over one dominant girl's frequent and extended contributions, which she thought possibly suppressed other students' cognitive and verbal engagement, and indicated strong aspiration to invite more students to actively participate in class discussions.

Existing research has revealed varied patterns in individual student's participation in classroom discourse (Clarke 2015, 2016; O'Connor et al. 2017; Sedova and Navratilova 2020). Kelly (2008) reported stark variations in student engagement in middle school English classroom discourse as a function of race and socioeconomic backgrounds. Clarke (2015) detailed that almost half of the students in a low-performing urban high school almost never spoke during the six weeks of discussion-based instruction. Examining 20 eighth-grade mathematics classrooms, Schnitzler et al. (2021) observed that 50% of students participated little or not at all.

At the other end of the spectrum, vocal students could emerge as opinion leaders and dominate discussions (Yukl 1989; Eby et al. 2003; Clarke 2015). While considerable research on leadership has been conducted on adult populations (Guastello 1995; Wheelan and Kaeser 1997), a relatively small body of research has focused on the nature and development of leadership skills in children's cooperative learning groups (French and Stright 1991; Anderson et al. 2001; Yamaguchi 2001; Li et al. 2007; Sun et al. 2017). According to the emergent approach to studying leadership, emergent leaders assume their roles informally (Certo 2011) instead of being elected or appointed by a teacher (Fiedler 1958; Yamaguchi 2001; Yamaguchi and Maehr 2004; Li et al. 2007). In addition, students' emergent leadership can be either decentralized (i.e. students shared control over topics and tasks) or centralized (i.e. dominated by a member with a high authoritative social status) (Oliveira et al. 2014).

In the present study, rather than adopting a trait-based approach to studying leadership and examining these leaders' attributes (Eby et al. 2003), we followed a context-based approach and viewed leadership status as contingent on situational factors (Li et al. 2007; Oliveira et al. 2014; Sun et al. 2017). In other words, students' emergent leadership is dynamically and reciprocally enacted with their teacher and fellow students rather than a separate and isolated outcome. More specifically, we conceptualize leadership as comprised of sociolinguistic moves characterized by students' verbal ability to influence or guide whole-class discussions (e.g. introducing or changing topics, influencing other's opinions). From this perspective, speech acts or interactive moves are examined to reveal the speaker's ability to intervene in a stream of discursive events or interactively establish power relations (Fiedler 1967).

The present study

The present study presented a linguistic ethnography analyzing the discursive patterns of Student J, a fourth-grade girl demonstrating outstanding performance in an intervention focused on dialogic teaching of controversial issues. A neglected area in prior research on dialogic teaching is the possible tension between dominance by one or a few students in whole-class discussion and equitable participation widely championed in the literature. The present study viewed Student J's active participation through the lens of emergent leadership for two reasons: first, other students and Miss S informally referred to her as a 'leader'; second, our field observations suggested that Student J's discourse moves exerted a considerable influence on other students. In doing so, the present study made another contribution by expanding the research on emergent leadership from small-group to whole-class settings. Adopting an *individual-with-context* perspective (Kovalainen and Kumpulainen 2007; Sedova and Navratilova 2020), the present study interpreted Student J's attempts and struggles to talk more in the face of the teacher's restriction of her participation, and the proximal influence of her leadership moves on the ongoing discussion processes.

Specifically, the present study included a fine-grained analysis of the discussion transcripts of four intervention topics, combining descriptive analysis of discourse patterns with micro-analysis of selected episodes. In addition, teacher and student interview data and field notes were analyzed to help shed light on our interpretation of the transcripts. The present study sought to address the following questions: How did Student J enact discursive leadership, and how did it evolve throughout the intervention? How did the teacher manage Student J's emergent leadership? How did Student J's leadership impact or scaffold other students' discursive engagement?

Materials and methods

Setting

The study took place in an eastern China public elementary school distinguished for its top academic achievements within its district. It predominantly served middle- to upper-middle-class Chinese families residing in close proximity. Two months prior to the intervention, the research team contacted the school principal, who, in turn, invited eight fourth-grade teachers to participate in the intervention; five agreed, and three declined. Prior to the intervention, students' assent forms and parental consent forms were obtained for all participating classes. Participating teachers and students were also informed that the reporting of the study would be anonymized and that none of the data would be released to the public.

Of the five participating classes, the present study focused on Miss S's class to investigate patterns of emergent leadership demonstrated by Student J. The homeroom teacher, Miss S, was a novice female teacher with a Master's degree in education and two years of experience teaching the Morality and Law subject. Of the five teachers participating in the intervention, Miss S was the youngest and had the least amount of teaching experience. Analyses of classroom videos captured prior to the intervention showed that Miss S's classroom teaching was highly teacher-controlled and dominated by the Initiation-Response-Evaluation/Feedback (IRE/F) discourse pattern (Sinclair and Coulthard 1975; Mehan 1979), in which teacher questions, student responses and teacher evaluations were mostly geared towards pre-determined answers.

Miss S's class comprised 35 students, ranging in age between nine years six months to ten years three months at the start of the intervention. All students spoke Chinese as their first language. Based on our informal conversation with Miss S and our field observations, students were generally in friendly terms with each other; in addition, Student J's academic prowess didn't isolate her from others and she managed to form congenial relationships with many students in the class.

Student J was chosen as our focus of analysis for two primary reasons—her active participation and outstanding performance throughout the intervention as well as her past performance. She consistently ranked first among eight classes of approximately 280 students, was very active in extracurricular activities, demonstrated personal charisma and had a high social status among peers. According to Miss S, students looked up to Student J as a role model who excelled in academic and non-academic tasks. In the present study, to facilitate our delineation of Student J, we contrasted her with another student, named S1, who came closest to be a counterpart to Student J in eloquence. S1 was a girl who was taller and spoke with a more assertive voice than Student J. However, unlike Student J, S1 was never referred to as a 'leader' either by other students or Miss S.

