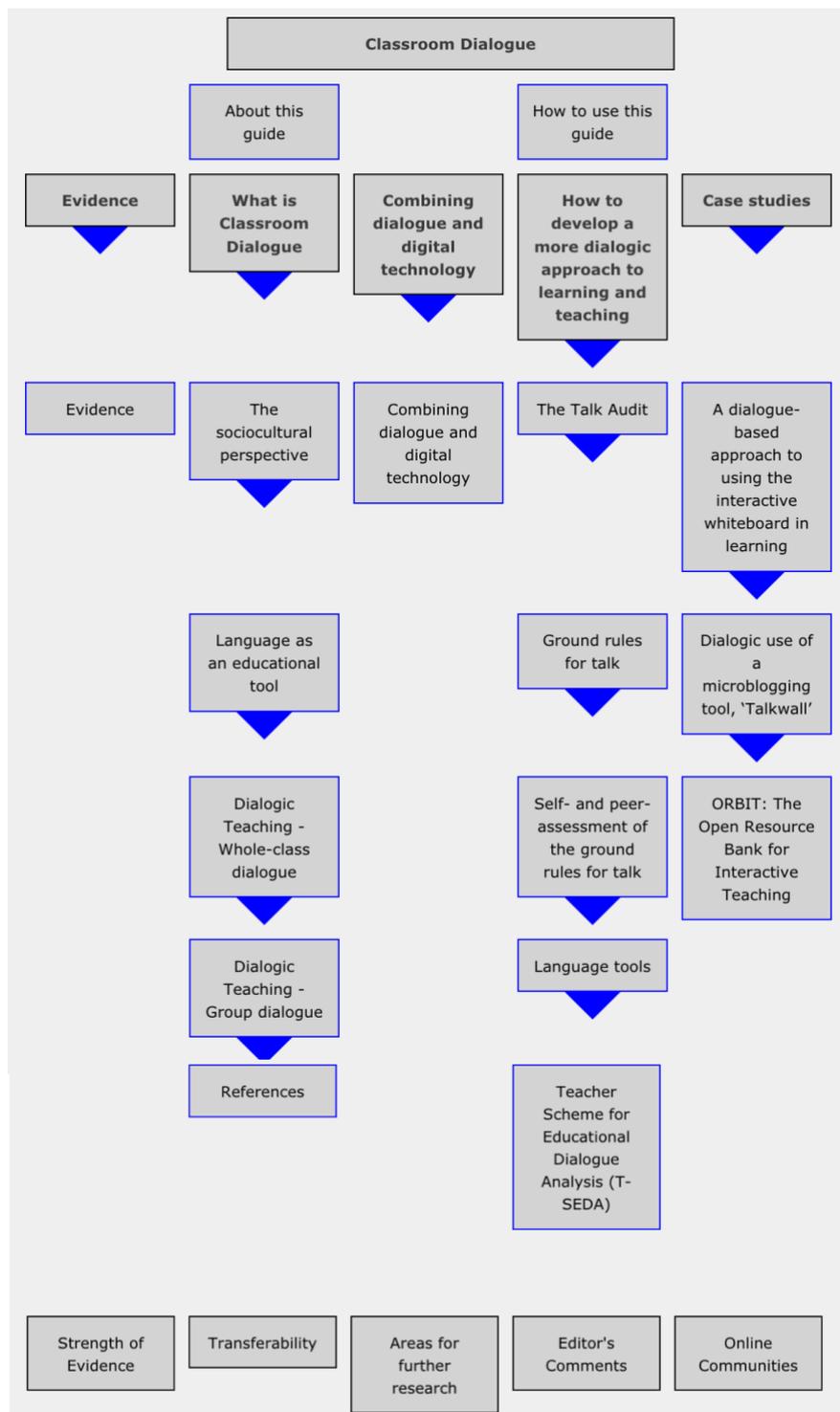


Classroom Dialogue

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Classroom Dialogue MESH Guide v1 (Nov 2018)
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How to use this guide

Talk is possibly the teacher's main pedagogical tool. Classroom Dialogue can be thought of as a very specific use of talk - one that actively uses language as a cultural tool and psychological tool to enhance learning. Classroom Dialogue is a tool that can be used to help students to construct knowledge as they explore and build on their own, and others', ideas.

