What is educational dialogue?

In dialogue, participants listen to each other, they contribute by sharing their ideas, justifying their contributions and engaging with others’ views. In particular they explore and evaluate different perspectives and reasons. Relevant questions and contributions are linked between speakers, allowing knowledge to be built collectively within a lesson or over a series of interconnected lessons.

Although verbal interactions are central, dialogue can be supported with non-verbal communication (e.g. gestures, facial expression and eye contact) and by using visual or technology resources. Silence, physical movement, classroom routines and ethos can also be important aspects of dialogue, framing and supporting (or sometimes hindering) the spoken conversation that is the main focus of this pack.

Dialogue with all students

Educational dialogue takes different forms with learners of different ages, from the youngest to oldest, and it can be developed in different areas of learning. Some features of productive educational dialogue already appear in many classrooms but sustaining productive educational dialogue takes time. It might also challenge participants, especially if they are not used to expressing their views at length or having them examined publicly.

What’s the difference between dialogue and talk?

Students and teachers, of course, talk a great deal during the course of the day. This talk can have many purposes: giving instructions, students chatting together, or sharing information. However, these examples are not what we mean by educational dialogue. Even when students talk together during learning situations, they may not be engaging in educational dialogue. Take this example from a teacher who has used the T-SEDA resources:

Some students let their learning partner do all the talking, or they would state their thoughts without listening to what their learning partner said. Some pairs either did not talk at all or their talk was off topic. The children were not able to structure their discussions and they did not understand the purpose of their talk. (Natalie)

Although students were talking together, they were not taking part in dialogue because they were not engaging with each other, listening to each other, and their talk was not part of their learning.

Video 1: What is educational dialogue? Provides more information about educational dialogue.
## T-SEDA dialogue coding scheme

<table>
<thead>
<tr>
<th>Dialogue categories</th>
<th>Contributions and Strategies</th>
<th>What do we hear? (Key Words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB – Invite to build on ideas</td>
<td>Invite others to elaborate, build on, clarify, comment on or improve own or others’ ideas / contributions</td>
<td>‘Can you add’, ‘What?’ ‘Tell me’, ‘Can you rephrase this?’ ‘Do you think?’ ‘Do you agree?’</td>
</tr>
<tr>
<td>B – Build on ideas</td>
<td>Build on, elaborate, clarify or comment on own or others’ ideas expressed in previous turns or other contributions</td>
<td>‘it’s also’, ‘that makes me think’, ‘I mean’, ‘she meant’</td>
</tr>
<tr>
<td>CH - Challenge</td>
<td>Questioning, disagreeing with or challenging an idea</td>
<td>‘I disagree’, ‘But’, ‘Are you sure…?’, ‘…different idea’</td>
</tr>
<tr>
<td>IRE – Invite reasoning</td>
<td>Invite others to explain, justify, and/or use possibility thinking relating to their own or another’s ideas</td>
<td>‘Why?’, ‘How?’, ‘Do you think?’, ‘…explain further’</td>
</tr>
<tr>
<td>R – Make reasoning explicit</td>
<td>Explain, justify and/or use possibility thinking relating to own or another’s ideas</td>
<td>‘I think’, ‘because’, ‘so’, ‘therefore’, ‘in order to’, ‘if…then’, ‘it’s like…’, ‘imagine if…’, ‘could’</td>
</tr>
<tr>
<td>CA - Coordination of ideas and agreement</td>
<td>Contrast and synthesise ideas, confirm agreement and consensus; Invite coordination/synthesis</td>
<td>‘agree’, ‘to sum up…’, ‘So, we all think that…’, ‘summarise’, ‘similar and different’</td>
</tr>
<tr>
<td>C – Connect</td>
<td>Make pathway of learning explicit by linking to contributions / knowledge / experiences beyond the immediate dialogue</td>
<td>‘last lesson’, ‘earlier’, ‘reminds me of’, ‘next lesson’, ‘related to’, ‘in your home’</td>
</tr>
<tr>
<td>RD – Reflect on dialogue or activity</td>
<td>Evaluate or reflect “metacognitively” on processes of dialogue or learning activity; Invite others to do so</td>
<td>‘dialogue’, ‘talking’, ‘sharing’, ‘work together in the group/pair’, ‘task’, ‘activity’, ‘what you have learned’, ‘I changed my mind’</td>
</tr>
<tr>
<td>G – Guide direction of dialogue or activity</td>
<td>Take responsibility for shaping activity or focusing the dialogue in a desired direction or use other scaffolding strategies to support dialogue or learning</td>
<td>‘How about’, ‘focus’, ‘concentrate on’, ‘Let’s try’, ‘no hurry’, ‘Have you thought about…?’</td>
</tr>
<tr>
<td>E – Express or invite ideas</td>
<td>Offer or invite relevant contributions to initiate or further a dialogue (ones not covered by other categories)</td>
<td>‘What do you think about…?’, ‘Tell me’, ‘your thoughts’, ‘my opinion is…’, ‘your ideas’</td>
</tr>
</tbody>
</table>
Educational dialogue and student learning in diverse contexts