Data sources

The data reported in this article were collected as part of a larger project involving dialogic teaching of controversial issues, details of which were reported in Shi et al. (2024). The five participating teachers took part in professional development sessions focusing on dialogic teaching prior to and throughout the intervention. The research team and

the teachers co-designed four controversial topics based on textbook contents, as presented in Table 1. For each controversial topic, the scenario involved personal or public dilemmas that did not have simple solutions. The goal was to expose students to conflicting perspectives and to encourage them to invoke understandings gleaned from everyday experience and background knowledge to support claims. To confirm that the participating students and teachers considered these topics as controversial, prior to the start of the intervention, an opinion poll was administered to all intervention students and teachers, asking them to rate the level of controversy of each topic on a 5-point Likert scale, ranging from completely non-controversial to highly controversial. The results showed that all the topics were rated as either controversial or highly controversial.

For each intervention topic, the activity cycle consisted of whole-class dialogic discussion in Session 1, written argumentative dialogues in Sessions 2 and 3, individual argumentative writing in Session 4, and peer evaluation in Session 5. At the beginning of the intervention, each teacher negotiated with students norms of discussing and debating controversial issues and four major norms were eventually established and shared across the five classes: (a) listening to others carefully when they are talking; (b) responding to a previous contribution before sharing own arguments; (c) respectfully challenging others and personal attacks are not allowed; (d) supporting claims with reasons or evidence.

The present study focused on Session 1 of Miss S's class for the four intervention topics. These sessions were videotaped with a camcorder mounted on a tripod: one was placed at the front to view every student's face, and another was placed at the back to view the teacher. Video recordings subjected to the present analysis lasted two hours and 23 minutes.

Table 1. List of intervention topics.

Topic	Topic statement
1	Lan and Yao were two 4th-grade students who were desk mates. During class breaks, Lan liked to play with Yao's new stationery; sometimes, he accidentally broke them. Over time, Yao felt increasingly offended that Lan always played with others' personal belongings without permission. She told Lan that his behavior wasn't acceptable. However, although Lan apologized, promising to seek Yao's permission first, he never adhered to his promise. Should Yao continue to forgive Lan?
2	One Saturday morning, Lan's mother was unexpectedly called to take an extra shift at work. Before going to work, she needed to send Lan to his calligraphy class. She had no time to cook lunch and decided to order delivery food. However, the delivery guy had been late for 20 minutes, making Lan and his mother quite anxious as they might have to go to work or class with empty stomachs. They called the delivery guy several times, and he responded by saying he was about to arrive each time. Lan's mother was quite angry and decided to give the guy a very negative rating. Should Lan persuade his mother not to give a negative rating?
3	Yao was a 4th-grade student with many electronic devices in her household, including TVs, mobile phones, computers, iPads, etc. Yao liked to use these devices for academic and entertainment purposes. However, since last semester, Yao's school grades started to fall behind, and she began to develop myopia. Her parents wanted to limit her 'screen time' and only allowed her to do school work on these devices. However, Yao believed these devices were important to her as she could obtain tremendous resources for learning. Besides, she could use some entertainment and relaxation time, which was very necessary for life. Do you support Yao or her parents?
4	Lan visited his hometown with his father every summer vacation. The forest resources in his hometown were very rich, but the local economy was quite poor. Residents made minimal earnings, and many young people had no choice but to leave their hometowns to search for employment opportunities in the urban area. Lan learned from his father that to change this situation; the local government wanted to make use of the rich forest resources to build a timber mill, which would not only provide plenty of job opportunities for the young so that they don't have to leave their hometown but also increase government revenues, which could be used to improve the local construction. However, the timber mill involves cutting down trees and taking up arable land, not to mention industrial waste that might damage the environment and threaten residents' health. Do you think the local government should build the timber mill?

As part of ethnographic fieldwork, the authors immersed themselves in the field, attending all of Miss S's intervention sessions, observing, and taking field notes. Data were also gathered via documentation of the research team's informal interaction with Miss S and Student J. In addition, we transcribed and analyzed semi-structured interviews conducted with Miss S, as well as with a focus student group, several days following the conclusion of the intervention. When interviewing Miss S, the first author followed the video-cued multivocal ethnographic method (Tobin 2019) and invited Miss S to view a few pre-selected clips of classroom videos to elicit her reflection on and response to these meaningful moments. The focus student group consisted of four students, including Student J, Students 1, 5 and 9 (numbered in the episodes below). Students 5 and 9 were two boys who were mostly silent in Topics 1 and 2 but became active in Topics 3 and 4. Students were invited to reflect on the controversial issues, evaluate their teacher's and peers' performance, and discuss their overall experience participating in the study. Teacher and student interviews subjected to the present analysis lasted one hour and 45 minutes in total.

Data analysis

The video corpus was transcribed verbatim, and all analysis was conducted using the videotapes alongside the transcripts. The data analyses included descriptive results of Student J and other students' discourse patterns, as well as qualitative analyses of episodes exemplifying Student J's leadership moves. For the qualitative analyses, we followed linguistic ethnography (Rampton et al., 2015) to capture the interactive nature of the leadership process as it unfolds moment by moment in whole-class discussion. Specifically, we searched complete transcripts for moves that potentially demonstrate student J's attempts to lead in the context of use, judging the effectiveness of a leadership move not only by an utterance per se but also by its connection to what came before it (e.g. whether a novel perspective was proposed) and what came after it (e.g. whether it invoked responses from multiple students). Therefore, episodes consisting of multiple turns (Erickson 1996) were selected, analyzed and presented to evaluate the antecedents to Student J's leadership and the impact of these moves on the subsequent discussion.

Results

This section consists of two parts. The first presents descriptive, quantitative results of discourse patterns, while the second follows a qualitative and micro-analytic approach to present episodes demonstrating patterns of Student J's emergent leadership.

Descriptive results of discourse patterns

We first investigated whether Student J talked more than other students. As shown in Table 2, contrasts among Student J, S1 and all students excluding Student J were made in the following aspects: number of talk turns, mean number of words per turn, and maximum number of words in one turn. Table 2 indicates that for all topics, when given an opportunity to talk, Student J spoke much more than other students, as her average number of words per turn and maximum number of words in one turn far exceeded those of other students.

