Banishing the quiet classroom

Abstract: Christine Harrison explains the importance of classroom talk in learning. She identifies hierarchies in talk and summarises the evidence about the importance of meaningful talk to children's learning and understanding. She then describes some strategies that can help teachers facilitate dialogue and orchestrate discussion.

n these days of accountability, schools are judged against a myriad of criteria to determine whether they are successful and yet perhaps the clearest indicator of learning – classroom talk – is rarely selected as a measure of successful learning. In fact, if we look carefully at what happens in most UK classrooms, it would seem that oracy is often underplayed and written communication takes a dominant role in the learning experience. Teachers frequently introduce youngsters to ideas through artefacts or videos or demonstrations and then ask the learners to document what they witnessed or they provide textbook exercises or worksheets for learners to complete. The purpose of these activities seems to be the permanent recording of these events and one has to ask why this is. Does written work help the learning process? Is literacy the best way to engage and drive learning in the classroom?

I would argue that oracy has a greater role to play than literacy in fostering and establishing learning. I believe that learning is shaped by the experiences that we engage in and also that the power to fashion ideas and beliefs is both greater and more flexible through oral communication than written. While I am aware that there are some learners who have the capacity to engage themselves in thinking and negotiation of ideas through the act of writing, these are rare and the majority of us require interaction with others to foster and support the development of our thinking. Robin Alexander in his booklet, *Towards Dialogic Talking*, (2006) argues that:

"Children, we now know, need to talk, and to experience a rich diet of spoken language, in order to think and to learn. Reading, writing and number may be the

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acknowledged curriculum 'basics' but talk is arguably the true foundation of learning." (p5)

In the five to six hours that students are at school in the UK, they experience a good deal of talk. They talk to their friends, to other students, to adult helpers and to their teachers and, in turn, these people speak to them. All talk, from chatter to organised debate, is undoubtedly essential in building and benefiting many of the relationships that support interactions inside the classroom. In this article, however, I am going to focus on the structured and semi-structured talk that takes place through group work and whole class discussion in the classroom.

What we need to ask is, what role does talk have in classrooms and why is talk important for learning? In fathoming the answers to these questions, we will be in a position to understand what teachers might do to foster talk within classrooms to benefit their learners.

What type of talk happens In classrooms?

Many studies have mapped the types of talk that take place in classrooms. If we look first at who does the most talking, it is clear from most UK classrooms that the teacher is responsible for most of what is said. The King's-Medway-Oxfordshire-Formative-Assessment-Project, completed between 1999 and 2001 - with science, mathematics and English secondary school teachers - we looked at how teachers generally start their lessons. We found that teachers often began lessons with question and answer sessions intended to link the lesson with previous learning experiences. At the start of the KMOFAP project, we found that on average teachers dominated talk in most of these lesson starters by an average word count of 10:1. While teachers did try and engage learners by asking questions, the answers demanded tended to be limited to one word or one sentence answers. This approach to the start of lessons tipped the dominance of talk in favour of the teachers and therefore limited the learner in expressing their ideas and created difficulty for the teacher in collecting evidence of strengths and weaknesses in student understanding. With support from the King's team, the project teachers began to address this imbalance in the classroom talk.

By the end of the project, most of the KMOFAP teachers had introduced techniques that reduced this dominance of teacher talk. This was achieved through helping students to find a voice by working on strategies to help students raise ideas. This began by improving "wait time" (Rowe, 1974) – the time a teacher takes between asking a question and taking an answer. It was also enhanced by many teachers allowing students to rehearse and construct answers in groups prior to the whole class discussion and working on techniques that encouraged the continuation of themes and

ideas within the talk. This involved teachers planning scenarios and situations that the class could talk about; rather than using a series of questions which would do little more than check whether some students know the answers or not.