There is a growing base of international research that supports the idea that dialogic teaching is beneficial for students’ learning and other personal development outcomes. Findings from evaluating professional development programmes include:

- UK primary students’ improved academic attainment (see Alexander, 2018)
- increased learning motivation, perceived autonomy and interest in STEM subjects among secondary students in Germany linked to increased teacher constructive feedback (Kiemer et al., 2015).

Other studies focus on the impact of ‘natural variations’ in classroom dialogue. Findings include:

- students that speak more using high-quality reasoning in language arts achieve better outcomes (see Sedova et al., 2019 in the Czech Republic).
- studies of primary mathematics in the US found that providing detailed and correct explanations backed up with evidence relates to higher achievement.

Evidence that teacher-student dialogue promotes learning

Recently, a team at the University of Cambridge produced compelling evidence about the impact of teacher-student dialogue. The data came from detailed analyses of 144 lessons by 72 teachers in 48 English primary schools (http://tinyurl.com/ESRCdialogue).

Which talk moves are strongly associated with learning gains?
- **building on ideas** is particularly important
- **invitations to build on ideas**
- **challenging and questioning others’ views respectfully***

These talk moves need to happen in the context of a supportive classroom, in which these elements are found:
- active student participation – multiple students give extended contributions and engage with others’ ideas
- explicit use of ground rules for talk – supporting dialogic practices, negotiated with students

*Too much challenging without the other supportive elements can even have a negative effect!
### Peer group dialogue

#### What is the value of group work?

- High quality group work is **strongly linked** with learning gains (e.g. Howe et al., 2019) especially when participants have different views (Bennett et al., 2009).
- Students can learn from each other
- Learners can practise using talk for learning, reasoning and problem solving without a teacher
- They can rehearse ideas in a less stressful environment before sharing their progress with students in other groups / the whole class arena – “making thinking visible” to others; this promotes learning gains (Howe 2020)
- Other students can reflect on and evaluate the new ideas, including using formal rubrics; going beyond passive listening

#### How can you make group work effective?

Children need to *learn* to talk and work effectively together in groups; often they are not skilled at this.

‘Ground rules’ and **sentence stems** can get learners in the habit of listening, referencing others, expressing agreement and respectfully challenging, giving reasons.

Support for dialogue in which students **engage with each other’s ideas** needs to be built into activity design, for example requiring students to work together in order to succeed, and aiming to stimulate reasoned debate. **Talking points** are a great activity for this. [link to video 4]

#### How can you know if groupwork is supporting learning?

**Tool 2G** in the T-SEDA pack provides a rating scale for the quality of groupwork; there are versions for observing younger and older students and one for learners’ self-assessment. High scores on these scales are strongly linked with learning outcomes (e.g. Howe et al., 2019).

#### What are talking points?

- **Statements** – *not questions* – that students are asked to agree/disagree (respectfully) with during discussion
- Provocative, curious, interesting, true, false
- May be used to generate factual or imaginative responses
- Like ground rules, they can be used in group work or whole class discussion

[Video 4 Practical tips for supporting classroom dialogue: talking points](#)
Dialogue in different contexts

Educational dialogue can be practised with diverse groups of learners from, in groups from all ages and across subjects and contents. This is why the T-SEDA pack is designed to be versatile and adaptable, and it has already been used by practitioners in varied contexts. The next pages will help you to think about dialogue in your setting: have a look for the ones that are relevant to you.