The largest difference between Student J and other students was observed in Topics 1 and 2, in which Student J's numbers of turns were four to five times those of other students. In Topics 3 and 4, however, Miss S intentionally limited Student J's opportunities to talk; as a result, Student J and other students had comparable chances to hold the floor. Notably, in Topic 3, faced with reduced opportunities to talk, Student J compensated by speaking longer: her longest turn in Topic 3, which consisted of 1122 words and lasted about four minutes, was the longest single turn in the entire intervention for all classes.

Our field notes indicated that for all topics, Miss S was in charge of allocating turns: students stood up and spoke when called on and they rarely spoke without permission. Close analyses of classroom videos showed that at each turn transition juncture, there were usually three students who raised their hands to bid for the floor and in the majority of cases, Miss S called on the student who was the first to put his or her hand up. Sometimes, Miss S deliberately called on students who rarely spoke in that session, possibly trying to distribute turns more evenly. In addition, our field notes and the interview with Miss S suggested that except for Student J, Miss S did not intentionally limit other student's participation.

Table 2 also confirms, from a quantitative dimension, our selection of S1 as a counterpart to Student J. First, S1's average number of words per turn far exceeded that of all students (excluding Student J). Second, for all intervention topics, turns containing the maximum number of words (excluding turns of Student J) were all contributed by S1. Lastly, in Topic 3, following Student J's 1122-word turn, S1 immediately responded with a turn of 787 words, possibly suggesting that she was trying to emulate Student J's performance.

Qualitative analysis of discussion episodes

The descriptive results above indicated that Student J played a dominant role in the quantitative dimension of words spoken throughout the intervention. The results also suggested that Student J's leadership might have transformed as a function of Miss S's management of Student J's floor rights. To investigate the challenges Student J posed to Miss S and the scaffolding role Student J played, we conducted in-depth, qualitative analyses of selected episodes.

Setting the tone early on

We first present Student J's leadership style as it emerged early in the intervention. In Episode 1, selected from Topic 1, Student J introduced several arguments that significantly

Table 2. Descriptive results of discourse patterns across intervention topics.

	Student J			S1			All students excluding student J			
Topic no.	Number of turns	Mean number of words per turn	Max number of words of one turn	Number of turns	Mean number of words per turn	Max number of words of one turn	Mean number of turns[1]	Mean number of words per turn	Max number of words of one turn	Number of students who spoke
1	9	203	459	3	211	335	2	90	335	14
2	10	148	476	5	117	230	2	86	230	20
3	3	461	1122	5	346	787	3	145	787	10
4	5	223	393	2	200	286	2	94	286	19

[1]*Note.* Mean number of turns only included students who spoke in that Topic.

impacted the ensuing discussion and setting the tone for the discussion early on. These arguments were referred to and commented on by many students, up to 50 turns after Student J's initial contribution.

Episode 1 from Topic 1.

Turn	Speaker	Utterance
21	Student 1	I also believe Lan shouldn't be forgiven, because he likes to toy with Yao's belongings when Yao isn't paying attention. This behavior is essentially a form of stealing and if Lan kept doing the same when he grew up, he would get himself into serious trouble.
22	Miss S	Speaking of consequences in the future, right? Anything else? Go ahead, please.
23	Student J	I'm neutral. First, I think the reason not to forgive Lan is that, although he apologizes each time, he doesn't keep his word. On the other hand, I think we should forgive Lan because apart from the possibility of Yao losing a friend, I've heard that <u>bad habits are formed quickly but are difficult to change</u>. I'm thinking that if Lan's bad habit is gradually getting better, maybe if we talk to him seriously, he might change in a month or half a month? One more thing, <u>being interested in and playing with other's stuff is a child's nature.</u> I think if we talk to him seriously about the consequences, and as he grows up, his nature to play with other's stuff might gradually weaken.
29	Student 2	Lan apologizes every time, but he continues to play with Yao's stationery; <u>perhaps it's a bad habit,</u> but it's unforgivable.
34	Student 3	I think Yao should forgive Lan. My reason is that although Lan keeps doing things like that, it is possible that if Yao continues to supervise him, <u>he will change his habit</u>.
42	Student 1	(Repeated the same arguments in Turn 21)
50	Student 1	Another solution is to write an agreement between Lan and Yao. The agreement should clearly state what Lan and Yao need to do. If any of the belongings got damaged, they could refer to and follow the rules stated in the agreement.
64	Student 2	The second thing is, <u>it's the nature of children</u>, so you should be able to tolerate it a few times.
74	Student 4	I don't support forgiving Lan. <u>If he can't change this habit</u>, he will keep playing with others' personal belongings. By the time he finishes primary school and enters middle school, he will continue his behavior, and he will have no friends.

In analyzing Episode 1, we first focus on S1's contributions. Turn 21 was S1's first contribution in this topic, in which she unequivocally indicated her position and equated playing with other's belongings with stealing. She also spelled out the negative consequence if Lan didn't change his behavior. However, while many students shared this position, S1's arguments were not commented on by others and probably noticing this, in Turn 42, she decided to repeat what she said in Turn 21, but still, other students didn't respond to this argument. In Turn 50, S1 suggested a novel solution, that Lan and Yao could set up an agreement and enforce it when needed, but again, other students didn't build on this solution in the following turns.

In contrast, Student J's arguments had a noticeable and enduring impact on other students' arguments. Turn 23 was Student J's second contribution to the discussion. Her first contribution—in Turn 8, which is not presented here—pointed out that 'Lan didn't keep his promise'. In the ensuing discussion, five students built on this argument, further elaborating on how Lan broke his promise, making his behavior unforgivable. Similar to Student J's first contribution, her second contribution, in Turn 23, involved novel, impactful arguments that were referred to and elaborated on by several students in the following turns.