This guide is relevant to all teachers of all age groups. It has been developed initially by colleagues at the University of Cambridge who belong to the [Cambridge Educational Dialogue Research Group \(CEDiR\)](#). Drawing on research undertaken both in the UK and other settings over a number of years, it provides an introduction to the concept of Classroom Dialogue. Further, it highlights a number of practical resources and strategies to support teachers in developing a dialogic pedagogy.

1) Evidence

Evidence suggests that school students' academic performance is influenced by the quality of educational dialogue in both small-group and whole-class situations (Howe & Abedin, 2013). The results of a recent Dialogic Teaching intervention study by Alexander, Hardman & Hardman (2017) involving 5000 UK children reported evidence of a positive effect on attainment; students in the intervention group who experienced just 20 weeks of dialogic teaching made, on average, two months more progress on standardised English, mathematics and science tests than their peers in the control group (Jay, Willis, Thomas, Taylor, Moore, Burnett, Merchant, Stevens, 2017). In Finland, the quality of educational dialogue has been positively associated with students' academic attainment in physics/chemistry and language arts (Muhonen, Pakarinen Poikkeus, Lerkkanen & Rasku-Puttonen, 2017). A recent PhD study in five Flemish primary schools also demonstrated a positive effect on students' reasoning and problem solving skills (T'Sas, 2018), whilst the link between dialogue and the development of critical thinking skills has been noted (Kuhn, 2016). Non-cognitive impacts of Classroom Dialogue include small improvements in students' self-reported communication skills, teamwork and resilience, with students receiving free school meals reporting slightly larger improvements (Siddiqui, Gorard, & See, 2017). Dialogic approaches were also significantly correlated with increases in positive attitudes to school and to self-as-learner in a recent large-scale study of around 1800 primary school children in 72 classrooms in England (<http://tinyurl.com/ESRCdialogue>; Howe et al, under review).

Research has begun to explore whether specific dialogic or talk 'moves' (for example, asking questions to expand or explain) may influence learning more than others. For instance, the study by Howe et al. found that high levels of student participation, where students are actively engaging with each others' ideas, in conjunction with high levels of elaboration (or building on ideas) and querying (or challenging), were positively associated with national Standardised Achievement Tests (SATs) scores at the end of primary school. Other work by Webb et al.

confirms the importance of teacher support of student participation in raising student achievement. Thus, both teacher practice and student participation need to be taken into account when predicting student achievement (ibid.). Finally, a comprehensive literature review of the field suggests how research into student participation has demonstrated that gender, ethnicity and history of attainment are important variables influencing student participation (Howe & Abedin, 2013).

These findings are consistent with work undertaken at the University of Pittsburgh. Analysing information collected from researchers interested in the role of discussion in learning, data was considered to include evidence that students who experienced dialogic teaching performed better on standardised tests than similar students who did not have discussion experience (Resnick, Asterhan & Clarke, 2015). Further, some students retained their learned knowledge for two or three years and, in some cases, even transferred their academic advantage to a different domain (e.g., from science instruction to an English literature exam). It is important to note that these results were not found every time teachers tried to use dialogic methods in teaching traditional subject matter. However, they occurred with enough frequency, and in enough of a variety of countries and school environments, that was considered to suggest a potentially powerful new way of organising school learning.

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2) What is Classroom Dialogue?

The sociocultural perspective

From a sociocultural perspective, there is an important relationship between language and cognitive development. Vygotsky (1962, 1978) was one of the first theorists to recognise the importance of social interaction and language in cognitive development. For Vygotsky, language is both a cultural tool (for the development and sharing of knowledge) and a psychological tool (for the development of individual thought). He argued that the development of thinking is a result of the dynamic relationship between these two uses of language, with 'intermental' activity (social interaction) influencing the development of important 'intramental' capabilities (individual thinking). From this perspective, language is an important educational tool (Mercer & Howe, 2012).