Teacher-dominated talk is also found in many UK primary classrooms, where talk is a vehicle for question-and-answer recitation teaching (Alexander, 2006). In this approach, the teacher controls and dominates the classroom talk and the role of the learner is to guess the answers that the teachers hold inside their heads. Learners are encouraged to participate but at only at a level of agreement or elaboration. Their role is to provide the "right answer" in the correct place in the teacher's tale as this extract from one of the science teachers on the KMOFAP project shows:

"I'd become dissatisfied with the closed Q&A style that my unthinking teaching had fallen into, and I would frequently be lazy in my acceptance of right answers and sometimes even tacit complicity with a class to make sure none of us had to work too hard ... They and I knew that if the Q&A wasn't going smoothly, I'd change the question, answer it myself or only seek answers from the 'brighter students'. There must have been times (still are?) where an outside observer would see my lessons as a small discussion group surrounded by many sleepy onlookers." James, Two Bishops School (Black et al, 2002)

Mercer (2000) and Alexander (2006) both focus on the talk repertoire that teachers utilise in their classrooms. Both present hierarchical repertoires in which the lower levels centre on teachers telling or using questions and prompts that require students to recall what has already been encountered. In the higher levels, Mercer has the category of exhortation which he describes as teacher talk that encourages students to think. Alexander, on the other hand, puts at the top discussion and scaffolded dialogue which he takes pains to explain are different to the "bedrock of teaching by direct instruction". Through discussion and scaffolded dialogue, talk moves from exchange of words to development of ideas, from interaction to shared social meaning, and from knowing to understanding. Classroom talk should not be used simply for the teacher to instruct but for the learner to develop.

Why do learners need to talk?

The opportunity to talk, particularly to enter into dialogue with others about a specific task or idea, has an essential role in learning and yet, for some children, such opportunities can be limited both within and outside school. If we continue to focus on the written rather than the spoken word in classrooms then we are disadvantaging our students and limiting their learning opportunities. In fact, outside school, the differential between

those youngsters who get the opportunity to talk and those who do not can be remarkably different. A study by Hart and Risely (1995) in the USA indicates that children of professional parents get double the amount of talk addressed to them than the children of working class parents and four times that of children whose parents are on welfare. This difference in the home setting offers severe disadvantages for some children in terms of both cognitive and social development. If talk is not a central goal for these children in their early years of schooling, then the differentials between these groups of children will continue to widen. Classroom talk needs to be encouraged as a means of social justice.

It has been widely accepted for several decades now that learners' cognitive development is driven by interactions between children, adults and society (Vygotsky, 1978, Brunner and Haste, 1987, Halliday, 1993). When students are faced with new experiences they need to make sense of them (Lindfors, 1999). Language is at the heart of this process. The learner

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uses talk to engage with the new within their own personal frameworks through interactions with other learners and their teacher.

In part they achieve this through comparison with their previous thinking in that area; but the major part of this learning results from negotiating common meaning with others that are also engaged in the learning experience. In this way, new knowledge is socially constructed (Vygotsky, 1978) and communication through dialogue is essential in achieving this. Feldman (1987) believes that as children learn, the constant interplay between what is known and what is new stimulates cognitive growth as well as language acquisition.

Stewart (1999) describes dialogue as "....the process of helping meaning flow through the people co-constructing it. "It is not simply that the learner hears several voices through dialogue but that the ideas from individuals get challenged, moulded and re-examined through the collective voice of the group. Isaacs (1999) argues that this is not simply shared knowledge that arises from dialogue. Rather, it is a sense of meaning that he terms "collective sensibility" that has evolved from the interactions (Bohm, 1996) and from which learners can capture their own sense of understanding. Because each learner brings their own knowledge, aspirations and limitations to the interactive process, they will have a particular lens on the shared knowledge that arises through the dialogue. Therefore, what they focus on, capture and retrieve from the shared knowledge will depend on the lens they select as well as their capacity to engage with the shared knowledge as it arises.