In Turn 23, besides reiterating her earlier argument that 'Lan didn't keep his words', Student J introduced two novel arguments that were underlined above—that Lan needed more time to break his bad habits and that Lan's behavior was congruent with a child's nature. It is noticeable that in Turn 23, Student J took a neutral stance, presenting and

elaborating on arguments on both sides. Our field notes indicated that, unlike other students who either favored or opposed a position, throughout the intervention, Student J frequently made arguments that involved conflicting perspectives. In doing so, she demonstrated an advanced mastery of dialectical thinking and cogent expression of two-sided reasoning, far exceeding her peers. Miss S also commented on the thoroughness of Student J's arguments: 'Student J's answer to my questions was always quite comprehensive: she always starts by summarizing others' ideas and then adds her own thoughts. Her thought process is always spot-on and logical—she gets straight to the point'.

As illustrated in Episode 1, following Turn 23, other students in Turns 29, 34, 64 and 74 incorporated Student J's arguments into their reasoning, displaying the 'snowball phenomenon' (Anderson et al. 2001), in which an argument made by one student quickly disseminates to others, who used it to support conflicting positions. Notably, other students did not simply repeat what Student J said but drew on her reasons to support their own perspective. For instance, while Student J argued that Lan's 'bad habits' should be forgiven, Student 2, in Turn 29, turned J's argument upside down to support an opposing position—that Lan's behavior was unforgivable. Similarly, Student 4, in Turn 74, used the 'bad habits' argument to spell out the negative consequences of forgiving Lan, insisting that Lan's behavior was unforgivable.

Analyses of the transcripts, video recordings, and field notes showed that Miss S did not restrict Student J's floor rights during the first two topics, calling on her most of the times when she raised her hand. As a result, many instances similar to Episode 1 were identified in Topics 1 and 2, with Student J making many impactful arguments early in the discussion. Witnessing Student J's dominance of class discussions gaining momentum, Miss S began to realize that she might need to intervene by allocating fewer turns to Student J and more to other students to prevent Student J from further monopolizing the discussion.

The field notes recorded our informal interaction with Miss S, who indicated that her attitude towards Student J was mixed, characterized by both affection and frustration. On the one hand, in her everyday teaching, Miss S readily deferred to Student J to provide a 'satisfactory' response when particularly difficult questions were raised. On the other hand, Student J's domination posed a threat to what Miss S perceived as the normative model of dialogic pedagogy. In fact, right after the teaching for Topic 1, she approached us and complained, with frustration, that 'This is the situation of our class—[Student J] simply talks too much. She silences other students as they think she has said everything possible. Sometimes, I don't like it when she talks too much' . In our formal interview with Miss S after the intervention, she confirmed our observation that she began to intentionally limit Student J's access to the floor starting from Topic 3, as she was 'left with no better choices' . Given fewer opportunities to talk, Student J did not give up but adapted to the new situation.

Modelling extended 'speech'

As shown in Table 1, there was a sharp decrease in Student J's speaking turns in Topics 3 and 4. In Topic 3, Student J did not make her first contribution until 22 minutes into the discussion, despite keeping her hand raised throughout that time, eagerly begging for the floor. Our field notes suggested that although Miss S seemed to purposefully avoid calling

on Student J, she didn't do the same to S1 and as a result, in Topic 3, S1 had greater access to the floor compared to Student J, as Table 2 shows. In the student focus group interview, when asked about this experience, Student J vented about feeling ignored: 'It was very difficult when I kept raising my hand, and the teacher didn't call on me. That's when I heard others saying things opposing my thoughts, and I organized in my mind how to address their arguments. However, the teacher just wouldn't call on me, and that was tough for me'. When Student J finally received an opportunity to talk, she let out everything she had been organizing in her mind all at once, delivering a four-minute, uninterrupted 'speech' . A slightly abbreviated version is shown in Episode 2, below.

Episode 2 from Topic 3.

Turn	Speaker	Utterance
38	Miss S	Did everyone understand her reasons? Now, let's hear from you.
39	Student J	I want to elaborate on her main points. Firstly, S9 mentioned the importance of balancing work and rest. In my view, playing games will only exhaust your eyes and your brain, making it impossible to feel relaxed. I believe going outdoors for exercise or even just playing around is a better alternative. Second, even if, like S10 said, screens are used for learning, as kids, we may lack the self-discipline of adults. Many children, even if claiming to search for learning materials, end up watching entertainment videos. The best solution in these cases is either to completely restrict their screen time or to use a parent's phone. Furthermore, regarding eyesight issues, I agree with S11 that prolonged reading or incorrect posture can lead to myopia. However, I've heard that non-e-ink screens, like fluorescent screens, can be more harmful. Let me share my own example. There was a time when I became addicted to the internet while using study materials. Since then, my mom kept my phone out of the room except when she was supervising my studying. I found that I adapted and no longer had such strong cravings for online content. Also, I'm aware that many students enjoy online games for their excitement. However, engaging in board games with family after dinner can be very relaxing. Thank you, Miss S.
40	Miss S	Let's give her a round of applause first. Now, I see many students are eager to share their thoughts. Please, go ahead.
41	Student 1	I am neutral…Student J believes that all screen time should be prohibited. I agree with that. However, I have a different opinion. In this new era, if we rarely use our phones and electronic screens, our knowledge might be limited. If Yao finishes the learning tasks within a specific time, she can be rewarded with some screen time. I think this method is quite feasible, and my mom adopted it, and my academic performance improved significantly. Further, this topic has two sides: firstly, I agree with Student J's points that prolonged screen time may lead to myopia. I also agree with S9 and other classmates' thoughts that staring at the TV for too long might not be the only cause of myopia; there could be other factors. To minimize damage to your eyesight, I agree with Student J's perspective on taking a break after playing with electronic devices. You can also look out of the window. If you've spent too much time on electronic devices, you can ask your parents to take them away. Sometimes, you can play chess with your parents, as Student J suggested. This method not only limits screen time but also prevents eye strain.
42	Miss S	Well said! Let's give her a round of applause, too. S9, your turn.

