"We define our identity always in dialogue with, sometimes in struggle against, the things our significant others want to see in us. Even after we outgrow some of these others—our parents, for instance—and they disappear from our lives, the conversation with them continues within us as long as we live."

(Taylor, 1994)

1 WHY DIALOGUE?

1.0 • WHY DIALOGUE?

Dialogue is one of the best vehicles for learning how to think, how to be reasonable, how to make moral decisions and how to understand another person's point of view. It is supremely flexible, instructional, collaborative and rigorous. At its very best, dialogue is one of the best ways for participants to learn good habits of thinking.

At its best, dialogue is one of the best vehicles for teaching good habits of thinking.

Robin Alexander, a professor in the United Kingdom, is one of the main advocates for teaching through dialogue, with many influential publications to his name. In one of his books, *Towards Dialogic Teaching: Rethinking Classroom Talk* (2006), he makes the following argument:

Dialogue allows us as teachers, leaders or support staff to intervene in the learning process by giving instant feedback, guidance and challenge to our students.

1. Dialogue is undervalued in many schools when compared with writing, reading and math.
2. Dialogue does not get in the way of "real" teaching. In fact, by comparing PISA and other international tests, Alexander shows it is possible to teach more through dialogue and yet still be "at or near the top" of the tables.
3. Dialogue is the foundation of learning because it allows interaction and engagement with knowledge and with the ideas of others. Through

Robin Alexander's research shows dialogue leads to gains in international tests such as PISA.

Dialogue gives teachers a valuable insight into their students' beliefs, questions and misconceptions.

dialogue, teachers can most effectively intervene in the learning process by giving instant feedback, guidance and stimulation to learners.

4. Dialogue in education is a special kind of talk, in that it uses structured questioning to guide and prompt students' conceptual understanding.

Some of the other benefits of dialogue include the opportunity to ask appropriate questions, articulate problems and issues, imagine life's possibilities, see where things lead, evaluate alternatives, engage with each other and think collaboratively. A wide-scale improvement in such abilities would be no panacea, but can you think of many more significant educational achievements than these?

1.1 • REASONS FOR DIALOGUE 1: LEARNING *HOW* TO THINK

(James) In 2003, Jill and I attended an international conference in Bulgaria. The focus was Philosophy for Children. In addition to the two hundred delegates from around the world, the organizers also invited some local teenagers to take part in proceedings. Midway through the four-day event, I was asked to facilitate a community of inquiry with these teenagers for the other delegates to observe.

I began the session with a fictional story about two hunters, Hank and Frank, who are chased by a talking bear. The teenagers then created a number of philosophical questions from which they chose their favorite: Why sacrifice yourself for others? After a short pause for quiet reflection, I invited an eager young man to start us off by giving his first thoughts. This is what he said:

> It seems to me that "sacrifice" is the most important concept in this question. I think someone might sacrifice themselves based on instinct, impulse or intuition. Of course, two of these are in the cognitive domain and one is in the affective domain, so I suppose we need to determine which of these is more likely in any given situation before we can answer the question effectively.

All the other delegates were nodding approvingly at the boy's apparent confidence in thinking about and analyzing the concept of sacrifice. As for me, I was like a rabbit caught in the headlights; I certainly had not been expecting that response!

To grab some thinking time for myself, I asked the teenagers to decide what these terms—instinct, impulse and intuition—had in common. While they did that, I asked a friendly philosopher to suggest what I might do next.

Reconvening, I asked one girl to give her group's answer. She will forevermore be a favorite of mine after replying: "Instinct, impulse and intuition have one thing in common . . . they are all names of perfumes." (At last: someone on my wavelength!)

Once the hour-long discussion had finished, I made a beeline for the organizers and moaned that they had staged all this: "You could've told me you'd invited only the most talented philosophers from across Bulgaria to join us!" They laughingly explained they had simply invited volunteers from the local area to take part—there had been no selection process.

"So how come they're so adept at thinking?" I inquired.