While talk has a role in enhancing and ensuring cognitive development,

it also has a role helping students regulate their learning. Learners know when they do not understand the ideas arising within a learning situation. However, it is a brave learner who attempts to think aloud and make public that they cannot engage with the shared meaning that is evolving in the dialogue. Rather, learners withdraw from the dialogue or listen in hoping to re-engage with the sense-making.

If, however, such learners can find the confidence to offer their preunderstanding or emergent understanding then the group engaged in the dialogue can react to this and so allow the learner to examine and then reexamine the sense they are making of the shared meaning. It is only through entering the dialogue about shared ideas that the learner can begin to see other aspects of the ideas and so make judgements about where they are in their own sense-making. Non-engagement not only deprives the group of the learner's position but prevents the learner from revealing their own sense-making to themselves. However, if a learner does offer their emergent understanding then they are at the mercy of their dialogic partners since movement forwards rests on the reaction from others. If agreement with or challenge to the learner's emergent ideas is not forthcoming from the group, then there is no selection pressure to help the learner reflect on and shape their understanding. This leaves the learner in a vulnerable position where they have revealed both publicly and to themselves where their thinking is but without a means of moving forward through the guidance and challenge from the others engaged in the dialogue; it therefore becomes difficult for the learner to continue to engage with both the problem and with the dialogue. Active participation in dialogue is therefore a risky business for individual learners.

What can teachers do to help learners talk?

If students learn by building ideas and concepts through social construction, then a teacher's role is to set up the conditions in which this dialogue can take place. This involves both organising the social setting so that dialogue is likely to be fruitful and also working with the learner to ensure that their learning moves forward. The latter is reached through diagnostic exploration of where the student is in their learning and then providing scaffolding (Bruner and Haste, 1987) to take these ideas forward.

Organising the setting to encourage dialogue can be achieved through ensuring that the seating and other furniture are arranged so that those involved in dialogue can easily communicate both verbally and nonverbally with one another. Seats arranged around tables, rather than opposite each other, encourages more collaboration because the nonspeakers at any point in the dialogue, do not need to turn their heads to actively engage in listening to the speaker. When the talk then passes to a

second person, each member of the group can rearrange and refocus. This to and fro movement helps signal to the others in the group that all are actively involved in the dialogue without a great deal of effort on behalf of each participant. It is also easier for each participant to bring their view into the dialogue because they can throw this into the group space. Sitting opposite another participant makes this harder to do because this seating position demands eye contact and as such could be a deterrent in allowing individuals to raise their own thoughts. Grouping round a table allows both group and individual space.

There have been many attempts to determine the optimum group size. Context and prior experience have a good deal to play in determining this; but what is clear is that two students is too small a group to elicit sufficient ideas to feed into the dialogue and ten is probably too large to ensure all can continue to participate throughout the dialogue. So a group size somewhere in between two and ten is likely to be effective and what may be the determining factor is the likely socialisation within the group.

Friendship groups are not a good idea since the norms and rituals that exist within such groups may exasperate or limit any shared understandings emerging. Individuals in groups do however need to get on with one another and for full participation by all individuals it requires a supportive environment. A further factor is purely pragmatic and that is the total number of groups within the class needs to be such that the teacher can legitimately sample enough of the group dialogues to gain an insight into where the various group ideas are situated. This both helps the teacher's diagnosis of where learners are at in their trajectories and allows the teacher opportunity to plan for the whole class talk. In this way, the talk that develops in one group can be compared with that from other groups and so the shared meaning continues to evolve as some thoughts get consolidated and added to while others diminish as they are challenged and discarded.

This is somewhat like a jigsaw. Within the groups, individuals find and present pieces of the picture. Some pieces will be identified as important for the whole picture while others will be discarded or set aside temporarily when others are not too sure of their part in the whole idea. Sometimes jigsaw pieces can be joined to others or reshaped to fit with others such that the part of the whole picture that any group possesses is likely to be clearer than the single pieces held by any individual within the group.