Reflection point: Have a look at the dialogue codes on page 2, with the examples of what you might hear, and look at the examples below. How do you think the students in your setting would verbalise the different dialogue codes? What might you hear in your classroom?

<table>
<thead>
<tr>
<th>Younger students: you might hear simpler language, and building or challenges might be expressed through these kinds of phrases</th>
<th>Older students: you might hear more formal sentence starters or more sophisticated language</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Build on Ideas</strong></td>
<td>‘And...’; ‘So then...’; ‘Oh yeah...’;</td>
</tr>
<tr>
<td><strong>Challenge</strong></td>
<td>‘I agree that...’; ‘That’s a good point’; ‘We started off thinking..., and then...’</td>
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<tr>
<td>‘No!’; ’But...’; ‘It can’t be...’;</td>
<td>‘I disagree that...’; That doesn’t seem right ‘; ‘That isn’t possible, because...’; ‘I think that’s half right’; ‘That’s not possible’</td>
</tr>
<tr>
<td><strong>Reasoning</strong></td>
<td>‘Because...’; ‘I think that means...’</td>
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<td></td>
<td>‘If that’s the case, it follows that...’</td>
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### Dialogue with young children

Dialogue is at the centre of education in the pre-school years (age 2-5). There are several ways in which carrying out a T-SEDA inquiry will help to identify the kind of dialogue that children are using at this stage. The table below shows speaking and listening skills taken from one national curriculum (England). Could you apply these in your own national context?

<table>
<thead>
<tr>
<th>Listening, Attention and Understanding. Children at the expected level of development will:</th>
<th>Possible T-SEDA dialogue code</th>
<th>What you might hear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions</td>
<td>Build on Ideas (B): build on, elaborate, clarify or comment on own or other’s ideas expressed in previous turns or contributions</td>
<td>I’m glad I didn’t see a Gruffalo. The mouse was brave. Yeah, the mouse was brave, and sneaky</td>
</tr>
<tr>
<td>Make comments about what they have heard and ask questions to clarify their understanding</td>
<td>Challenge (CH): Question, disagree with or challenge an idea.</td>
<td>Where did the skeletons come from then? No, I’m not scared of the skeletons, they look friendly</td>
</tr>
<tr>
<td>Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.</td>
<td>Connect (C): Link to contributions/knowledge/experiences beyond the immediate dialogue</td>
<td>We went to the woods, we went stumble, trip, stumble, trip</td>
</tr>
</tbody>
</table>

### Speaking. Children at the expected level of development will:

<p>| | | |</p>
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<tbody>
<tr>
<td>Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary;</td>
<td>Guide Direction of Dialogue or Activity (G): Take responsibility for shaping the activity or focussing the dialogue in a desired direction</td>
<td>Get that big bowl then you can be daddy bear. I’ll be mummy bear.</td>
</tr>
<tr>
<td>Offer explanations for why things might happen, making use of recently introduced vocabulary from stories</td>
<td>Make Reasoning Explicit (R): explain, justify or use possibility thinking relating to their own or others ideas</td>
<td>I think if I made a giant jam sandwich the bread would get too squishy</td>
</tr>
</tbody>
</table>
Educational dialogue also has a valuable role to play in higher education (HE) and adult learning. Lecturers in several countries have conducted successful T-SEDA inquiries in their universities where they believed that more dialogue would be valuable for student learning. Here are some examples from HE contexts.

Steven is a law lecturer who has used the T-SEDA resources to carry out his own inquiry. He noted that the value of dialogic education is that it helps to promote the self-led learning skills that are important in HE contexts.

Steven also realised that the different types of learning setting in HE could promote different forms of dialogic interaction. In a larger lecture-style situation, he found that asking open questions was a way to encourage students to engage in dialogue.

For example, when he asked the question in a lecture ‘Should International Investment Law be involved in any way with Anti Money Laundering/Counter Terror Finance efforts, or should they be mutually exclusive?’, he was not looking for a predefined answer. Instead, he wanted students to ‘begin to explore, analyse and evaluate the question using their internal dialogue’. Then they could discuss the question in a smaller seminar group at a later point in time and consider how others had thought about the question.