In Turn 39, Student J systematically countered several points made by others. She first summarized others' major arguments and then made several counterarguments. First, she countered S9 by proposing that outdoor activities are a better way to balance work and leisure. Second, she countered S10 by claiming that students might lack self-control and were addicted to game playing using electronic devices. Third, she countered S11 by arguing that having too much 'screen time' might lead to myopia, even though myopia might be caused by reasons other than using electronic devices. When Student J finished making counterarguments, she drew on her personal experience and suggested alternative options for entertainment.

The video footage of students' postures and facial expressions indicated that as Student J talked at length, almost the entire class turned to her and listened attentively, much more so than when other students spoke. In a sense, the students still looked to Student J as an opinion leader, although her contribution came late into the discussion.

The impact of Student J's extended 'speech' on S1 was readily observable in Episode 2. In Turn 41, S1 made an equally extended and well-elaborated response, the second-longest contribution in the intervention. Our field notes also indicated that S1 seemed to mimic the way Student J talked and posed herself. In Turn 41, S1 adopted a neutral position and systematically marshalled multiple, conflicting arguments offered by Student J and other students: on the one hand, S1 explicitly agreed with Student J and others that prolonged screen time might lead to myopia; on the other hand, S1 challenged Student J's argument that all screen time should be prohibited, pointing out that doing so might lead to a lack of knowledge, a negative consequence.

It was also noticeable that S1 explicitly mentioned the name of Student J for four times, indicating that she was deliberately acknowledging and responding to Student J's arguments. However, the video footage suggested that when S1 was talking at length, other students, although listening attentively, did not physically turn to her in the same way as they did when Student J was talking. When Student J and S1 finished talking, Miss S invited the class to give each of them a round of applause, the only occasions she did so during the intervention, suggesting that she considered the two girls' performance were outstanding and commendable.

Playing devil's advocate

In Topic 4, we observed another type of leadership move of Student J. In this topic, Student J, preoccupied by an extracurricular activity at the school, arrived 10 minutes late. Our field notes indicated that when Student J got into her seat, she did not raise her hand immediately but silently and attentively observed what others were saying. In Turn 39 of Episode 3 (shown below), her first contribution to this topic, she played devil's advocate and was the first to challenge the position dominating the discussion until then. Prior to Turn 39, multiple students had offered a wide array of reasons in support of the position that a timber mill should not be built, prioritizing environmental protection over economic development (Shi et al., 2024). For instance, in Turn 29, S1 unequivocally opposed the building of a timber mill and was the first to propose an alternative solution, that of developing tourism rather than building a factory. Concerned that the discussion would continue to be one-sided, Miss S attempted (Turn 38) to solicit arguments supporting the opposing side. Student J seized upon this opportunity and became the first and only student in the class to argue in support of building the timber mill.

The field notes indicated that in our informal interaction with Student J following this session, she said, 'I realized everyone was opposing the building of a timber mill, but I guess the teacher must have wanted to hear something else. I decided to be that person, even though that was not my initial position' . Here, we see Student J's uncanny understanding of the teacher's pedagogical purpose and her competence and confidence to construct arguments against her initial position. We speculate that by playing devil's advocate and making unique contributions, Student J maintained her leadership role, even with reduced access to the floor.

Episode 3 from Topic 4.

Turn	Speaker	Utterance
29	Student	I also disagree with building a timber mill. Young people who work in the cities can earn money and make a significant contribution to their hometown. Why do we have to build a timber mill to address the issue? I'm quite confused. Secondly, I think they can use the local forest resources to develop tourism instead of building a factory. They could create a park because the forest here is rich with natural resources.
30	Miss S Miss S	Any one thinks differently? S1 said we could use the forest to develop tourism, but let's think about it. Is it easy to develop tourism? Okay, not to build a timber mill. Does anyone support building a timber mill? Come on, your turn, please.
83 39	Student J	Although I agree that we can develop tourism, if you think about it, the local construction is very backward. Although the place is particularly rich in forest resources, if you do not improve the local economy, the transportation costs will be very high. No matter how good your environment is, you can't even find a decent hotel to stay at night. Who would be willing to come and visit your place? There are so many tourist destinations, so why would a tourist pick this place? I think the best approach is to build a timber mill first to develop the whole town. The local residents can use the profits to build better tourist facilities.
40	Miss S	Okay, that's your viewpoint. Who would like to add your thoughts?
41	Student 5	I agree with what Student J said. Even though you could build a timber mill, you can't cut and sell trees all time - you only do it occasionally. Otherwise, you'll end up losing all local residents. S12 also mentioned that the land would be polluted, and I agree with that point. Student J suggested building a factory first and then developing tourism, which I think is feasible.
45	Student 6	I don't agree with this perspective. Even though we are living a well-off life today, there are still some villages struggling with poverty. If every village did what Student J suggested, environmental pollution would accumulate.
49	Student 7	Based on Student J's opinion, there's no need to build a timber mill. Young people who sought employment in the urban area could bring their earnings back to develop local tourism.
53	Student 4	I also don't agree with building a timber mill. Like Student J said, even if you build a small park and start tourism, people probably wouldn't choose this place as their travelling destination because there are many environmentally friendly locations.
55	Student 8	I also agree with Student J's point. If you build this timber mill, I think you can start off by cutting down a small number of trees. The other trees can be used to develop tourism to develop the economy.

Prior to Turn 29 in Episode 3, all the arguments were one-sided and opposed the building of a timber mill. In Turn 29, which was S1's first contribution in this topic, she was also on the majority side and offered a novel solution, that of developing tourism. However, when Miss S invited other students to challenge it and offered a hint that it might be difficult to develop tourism (Turn 30), students were still supporting the predominant position in Turns 31–37, which were not presented here. In Turn 38, Miss S decided to explicitly invite arguments in support of the hitherto unaddressed position, that of supporting the building of a timber mill. Witnessing this, Student J decided to play devil's advocate in Turn 39, in which she managed to set up an opposing position and transformed the previously one-sided discussion into a two-sided one. Student J primarily challenged one solution proposed by multiple students prior to Turn 39—that the local government should encourage tourism development, as it is more environmentally friendly. Student J directly challenged this solution by pointing out the impracticality of developing local tourism due to the region's backward construction and transportation.