Promoting classroom dialogue

In the next stage of whole class discussion, these group ideas can be held up and examined alongside those of other groups. Discussion here has a different role to play than that of the group dialogue. Discussion, etymologically, is derived from the Latin meaning "smash to pieces" (Isaacs, 1999) and it is through the whole class discussion orchestrated by the teacher that ideas are judged and reshaped, having emerged and been moulded through group dialogue. So, choosing which group speaks first is important; as is deciding how much of that group's dialogue needs to be revealed before a second group is allowed to add, contrast or compare their ideas. The skilful teacher helps draw together the themes and ideas that emerge from the group dialogues while at the same time holding up these experiences for scrutiny, challenge and consolidation through the whole class discussion.

The teacher not only has a facilitatory role to play in this but an active role also. Formulating good questions that make students think and motivate them to want to discuss ideas is an effective starting point. For example, questions such as, "Is it always true that green organisms

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photosynthesise?" are better at generating talk than "Which types of organisms photosynthesise?" Questions that require students to predict or consider alternatives are better ones that lead to a set answer. For example, "What might the wolf have done if the grandmother had been out?" is a far better question for active discussion and thought than "What happened to the wolf in the story about Red Riding Hood?" Learning can benefit greatly from the talk that is generated from good questions and teachers need to put planning time aside to generate these questions and to share effective questions with colleagues.

Teachers also help scaffold the emerging ideas as they arise within groups by intervening. Through careful eavesdropping of student conversations the teacher comes to understand what learners know, what they partly know and what they do not yet know (Black and Harrison, 2004). This helps teachers to pitch more carefully the next events in the learning, be they in the discussion that follows or in follow-on activities during the same or subsequent lessons. In this way, the "partly known" ideas are sorted out and unknown ideas introduced as well as the correct ideas consolidated. This allows learners to work at their "leading edge of learning" as their knowledge base is continually being challenged and upgraded through this process. Such an approach is defined as formative (Black et al, 2002).

The teacher's selection of which group speaks first and the questions that s/he asks the other groups in response to what the first group has said are also part of the teacher's intervention repertoire. A searching question or a variation on an idea from a second group can cause the first group, who

has already spoken in the whole class discussion, to reconsider their group's ideas or to re-establish and reconfirm what they meant in their original presentation of the idea. At the same time, other groups, who have not had opportunity to offer their ideas look at those ideas already raised and begin to identify where their own thinking fits and varies. So the teacher's intervention holds up a mirror for all the groups to investigate, reestablish and evolve their ideas.

Sometimes, teachers need to work on strategies to prevent them "cutting off" classroom talk. This mostly involves them withholding from the students their judgement about an answer so that the students can compare answers given with the answers they hold inside their heads. For example, one of the maths questions that a couple of different classes discussed was "What's similar and what's different about fractions and ratios?" The first teacher used a technique called "Pose-Pause-Pounce-

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Bounce". First, the teacher poses the question. Then there is a pause for a student to answer. On hearing the first answer, the teacher immediately

bounces the question to a second student. The "pounce-bounce" action prevents the teacher reacting to the first answer and so possibly cutting off the class talk. The second student might give the same or a different answer to the first student and may or may not respond to what was said in the first answer.

Whatever happens, the point is that the classroom talk has started to move away from the teacher judging publicly whether the student is correct to the voicing of more student talk and ideas. The ultimate aim is to achieve pose-pause-pounce-bounce-bounce. This pushes the talk in the direction of the learners which in itself is beneficial to learning but also gives the teacher essential "thinking time", where they can plan what intervention is needed to help drive the learning forward.