Language as an educational tool

The importance of language to learning is evident even from children's earliest interactions with their carers. Hart and Risley (1995) argued that the amount and quality of the dialogue that young children experience at home is one of the best predictors of their eventual academic attainment. The conversational style of carers has been shown to be critical to children's long-term retention; children have more organised and detailed memories if their carers frequently use elaboration and evaluation (Reese, Haden & Fivush, 1993). Longitudinal studies have also shown that long-term retention is facilitated by the practice of verbalising events at the time that they occur (Fivush & Schwarzmüller, 1998). However, for some children, the only chance to engage in productive, educationally stimulating dialogue occurs in school.

Dialogic Teaching - Whole-class dialogue

Different types of talk have been identified in the classroom, some of which are more educationally effective than others. 'Monologic' talk is dominated by the teacher and is exemplified by an 'Initiation-Response-Feedback' (IRF) pattern. The IRF pattern, which may be repeated several times during whole-class teaching, is typified by the teacher asking a closed question (initiation), a child answering (response) and the teacher offering feedback on that answer (feedback). Such an approach is common in classrooms (Howe & Abedin, 2013), but it has been criticised for limiting the meaningful engagement of students with talk (Mercer, 1995).

In contrast, dialogic talk assumes a more conversational manner and tries to consider several points of view (Howe & Abedin, 2013). It encompasses encouraging, non-evaluative feedback (e.g. Berry, 2006; Chin, 2006) and refocuses the conversation away from the teacher's initiating moves towards students' responses (Wolfe & Alexander, 2008). This focus on students' responses enables teachers to more effectively support individuals in their learning, which is fundamental to both formative assessment (Black, Harrison, Lee, Marshall & Wiliam, 2002) and the idea

of “learning as assessment” (Wolfe & Alexander, 2008). In this way, the conceptualisation of learning is broadened, moving beyond the idea of acquisition of knowledge to encompass students’ involvement in knowledge building practices (James, 2008).

An approach to classroom teaching that emphasises Classroom Dialogue has been summarised by Alexander (2017). Alexander defines dialogic teaching as being:

- Collective: teachers and children address learning tasks together
- Reciprocal: teachers and children listen to each other, share ideas and consider alternative viewpoints
- Supportive: children articulate ideas freely without fear of embarrassment over “wrong” answers and help each other achieve common understandings
- Purposeful: questions are purposeful and structured to provoke thoughtful answers, which may in turn provoke further questions
- Cumulative: individual exchanges are not disconnected but chained into coherent lines of enquiry. Answers are viewed as the building blocks of dialogue rather than its end point

In reality, it is neither possible nor desirable to be dialogic all the time. The rhythm of the lesson will change and there will be times when the teacher does not wish to seek extended contributions from the students. At such times the teacher may adopt a more ‘authoritative’ style of interaction with the class (Mortimer & Scott, 2003), for example when introducing new information. The most effective whole-class teaching uses a balance of authoritative talk and dialogue, because each kind of talk has its own useful functions.

Dialogic Teaching - Group dialogue

Different types of educationally effective talk in groups have been identified. Dawes, Fisher and Mercer (1992) first distinguished between ‘exploratory’, ‘cumulative’ and ‘disputational’ talk. Exploratory talk, which is similar to the concept of ‘accountable talk’ developed in the United States (Wolf, Crosson & Resnick, 2006), has been judged to be the most educationally effective type of talk in groups (Littleton & Mercer, 2013). Exploratory talk may be defined as talk in which:

- everyone engages critically but constructively with each other’s ideas;
- everyone offers the relevant information they have;
- everyone’s ideas are treated as worthy of consideration;
- partners ask each other questions and answer them, ask for reasons and give them;
- members of the group try to reach agreement at each stage before progressing;
- to an observer of the group, reasoning is ‘visible’ in the talk (Littleton & Mercer, 2013, p.16).

This is in contrast to ‘cumulative’ talk, in which ideas are shared and accepted in an uncritical way, or ‘disputational’ talk, which is characterised by disagreement and competition rather than co-operation (Littleton & Mercer, 2013).