Following Turn 39, three students (S5, S4 and S8) agreed with Student J, and two challenged her (S6 and S7). Our field notes indicated that just as in Episode 3, by Topics 3 and 4, multiple students began to take the initiative to disagree with and challenge Student J's arguments, whereas they tended to unanimously agree with and build on what she said in

the first two topics. Therefore, even with reduced access to the floor in Topic 4, Student J continued to be an influential figure by championing a minority viewpoint, which helped to 'spice up' the previously one-sided discussion and prompted other students to generate counterarguments.

It was also noticeable that in Turns 41, 45, 49, 53 and 55, students explicitly mentioned Student J's name when responding to her arguments, but they never mentioned S1's name, although S1 was the first to introduce the argument related to tourism. In addition, while students rarely mentioned other's names in Episode 1, which was representative of talk in the first two Topics, they began to do so in Episodes 2 and 3, which were representative of talk in the last two Topics. We therefore observed a shift from students' efforts to address Miss S to directly 'dialoguing' or debating with their peers.

Satisfied by the spirited discussion involving opposing perspectives in Topic 4, Miss S vibrantly approached us when the session was over and expressed her joy over having led what she thought was a successful dialogic discussion: 'I am so glad that the students in our class finally caught up and showed a lot of progress. They are now able to articulate their reasons and challenge each other' . This statement was in stark contrast to her frustrated comments on Topic 1. We speculate that Miss S derived a sense of achievement from her orchestration of a discussion that fulfilled the dual goal of honoring Student J's leadership while encouraging others' active participation.

Discussion

The present research involved a case study of a fourth-grade girl's dominance in whole-class discussion of controversial issues in Morality and Law, the impact of her discourse moves on other students and Miss S's management of her speech turns. Our results revealed Student J's leadership in the quantitative dimension, in terms of her number of speaking turns and words spoken, and in the qualitative dimension, in terms of how her contribution prompted and scaffolded other students' development of reasoning and argumentation skills. The novelty of the present study lies not only in its extension of the examination of emergent leadership from small-group collaborative tasks to whole-class dialogic discussions but also in its shift of focus from silent to vocal students to fulfil the ideal of equitable participation in dialogic teaching.

The episodes analyzed above were representative of Student J's discourse pattern in two aspects: first, similar to her contributions in episodes 1 and 2, she frequently took a neutral position and advanced arguments for both sides; second, as shown in all the episodes, her utterances were highly 'dialogic' , in the sense that she always built on or challenged what others said. Although active and outspoken, Student J was not a 'turn shark' (Erickson 1996) who tried to steal turns from other children; instead, she consistently adhered to the norms of dialogic discussion and was quite respectful of others.

Interpreting Student J's dominance through the lens of emergent leadership, her leadership role was 'emergent' in two senses: first, the role was not assigned to her by Miss S but was interactionally established and maintained by the discourse community; second, Miss S's orchestration of talk turns prompted Student J to be flexible, adaptive and ingenious to maintain her leadership position. Although S1 spoke with a more forceful voice and were also quite articulate, other students rarely responded to what S1 said but instead, they frequently oriented to Student J's contributions, explicitly mentioning her name when building on or challenging her arguments (e.g. Episodes 2 and 3).

The present study has several important implications for future research and practice. First, professional development in dialogic teaching could be enhanced by preparing teachers to manage effectively active and eloquent students who tend to dominate discussions. As we pointed out at the outset, while research and practice on reticent students abound, limited research has addressed the fulfilment of the dual goal of honoring outspoken students' participation while ensuring that other students can remain verbally and cognitively engaged.

Teachers, including novice teachers like Miss S, can be quite accepting of dialogic teaching principles. However, when these principles conflict with practical demands, teachers often have difficulty finding trade-offs between different requirements, such as clarity and coherence, adequate coverage of content, equitable participation, and time (O'Connor et al. 2017). In the present study, underprepared to deal with unequal participation in her class, Miss S simply decided to deprive Student J of her floor rights. This strategy, while effective in temporarily keeping Student J's participation in check, clearly frustrated and disappointed Student J. Although we do not know the long-term repercussions of this experience on Student J's development, being ignored simply because of one's academic prowess rather than having violated classroom norms clearly deviates from the core principles of dialogic teaching.

Rather than simply depriving Student J of her floor rights, Miss S could have adopted other strategies to manage Student J's active participation, such as inviting Student J to be a 'teaching assistant' and co-lead the discussion. Miss S could also model for students how to challenge Student J's arguments and explicitly invite other students to challenge Student J's arguments, especially after an extended contribution of Student J. In addition, Miss S could incorporate student-led small-group activities by dividing students into groups and appointing a leader for each group. However, as a novice teacher and inexperienced in dealing with outspoken children, the only strategy Miss S adopted was to deny Student J her floor rights. Future research should focus more on resources and strategies teachers could draw on to create and maintain an inclusive classroom community that encourages the participation of both vocal and silent students.

The second implication regards the zone of proximal development (ZPD) created through the interactions among asymmetrical peers (Vygotsky 1978; Zillmer and Kuhn 2018), especially the scaffolding Student J provided in enabling her peers to perform at levels beyond their current ability. Student J's leadership moves transformed throughout the intervention, and in the process, we witnessed a corresponding transformation in other students' discourse features: from merely agreeing with what Student J said in the first two topics, to delivering an extended 'speech' in Topic 3, and to disagreeing with and criticizing Student J's arguments in Topic 4. In a sense, Student J arguably scaffolded other students' development within their zone of proximal development, and as other students progressed over time, there was a possible shift from centralized to decentralized leadership, the latter reportedly associated with higher levels of student cognitive engagement (Oliveira et al. 2014).