"Because they've been taught how to think from an early age," they said.

"But so have children in the United Kingdom, and yet I haven't come across young teenagers as skilled in thinking as your students," I countered.

Their response was something that initially vexed, then intrigued and ultimately emboldened me: "From what we've seen in Western countries, you don't seem to teach children *how* to think; instead you only teach them *what* to think."

Students benefit from being taught *how* to think, and dialogue is one of the best ways to achieve this.

The more I work in schools around the world, the more I think these Bulgarian teachers may have been right.

For example, if I ask children at the end of primary school (nine- to eleven- year-olds) if they think stealing is wrong, they all answer yes. But if I then ask why Robin Hood is thought of as a good man if stealing is wrong, they always retort: "Because he robbed from the rich and gave to the poor." Perhaps there's nothing too controversial there yet, but if I press them to decide if it would be okay for me to steal, let's say from a bank, and give the proceeds to poor people, they almost always say yes. Rarely do the children seem troubled by the fact that stealing from anybody, no matter what the funds are used for, is against the law.

I wonder if this suggests the Bulgarian teachers might be right—that too many children are being taught *what*, rather than *how*, to think.

Yet teaching students how to think feels like something of an abstract concept. Perhaps the simplest way to picture it is to consider one strategy for thinking that we all use when faced with a difficult choice: to list advantages and disadvantages. Creating this structure in our head is common to all of us. But it is not a structure we were born with—we were taught it, and it has become one of our "thinking tools." Dialogue allows us to model structures for thinking, for example, by asking questions, giving counter-examples, asking for reasons, justifying answers, adding to the last idea you heard. All of these are new thinking structures, and you are explicitly modeling and teaching them with students.

Another example: I often notice teachers and parents praising children for saying the "right" thing: "it is wrong to kill," "we must always be nice," "you should never lie" and so on. And on the face of it, this might seem reasonable. After all, we want children to be moral and to do the right thing. However, what happens if they are faced with a dilemma but, up to that point, have only ever followed instructions? Such dilemmas might include eating meat while maintaining that killing is wrong, always telling the truth even if it is likely to hurt someone, always being nice even to someone who is either being racist or bullying a friend. What then?

Many parents will reply that they trust their children to do the right thing. But how do children know what the "right" thing is unless they have learned how to make moral decisions for themselves? In other words, how can they be moral if they haven't learned *how* to think or developed at least some wisdom?

Dialogue can help to develop students' wisdom and ethics.

This is where dialogue comes in because it is one of the best ways to learn how to think, how to be reasonable, how to make moral decisions and how to understand another person's point of view. It is supremely flexible, instructional, collaborative and rigorous. At its very best, dialogue is arguably the best way for students to learn good habits of thinking.

For examples of teaching students how to think, look at the strategies in Chapter 4.

1.2 • REASONS FOR DIALOGUE 2: FROM SURFACE TO DEEP

(Jill) A lot of our teaching leads to students gaining some surface-level knowledge. Without this, many students would not "know" their numbers and letters or the myriad of subject-specific facts such as "rain is a form of precipitation."

However, our teaching does not often lead to students' deep understanding—at least not teaching in the traditional sense of "I speak and show; my students listen and learn."

This is not to criticize what teachers do: knowledge is a necessary first step to understanding. So helping students to gain some initial surface-level knowledge is an important function of our pedagogy.

Students *also* need to develop a deep understanding of concepts, connections, context and generalizations. There are many ways to achieve this, of which high-quality dialogue is one of the best.

Dialogue helps students to understand concepts, connections, context and general principles.

Of course, the emphasis is on *high-quality* dialogue. Not just any old dialogue will do. High-quality dialogue includes getting students to generate ideas, create meaning, classify, compare, make links, question assumptions, test cause and effect, speculate, hypothesize and so on.