A second teacher adopted a different approach having posed a question about fractions and ratios. She asked students to discuss the question in groups so that they would be able to explain these similarities and differences in terms of sharing a large pizza. After five minutes of group talk, where the teacher circulated and listened in on snippets of the dialogue, she asked each group in turn to articulate one main point or idea that had arisen within their group talk. Two students acted as scribes writing up these thoughts on the board. The teacher repeated what each group said to help the scribes and to help others in the class hear the point. She then asked the groups to talk about the various points that had been written on the board - which did they agree with, which needed more clarity to make sense, which did they disagree with. After three minutes

talk in this way, she asked the groups to change composition. Most groups were composed of four participants and she asked these to spilt into two and work with two other students from a nearby group to share the thoughts of both groups. In both these events, the teacher circulated between the groups, listening into the conversation without intervention verbally or non-verbally.

The teacher then orchestrated a whole class discussion by asking a specific group to begin to explain what decisions did a family have to come to in cutting up the large pizza. She then moved onto a second group to ask them to retell the family's predicament and solution in terms of fractions; before hearing the story retold by a third group in terms of ratios. The

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teacher then asked the class to reflect on the points they had listed on the board in relation to similarities and differences and asked them which of these ideas had the stories used. She pointed to each one and students nodded or said "yes". The teacher, each time, selected a student to identify where that point had been used in one of the three stories and each time asked a student from another group whether she agreed or not with the answer. In this way, a large proportion of the class were asked to take part in the class discussion either by offering examples and ideas or explaining how these examples or ideas fitted or contradicted with suggestions that various groups had made or by identifying examples from the previous discussion to fit in with the current class talk. From these interactions, the teacher was able to gauge individual, group and class understanding while the learners had their ideas continually reviewed and challenged. This reciprocity in learning was only possible through the medium of talk. In contrast, written communication separates the assessment from the learning in time and reduces the possibilities for shared purpose.

The classroom ethos

It is clear that the quiet classroom is not the environment for learning to take place. However, getting the right ethos for learning is more than just allowing talk to happen. Learners need to be able to articulate their understanding, to hear and compare their thinking with that of other learners and to consider whether their ideas fit, partly fit or do not fit with the consensus that the class and teacher seem to agree on. Learners therefore need to be skilful in the ways they interact with others and mindful about what they hear and see in the classroom. Part of this will be checking off and consolidating ideas which the learner is already relatively confident about. Another part will be in the learner recognising where

their weak areas are and diagnosing where the problems lie. This might be achieved by revealing any problems with understanding but it is a brave learner who can do this. One approach to help learners identify, diagnose and recognise weak areas in their understanding is for teachers to make misunderstandings a focus of the work that the class do. Both from the research literature and from the experience of working with youngsters, teachers come to know some of the difficulties that learners may encounter in a particular topic. If the teacher bestows these problems on imaginary learners and the task is set to unravel the problems and guide these imaginary learners, then much can be gained from this approach.

For example, let's take again the area of ratios and fractions discussed in the previous section. A ratio of 4:1 means dividing the total into 5 parts and yet often learners think that its only 4 parts. Taking this problem to the class, the teacher might pose the following activity to discuss in groups: "Amina and Mia can't decide whether cutting a pizza into 4 portions is the same as dividing it into a ratio of 4:1. Can you help them out?"

Openly discussing problems and uncertainties and making the sorting of errors a focus of the learning activities focuses the goals of the class on improvement rather than on finding the right answer. This legitimises the action of seeking help and encourages learners to check with others on areas that they feel uncertain about. It creates a much more collaborative approach to learning where the role of the classroom talk is to foster cooperation and focus on understanding rather than on right answerism. The interventions that drive and support learning can then become a natural part of what learners and teachers engage in. Wouldn't teaching be so much easier if learners could tell the teacher where their problems were? It would allow teaching to be much more targeted and less trial and error. It would also make the process of learning much more apparent to youngsters and help them create better self-regulation in their learning, which would have huge impact on their future learning.

Last word

There have been numerous initiatives, from government and elsewhere, to try and raise standards. Undoubtedly one of the main ways of achieving this is for teachers to focus on nurturing their interactions with and between students. Fostering dialogue and orchestrating discussion should be at the heart of what teachers do on a daily basis. If you want learning to happen banish quiet classrooms and let the kids talk!

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