Related to this point, the third implication regards the sharing of leadership between teachers and students in dialogic discussions. In the present study, Miss S's assignment of floor rights meant she continued to assume an authoritative role in making critical decisions regarding who got to speak and who did not. Therefore, emergent leadership in whole-class

discussion and in small groups possibly differed in many respects, with student leaders in small groups assuming a wider array of roles (Anderson et al. 2001; Li et al. 2007; Oliveira et al. 2014; Sun et al. 2017), while student leaders in whole-class discussion were much more limited in their role as the teacher continued to lead in managing talk turns, task assignment and time. If the ultimate goal of dialogic teaching is to shift classroom discourse from teacher-centered to student-centered, students and teachers could share or co-manage leadership so that discussions could be truly owned and managed, at least partially, by the students themselves. This does not mean that teachers are peripheral or inconsequential in dialogic classrooms; on the contrary, teachers need to assume and transition among multiple roles, such as dispenser, coach, moderator and participant (Chen et al. 2017), so that students could develop within the zone of proximal development created both between teacher and students, as well as between asymmetrical peers.

Our study shows that dialogic discussion of controversial issues provides a supportive environment for the emergence of student leaders; it also provides a productive context to examine the establishment and refinement of student leadership. Despite these findings, several caveats need to be expressed. The first limitation is that we are cautious about claiming to have captured all aspects of emergent leadership during whole-class discussions of controversial issues. We focused on one student and examined only her explicit sociolinguistic moves; other emergent leaders might demonstrate different moves, explicit or implicit. Moreover, by focusing on Student J and contrasting her with S1, we treated all other students as anonymous and did not analyze their individual performance, which might obscure or limit our understanding of how Student J's leadership play out in this particular context. The third limitation is that Student J already had a high social status and had assumed various school leadership roles prior to the intervention. Future research could explore how students without a high social or academic status could emerge as leaders during whole-class dialogic discussion of controversial issues.

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References

Alexander R. 2014. Triumphs and dilemmas of dialogue. In: Lefstein A, Snell J, editors. Better than best practice: developing teaching and learning through dialogue. Oxon & New York: Routledge; p. 72–74.

Alexander R. 2018. Developing dialogic teaching: genesis, process, trial. Res Papers Educ. 33(5):561–598. https://doi.org/10.1080/02671522.2018.1481140.

Alexander R. 2020. A dialogic teaching companion. London: Routledge.

Anderson RC, Nguyen-Jahiel K, McNurlen B, Archodidou A, Kim S-y, Reznitskaya A, Tillmanns M, Gilbert L. 2001. The snowball phenomenon: spread of ways of talking and ways of thinking across groups of children. Cogn Instr. 19(1):1–46. https://doi.org/10.1207/S1532690XCI1901_1.

Asimeng-Boahene L. 2007. Creating strategies to deal with problems of teaching controversial issues in social studies education in African schools. Intercult Educ. 18(3):231–242. https://doi.org/10.1080/14675980701463588.

Avery P, Levy S, Simmons A. 2013. Deliberating controversial public issues as part of civic education. Soc Stud. 104(3):105–114. https://doi.org/10.1080/00377996.2012.691571.

Barak M, Lefstein A. 2022. Above the law? The democratic implications of setting ground rules for dialogue. Lang Educ. 36(3):195–210. https://doi.org/10.1080/09500782.2021.1981923.

Bickmore K, Parker C. 2014. Constructive conflict talk in classrooms: divergent approaches to addressing divergent perspectives. Theory Res Soc Educ. 42(3):291–335. https://doi.org/10.1080/00933104.2014.901199.

Certo JL. 2011. Social skills and leadership abilities among children in small-group literature discussions. J Res Child Educ. 25(1):62–81. https://doi.org/10.1080/02568543.2011.533117.

Chen YC, Hand B, Norton-Meier L. 2017. Teacher roles of questioning in early elementary science classrooms: a framework promoting student cognitive complexities in argumentation. Res Sci Educ. 47(2):373–405. https://doi.org/10.1007/s11165-015-9506-6.

Clarke SN. 2015. The right to speak. In L.B. Resnick, C.S.C. Asterhan, & S.N. Clarke (Eds.), Socializing intelligence through academic talk and dialogue. Washington, DC: American Educational Research Association.

Clarke SN, Howley I, Resnick L, Rosé CP. 2016. Student agency to participate in dialogic science discussions. Learn Cult Soc Inter. 10:27–39. https://doi.org/10.1016/j.lcsi.2016.01.002.

Eby LT, Cader J, Noble CL. 2003. Why Do High Self-Monitors Emerge as Leaders in Small Groups? A Comparative Analysis of the Behaviors of High Versus Low Self-Monitors. J Appl Soc Pyschol. 33(7):1457–1479. https://doi.org/10.1111/j.1559-1816.2003.tb01958.x.

Erickson F. 1996. Going for the zone: the social and cognitive ecology of teacher-student interaction in classroom conversations. In Hicks D, editor. *Discourse, Learning, and Schooling*. Cambridge: Cambridge University Press; p. 29–62.

Ersoy AF. 2010. Social studies teacher candidates' views on the controversial issues incorporated into their courses in Turkey. Teach Teach Educ. 26(2):323–334. https://doi.org/10.1016/j.tate.2009.09.015.

Fiedler FE. 1958. Leader attitudes and group effectiveness. Champaign, IL: University of Illinois Press.

Fiedler FE. 1967. A Theory of Leadership Effectiveness. New York: McGraw-Hill.

French DC, Stright AL. 1991. Emergent leadership in children's small groups. Small Group Res. 22(2):187–199. https://doi.org/10.1177/1046496491222003.

Guastello SJ. 1995. Facilitative style, individual innovation, and emergent leadership in problem solving groups. J Creat Behav. 29(4):225–239. https://doi.org/10.1002/j.2162-6057.1995.tb01397.x.

Hennessy S, Calcagni E, Leung A, Mercer N. 2023. An analysis of the forms of teacher-student dialogue that are most productive for learning. Lang Educ. 37(2):186–211. https://doi.org/10.1080/09500782.2021.1956943.

Hess DE. 2004. Controversies about controversial issues in democratic education. APSC. 37(2):257–261. https://doi.org/10.1017/S1049096504004196.