A very useful way to distinguish between surface-level knowledge and deep understanding is through the SOLO taxonomy. The Structure of Observed Learning Outcomes (SOLO) taxonomy (Martin, 2011) is a model that describes levels of increasing complexity in students' understanding of subjects. It was proposed by John B. Biggs and K. Collis and has since gained popularity.

We have written about the SOLO taxonomy in depth in *Challenging Learning Through Feedback* (Nottingham & Nottingham, 2016). We give an overview of it in Section 8.5 and suggest it as a way to review the outcomes of a mystery (one of the dialogue activities suggested in Chapter 8; see Figure 11 in Chapter 8).

The SOLO taxonomy provides a clear structure for thinking about how to deepen and extend dialogue.

The levels of the SOLO taxonomy are shown below. The bolded terms are the ones originally proposed by Biggs and Collis. The terms in brackets are the ones we find more useful when talking with students about the SOLO taxonomy.

1. **Prestructural** (NO IDEA): students have acquired bits of unconnected information, which have no organization and make no sense.
2. **Unistructural** (ONE IDEA): students have one or two correct pieces of information and have made simple connections between them. They do not grasp the significance of this information, though.
3. **Multistructural** (MANY IDEAS): students know a number of related facts and are able to connect them correctly. They do not yet understand the overall significance.
4. **Relational** (RELATE): students are now able to appreciate the significance of the parts in relation to the whole.
5. **Extended Abstract** (EXTEND): students are making connections within the given subject area and beyond it. They are also able to generalize and transfer the principles and ideas underlying the specific instance.

As you can see, the SOLO taxonomy provides a clear structure for thinking about understanding. Level 1 represents no knowledge at all; Levels 2 and 3 represent knowledge; Levels 4 and 5 represent understanding.

So in SOLO taxonomy terms, high-quality dialogue can help students move from Levels 2 and 3 to Levels 4 and 5.

That is what we aim to show you in this book: how to create the high-quality dialogue that can lead to this movement from surface-level knowledge to deep understanding.

1.3 • REASONS FOR DIALOGUE 3: CREATING A CLIMATE OF TRUST

(Richard Kielty) Trust is the firm belief in a person's reliability, benevolence and honesty. Research by Bryk and Schneider (2002) among others has shown that nurturing trusting relationships between teacher and students is a key element in improving student learning.

Dialogue works best when the participants trust and respect each other.

Building relational trust is about creating a learning environment in which students feel they can take risks, make mistakes, express opinions and collaborate. These are also necessary conditions for high-quality dialogue. So as teachers, we need to create a climate of respect and trust that allows for this expression—and to model how this can be done.

An effective dialogue should be like a handball match in which the teacher is just *one* of the players rather than the whole of the opposition team! The "ball" should be passed from teacher to student to another student to another and another and another before going back to the teacher and back again to another student and so on. Yet many dialogues in classrooms seem more like a tennis match with the "ball" going from teacher to student to teacher to another student and so on.

The way in which a teacher listens, invites and responds sets the expectations for how students should also behave during a dialogue.

As teachers we model how to respond to dialogue through how we respond to student answers. We show how to reflect, how to treat answers with respect and when to offer support. We also show how to deal with unconventional ideas. I am sure we can all remember a time when a student has expressed an idea that seemed so bizarre and out of the ordinary that other students laughed. Were they laughing at the idea or at the student for expressing the idea? How we respond to this type of situation establishes the tone for future discussions. I have seen students humiliated when teachers join in with the other students in laughing at them. It is unlikely that the humiliated student will contribute any further ideas willingly and confidently. Instead, the idea given could and should have been used to stimulate discussion and to challenge misconceptions.

As a teacher, I might feed additional information to students and encourage them to rethink their ideas. I would acknowledge and value the fact that students are willing to take risks when answering questions and encourage them to build on risky answers. When modeling effective dialogue, we should prompt responses but not shape them (e.g., Does anyone have anything to add? Does anyone disagree with that?).