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3) Combining dialogue and digital technology

Research into the interaction between Classroom Dialogue and digital technology is a burgeoning field of study. Much of the research undertaken on the influence of digital technology on productive Classroom Dialogue is informed by a sociocultural perspective (Major, Warwick, Rasmussen, Ludvigsen & Cook, 2018) introduced previously. Dialogue and digital technology may interact to enhance learning in several ways; for example, it may facilitate the use of dialogue to scaffold understanding, or it may facilitate exposure to, and building upon, other people's ideas (Major et al., 2018). A variety of different digital technologies have been discussed in the research literature, including interactive whiteboards, microblogging tools, applications, wikis or purpose-built software (Major et al., 2018). Productive Classroom Dialogue may be enhanced through specific features of the technology, such as the ability to externalise ideas (Lipponen, 2000) or to store, modify and revisit ideas to support students' developing understanding (Mercer, Hennessy & Warwick, 2010). In addition, research has shown that dialogic use of digital technology may have a positive effect on the classroom atmosphere (Bouhnik & Deshen, 2014) whilst also improving learner motivation and engagement (de Silva, Chigona & Adendorff, 2016).

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4) How to develop a more dialogic approach to learning and teaching

The Talk Audit

The first stage in developing a more dialogic approach to learning and teaching would be to consider the type of language that is already in use in your classroom. One way of doing this would be to undertake a 'talk audit'. Produced by 'The Inquiry Project', the talk audit identifies four 'goals' for productive discussions and nine associated 'talk moves' in the form of a checklist. This enables teachers to examine how frequently such talk moves are used in their classroom.

https://inquiryproject.terc.edu/prof_dev/Goals_and_Moves.cfm.html

The talk goals and moves reflect the principles of dialogic teaching that are underpinned by effective questioning and feedback techniques. The Thinking Together research conducted in primary and secondary classrooms (Mercer and Dawes, 2007) has produced a similar type of audit (Dawes, 2010):

https://thinkingtogether.educ.cam.ac.uk/resources/Teacher_techniques_checklist.pdf

Reference

Dawes, L. (2010). *Creating a Speaking and Listening Classroom*. London: Routledge.

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Ground rules for talk

One way to facilitate the development of a supportive environment where children can articulate their ideas freely is through the negotiation of 'ground rules' for talk. The Thinking Together website (Dawes, 2010) has some very useful resources for encouraging children to consider how talk is used in classrooms and activities for developing ground rules for talk with your students.

<https://thinkingtogether.educ.cam.ac.uk/resources/>

Reference

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Self- and peer-assessment of the ground rules for talk

Students can be encouraged to reflect on how well they, and their group, are doing when using the ground rules for talk using the Thinking Together 'Talk Tally' (Dawes, 2010). This could form part of an Assessment for Learning activity in which students award themselves and/or their group 'two stars and a wish' to identify what they are currently doing well and what they might do next time to improve:

https://thinkingtogether.educ.cam.ac.uk/resources/Thinking_Together_Talk_Tally.pdf

Reference

Dawes, L. (2010). *Creating a Speaking and Listening Classroom*. London: Routledge.

Language tools

Dawes (2008, p.5-6) has identified some 'language tools' that help children to use language to think together.

- To ask questions that support one another's thinking:
 - 'what do you think?'
 - 'why do you think that?'
 - 'Let's think again ...'
- To encourage one another to elaborate or add detail:
 - 'Can you say a bit more?'
 - 'What else do we know?'
 - 'I can tell you about ...'
 - 'Can you explain ...?'
 - 'I hadn't thought of that until you said it ...'
 - '[name] pointed out to me that ...'
- To challenge one another's thinking, with respect and interest:
 - 'I disagree because ...'
 - 'But ...'
 - 'I agree but ...'
 - 'You're right in my opinion ...'
 - 'I believe that ...'
 - 'I think ...'
 - 'Another point of view is ...'
 - 'So-and-so said - and I can't see how your view fits with ...'
- To justify what they assert:
 - 'My reason for saying that is ...'
 - 'Because ...'