Steven concluded that the dialogic practices suggested in the T-SEDA pack could be used in conjunction with HE subject content to enable students to discuss issues in greater depth and to develop greater criticality of the subject matter.

Kathren teaches English as a Second Language (ESL) to adult students. She carried out a T-SEDA inquiry in order to create a supportive classroom environment to heighten engagement and allow the students to explore the content of their lessons more creatively. She was particularly interested in the use of ground rules for talk.

Kathren found that the inquiry enabled her to pay more attention to aspects of her own teaching, such as types of questions that she was asking. Her students spoke a great deal during her classes, demonstrating challenge to each other’s ideas and expanding on what others has said.

I think that once teachers realise the power of just changing the way you maybe ask questions, or changing the way that students ask questions, it could be really quite a wow moment.
In England, the National Curriculum document¹ for Key Stages 1-4 (ages 5-16) states that students should become proficient in Spoken Language during their time at school:

6.2 Pupils should be taught to speak clearly and convey ideas confidently using Standard English. They should learn to justify ideas with reasons; ask questions to check understanding; develop vocabulary and build knowledge; negotiate; evaluate and build on the ideas of others; and select the appropriate register for effective communication. They should be taught to give well-structured descriptions and explanations and develop their understanding through speculating, hypothesising and exploring ideas. This will enable them to clarify their thinking as well as organise their ideas for writing.

The highlighted phrases in the above statement show the similarities between the Spoken Language aims and the dialogue that is key for learning shown above. Of course, what you will hear in your classroom depends on the age and stage of your students.

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T-SEDA inquiries can be carried out across all subjects with students of any age. Helping students to improve their dialogue can aid learning from the earliest years of primary/elementary school to school-leaving age students.

Teachers have used the T-SEDA pack in many ways: primary maths; physics classes with sixteen-year-olds; psychology classes with sixteen-year-olds; in secondary history and English classes. These are just a few examples.

A typical response from these teachers is that dialogic practices “really help to develop [students] knowledge in that topic, and that “having their ideas challenged made them think about them in a different perspective” (Jacob)

Other teachers have wanted to observe and improve their students’ dialogue as part of the classroom culture rather than for a specific subject. For example, Nadia wanted to investigate if children could build on each other’s ideas across a range of subjects such as English, maths, geography and history. Another teacher, Lucy, found that the students in her class used talk rules and listening cues to build on each other’s ideas during class discussion.

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**Dialogic principles for equitable participation**

- The notion of dialogue is intrinsically inclusive of people’s diverse views and knowledge
- All have rights to be heard
- All need to participate to promote everyone’s learning
- Inclusion of diverse voices and perspectives will add to the understanding of what dialogue means in practice

**BUT barriers to dialogic participation for all learners may exist in:**

- Ways of communicating
- Lack of confidence to participate
- Understanding of different perspectives and ways of thinking
- Acceptance and valuing of diverse views
- Contrasting perceptions and motivations for participation
- Preconceived ideas about ‘ability’ and capacity to participate
- Cognitive challenge

**SO, it’s important to consider factors relating to the people taking part and the context, such as:**

- Individual differences in communication, including non-verbal
- Cultural differences and commonalities
- Classroom structures, routines, activities and environment (physical and social)

**PRACTICAL MEASURES could include:**

- Discussing the value of listening to other voices in your setting
- Adapting and extending the observation templates in the T-SEDA pack to answer specific questions about inclusion
- Developing new structures support for group interaction and cultural awareness

### Engaging students on the autistic spectrum in dialogue

For example, Ana Laura Trigo Clapés has devised ways of adjusting the T-SEDA coding scheme to the communication characteristics associated with autism. Some of the strategies were enriched, adding suggestions of how they could be implemented to support students’ understanding of the content and structure of dialogue and what is expected from their participation. Six main features were added, including incorporating visual or physical representations, being explicit, breaking down information into steps, providing options, mediating dialogue with peers and providing 1-to-1 support. Other new strategies related to configuring the physical classroom environment and planning friendlier activities that open up opportunities for different forms of contribution. Contact t-seda@educ.cam.ac.uk for more information on the free resources available.