Opening a dialogue with students about the meaning and importance of trust is a valuable exercise in helping build a classroom culture that is inclusive, empathetic and safe. Everyone has experience with trust and can speak about the impact of its presence or absence in a variety of contexts and relationships. Making an explicit link between the development of specific character traits and the individual's contribution to the group within a classroom is essential for students to develop a sense of belonging. When students feel this sense of belonging, then dialogue becomes authentic and meaningful. This then leads to deeper understanding of ideas and concepts.

1.4 • REASONS FOR DIALOGUE 4: DEVELOPING LANGUAGE TO EXPRESS UNDERSTANDING

(Martin) A few years ago, I was faced with one of the most awkward moments of my teaching career, when I was asked if someone could record one of my lessons for a piece of research they were doing at a local university.

As you can imagine, I felt rather anxious about someone putting a camera in my classroom. How would the students react? What would I see on film that I wasn't aware of in the room? What would I do and say that might be embarrassing? And worst of all, would the camera notice I have a double chin and show that I'm thinning a bit on top?

The purpose of the video was to record examples of teacher questioning and classroom dialogue, to investigate the amount—and type—of student talk taking place in the classroom. The university researcher (let's call her "Alan"), was focusing on the amount of time students spent engaged in talk, how much time they had to think about responses and the balance of the type and purpose of the questions asked in the room. Her research was in fact based on that conducted by Mary Budd Rowe back in 1972, focusing on teacher questions. Alan was trying to find out if the modern classroom was any different (Rowe, 1986).

Mary Budd Rowe's research showed that the typical wait time between a teacher asking a question and either a student answering or the teacher continuing to talk is just 0.8 seconds!

Budd Rowe's original research drew conclusions about talk in classrooms that reveal some startling statistics about dialogue and thinking. She observed that after asking a question, the typical amount of wait time before the teacher either took an answer from the students or continued talking was around 0.8 seconds. Yes, you read that correctly: 0.8 seconds! That's less than 1 second for a student to think of a response before someone else shouts out an answer or the teacher moves on to talk about something else.

Is it really any wonder that students become disengaged? It doesn't sound like a game worth joining, does it?

From the students' perspective, here's how that game looks:

Teacher: In which year did the Vikings first invade Britain?

Student: (thinking to herself, "*I know this one, it's . . .*")

Meanwhile Mary shouts out the answer.

Teacher: That's right, Mary. Thank you. As we were talking about yesterday, the Vikings first landed here in 793.

Student: (thinking to herself, "*Oh, so it was 793 not 795.*")

Meanwhile the teacher asks another question.

Teacher: Can anyone remember where in Britain the Vikings first landed?

Student: (still thinking about 793 or 795, but now starting to think about the next question)

Teacher (less than 1 second after asking the previous question): It was Lindisfarne in the Kingdom of Northumbria.

Student: (thinking to herself, "What did he just say about Northumbria?")

You will notice a strong correlation here between this example of classroom talk and the IRE pattern that we cover in the next chapter. In this kind of conversation, the typical length of a student answer is only 1.3 seconds. This is because of the expectation placed on the student that this pattern of talk creates: "I ask, you respond, I move on." This pattern soon becomes a habit in classrooms for both the teacher and the student.

When I first heard about Budd Rowe's research, I was rather skeptical; surely we can't just leave a wait time of only 0.8 seconds before taking an answer or moving on? And surely the student talks for more than 1.3 seconds.

Yet, when I watched the video of my own practice—even though I am experienced in teaching dialogue—there were many questions I asked that were either answered by me or answered in very quick time (sometimes before I'd even finished asking the question!). Or when students did answer, it was the usual suspects who answered.

Budd Rowe's work suggests a very simple way to improve dialogue, which is to introduce wait time. She observed that when the teacher waits for a minimum of 3 seconds *before* taking an answer from the students, and then waits another 3 seconds *after* taking an answer from the students, the effects in the classroom are staggering:

- **The length of explanations increases fivefold among advantaged groups and sevenfold among disadvantaged groups.**
- **The number of volunteered, appropriate answers by larger numbers of students greatly increases.**
- **Failures to respond and "I don't know" responses decrease from 30 percent to less than 5 percent.**
- **The number of questions asked by children rises.**
- **Students' scores on academic achievement tests show a tendency to increase.**

There are many advantages for students when the wait time between question and response is increased to 3 or more seconds.