- 'I have noticed that ...'
- 'I have found out that ...'
- 'I see it differently ...'

- To speculate:
 - 'If ...'
 - 'What if ...'
 - 'Why ...'
 - 'Maybe we could ...'
 - 'I have a suggestion ...'

- To be able to negotiate and change their mind:
 - 'I see what you mean ...'
 - 'I am beginning to understand ...'
 - 'That's a good way to look at it ...'
 - 'When you put it that way ...'
 - 'You have convinced me ...'
 - 'Your reason sounds right because ...'

Reference

Dawes, L. (2008) *The Essential Speaking and Listening: Talk for learning at KS2*. London: Routledge.

Teacher Scheme for Educational Dialogue Analysis (T-SEDA)

Researchers at the University of Cambridge (UK) are currently developing and trialing an extensive resource that supports teachers in conducting their own inquiry into Classroom Dialogue (until March 2019). For further information about this trial and the associated resources please see the website:

<https://www.educ.cam.ac.uk/research/projects/tseda/>

Reference

Vrikki, M., Kershner, R., Calcagni, E., Hennessy, S., Lee, L., Estrada, N., Hernández, F., and Ahmed, F. (2018). The Teacher Scheme for Educational Dialogue Analysis (T-SEDA): Developing a research-based observation tool for supporting teacher inquiry into pupils' participation in Classroom Dialogue. *International Journal of Research and Methods in Education*.

5) Case Studies

[A dialogue-based approach to using the interactive whiteboard in learning](#)

Recent research has explored how the interactive whiteboard (IWB) can be used to encourage dialogue with primary and secondary children across subject areas (Hennessy, Warwick, Brown, Rawlins & Neale, 2014). An overview of the project can be found here:

<http://dialogueiwb.educ.cam.ac.uk/about/>

The 'resource bank and templates' section of the project website provides a variety of ideas for IWB activities designed to promote dialogue:

<http://dialogueiwb.educ.cam.ac.uk/resources/>

Reference

Hennessy, S., Warwick, P., Brown, L., Rawlins, D. & Neale, C. (2014). *Developing interactive teaching and learning using the IWB: a resource for teachers.* Open University Press.

[Dialogic use of a microblogging tool, 'Talkwall'](#)

The University of Oslo (Norway) and the University of Cambridge are currently developing resources to support teachers developing their dialogic classroom pedagogy and use of digital technology. Their international research project focuses on the use of a free, web-based microblogging tool called 'Talkwall'. Talkwall has been developed to enhance, and possibly transform, classroom interactions by encouraging genuine 'thinking together', as students are easily able to share, and build upon, each other's ideas. Further information about understanding Classroom Dialogue and how to use Talkwall, including ideas for the dialogic use of Talkwall, can be found on the project's website:

<http://digitaliseddialogues.co.uk/>

The microblogging tool 'Talkwall', which can be used across a variety of subjects and with children of varying ages, can be accessed here:

<http://www.talkwall.net/#/>

[ORBIT: The Open Resource Bank for Interactive Teaching](#)

For further information about developing strategies that promote Classroom Dialogue and links to resources for use in mathematics and science (primary and secondary), please visit the ORBIT website:

http://oer.educ.cam.ac.uk/wiki/Teaching_Approaches/Dialogue

[Further research](#)

The CEDiR group is developing research in 5 thematic strands and welcomes research collaborations and applications for doctoral study related to any of these:

- [dialogic theory and research methodology](#)
- [dialogue, professional change and leadership](#)
- [inter-cultural and conflict transformation dialogue](#)
- [digital technology and dialogue](#)
- [classroom dialogue](#)

CEDiR welcomes dialogue and collaboration and is actively forging partnerships with other researchers in this field, including those working in other cultures. Indeed, the group already has links with senior academics and practitioners in the field worldwide, including a substantial number of high profile international collaborators and associates spanning over 15 countries. In addition, CEDiR particularly welcomes approaches from teachers and educators who might like to trial the **Teacher-SEDA** resource pack: see <https://www.educ.cam.ac.uk/research/projects/tseda/>