Howe C, Abedin M. 2013. Classroom dialogue: a systematic review across four decades of research. Cambrid J Educ. 43(3):325–356. https://doi.org/10.1080/0305764X.2013.786024.

Kelly S. 2008. Race, social class, and student engagement in middle school English classrooms. Soc Sci Res. 37(2):434–448. https://doi.org/10.1016/j.ssresearch.2007.08.003.

Kelly TE. 1986. Discussing controversial issues: four perspectives on the teacher's role. Theor Res Soc Educ. 14(2):113–138. https://doi.org/10.1080/00933104.1986.10505516.

Kovalainen M, Kumpulainen K. 2007. The social construction of participation in an elementary classroom community. Int J Educ Res. 46(3-4):141–158. https://doi.org/10.1016/j.ijer.2007.09.011.

Li Y, Anderson RC, Nguyen-Jahiel K, Dong T, Archodidou A, Kim I-H, Kuo L-J, Clark A-M, Wu X, Jadallah M, et al. 2007. Emergent leadership in children's discussion groups. Cogn Instr. 25(1):1–2. https://doi.org/10.1080/07370000709336703.

Mehan H. 1979. Learning lessons: social organization in the classroom. Cambridge, MA: Harvard University Press.

Mercer N, Dawes L, Staarman JK. 2009. Dialogic teaching in the primary science classroom. Lang Educ. 23(4):353–369. https://doi.org/10.1080/09500780902954273.

Michaels S, O'Connor C, Resnick L. 2008. Deliberative discourse realized and idealized: accountable talk in the classroom and in civic life. Stud Philos Educ. 27(4):283–297. https://doi.org/10.1007/s11217-007-9071-1.

Nystrand M, Wu LL, Gamoran A, Zeiser S, Long DA. 2003. Questions in time: investigating the structure and dynamics of unfolding classroom discourse. Discourse Process. 35(2):135–198. https://doi.org/10.1207/S15326950DP3502_3.

O'Connor C, Michaels S, Chapin S, Harbaugh A. 2017. The silent and the vocal: participation and learning in whole-class discussion. Learn Instr. 48:5–13. https://doi.org/10.1016/j.learn-instruc.2016.11.003.

Oliveira AW, Boz U, Broadwell GA, Sadler TD. 2014. Student leadership in small group science in-quiry. Res Sci Technol Educ. 32(3):281–297. https://doi.org/10.1080/02635143.2014.942621.

Rampton B, Maybin J, Roberts C. 2015. Theory and Method in Linguistic Ethnography. In: Snell J, Shaw S, Copland F, editors. Linguistic Ethnography. London: Palgrave Macmillan London; p. 14–50.

Resnick, L. B., Asterhan, C. S. C., & Clarke, S. (Eds.). 2015. Socializing intelligence through academic talk and dialogue. Washington, DC: AERA.

Schnitzler K, Holzberger D, Seidel T. 2021. All better than being disengaged: student engagement patterns and their relations to academic self-concept and achievement. Eur J Psychol Educ. 36(3):627–652. https://doi.org/10.1007/s10212-020-00500-6.

Sedova K, Navratilova J. 2020. Silent students and the patterns of their participation in classroom talk. J Learn Sci. 29(4-5):681–716. https://doi.org/10.1080/10508406.2020.1794878.

Segal A, Pollak I, Lefstein A. 2016. Democracy, voice and dialogic pedagogy: the struggle to be heard and heeded. Lang Educ. 31(1):6–25. https://doi.org/10.1080/09500782.2016.1230124.

Shi Y, Zhang Z, Cao Shu, Liu Q. 2024. Dialogic teaching of controversial issues: discursive moves to enact two-sided discussions. Lang Educ. 38(2):303–319. https://doi.org/10.1080/09500782.2023.2240292.

Sinclair JMH, Coulthard M. 1975. Towards an analysis of discourse: the English used by pupils and teachers. Oxford: Oxford University Press.

Snell J, Lefstein A. 2018. "Low ability," participation, and identity in dialogic pedagogy. Am Educ Res J. 55(1):40–78. https://doi.org/10.3102/0002831217730010.

Sun J, Anderson RC, Perry M, Lin TJ. 2017. Emergent leadership in children's cooperative problem solving groups. Cogn Instr. 35(3):212–235. https://doi.org/10.1080/07370008.2017.1313615.

Tobin J. 2019. The origins of the video-cued multivocal ethnographic method. Anthropol Edu Q. 50(3):255–269. https://doi.org/10.1111/aeq.12302.

Vygotsky L. 1978. Mind in society: the development of higher psychological processes. Cambridge, MA: Harvard University Press.

Wells G, Arauz R. 2006. Dialogue in the classroom. J Learn Sci. 15(3):379–428. https://doi.org/10.1207/s15327809jls1503_3.

Wheelan SA, Kaeser RM. 1997. The influence of task type and designated leaders on developmental patterns in groups. Small Group Res. 28(1):94–121. https://doi.org/10.1177/1046496497281004.

Wilkinson IAG, Reznitskaya A, Bourdage K, Oyler J, Glina M, Drewry R, Kim M-Y, Nelson K. 2017. Toward a more dialogic pedagogy: changing teachers' beliefs and practices through professional development in language arts classrooms. Lang Educ. 31(1):65–82. https://doi.org/10.1080/09500782.2016.1230129.

Yamaguchi R. 2001. Children's learning groups: a study of emergent leadership, dominance, and group effectiveness. Small Group Res. 32(6):671–697. https://doi.org/10.1177/104649640103200601.

Yamaguchi R, Maehr ML. 2004. Children's emergent leadership: the relationships with group characteristics and outcomes. Small Group Res. 35(4):388–406. https://doi.org/10.1177/1046496404263272.

Yukl G. 1989. Managerial leadership: a review of theory and research. J Manag. 15(2):251–289. https://doi.org/10.1177/014920638901500207.

Zillmer N, Kuhn D. 2018. Do similar-ability peers regulate one another in a collaborative discourse activity? Cogn Dev. 45:68–76. https://doi.org/10.1016/j.cogdev.2017.12.002.