There are also benefits in wait time for teachers' practice too. When teachers wait 3 seconds at appropriate times in the dialogue, the following happen:

- Their questioning strategies tend to be more varied and flexible.
- They decrease the quantity and increase the quality (and variety) of their questions.
- They ask additional questions that require more complex information processing and higher-level thinking on the part of students.

Extending wait time also improves the quality and variety of teachers' questions.

You can find out more about specific questioning techniques and their role in dialogue in our book *Challenging Learning Through Questioning* (Nottingham & Renton, in press).

Budd Rowe's research has been repeated many times over in many different countries since 1972, and the results are consistent: in the typical classroom students get very little time to process information, language and ideas in order to be able to contribute to a dialogue.

Stahl's (1990) update of the work coined the term *think time* to describe what was happening in the 3 seconds, to demonstrate that students are actively processing, rather than simply waiting. This small alteration is a powerful one in changing our practice in dialogue, suggesting that students are contributing even when not speaking, because they are involved in active, internal dialogue.

Following my video experience, I regularly use the strategy Think-Pair-Share as a very simple reminder that students need time to think, to process their ideas and, most important, to practice the language needed to contribute to the dialogue.

Think-Pair-Share is an effective tool for increasing wait time. It also gives students more opportunity to develop their language of learning.

In the example conversation earlier, the only person really practicing any subject-specific vocabulary is the teacher—and teachers are not the ones who need the practice! Think-Pair-Share allows that practice, both internally and verbally. After asking a question, the teacher gives think time (a minimum of 3 seconds) so the students can begin constructing a response independently. The students then pair up and talk to one another about their possible answers. The pairs are then invited to share their answer with the class.

- Ask a question.
- **Think** on your own for a minimum of 3 seconds.
- In a **pair** discuss your possible answers.
- **Share** your ideas with the class.

The advantage to this approach is that the students get ample opportunity to prepare and practice the language they need before answering the question. By preparing independently first, then verbalizing their ideas, then comparing with another student's ideas, they have time to rehearse and formulate their ideas. This in turn often leads to students being more willing to contribute their ideas, more able to use the subject language and more willing to take a risk in being wrong.

The Think-Pair-Share pattern is a very good way to model structured thinking, help the students engage and contribute, create an ethos of risk-taking and support progress. At the heart of this is the development, processing and rehearsal of language.

1.5 • REVIEW

This chapter has covered the following main points:

1. Dialogue is one of the best vehicles for learning how to think, how to be reasonable, how to make moral decisions and how to understand another person's point of view.
2. Dialogue is supremely flexible, instructional, collaborative and rigorous. At its very best, dialogue is one of the best ways for participants to learn good habits of thinking.
3. Dialogue does not get in the way of "real" teaching. It *is* possible to teach more through dialogue and yet still be "at or near the top" of the tables.
4. Dialogue helps participants to learn *how* to think as well as *what* to think.
5. Dialogue helps students to move from surface-level knowledge through to deep understanding of concepts.
6. Dialogue can develop a climate of trust and support.
7. Dialogue develops language and helps participants know how to better express their ideas and understanding.

1.6 • NEXT STEPS

Here are some suggestions to help you with your reflections on dialogue:

1. Pay attention to the types of talk that take place in your classroom: Which interactions would you class as conversation and which as dialogue?
2. Do some of your students lean more toward dialogue than toward conversation? If so, what attitudes and skills do they bring to this?
3. Are there some common features between dialogue in different disciplines? For example, between scientific dialogues and dialogues examining literature?
4. How often do you use dialogue with your students?
5. What are the benefits?
6. What problems do you encounter?