

Exploratory Talk for Learning - Douglas Barnes

The constructivist view of learning carries with it a radical requirement for teachers since it implies that their central task is to set up situations and challenges that will encourage their pupils to relate new ideas and ways of thinking to existing understandings and expectations in order to modify them. I find it useful to think of this as working on understanding. Working on understanding is, in essence, the reshaping of old knowledge in the light of new ways of seeing things. (Of course, 'seeing' here is a metaphor for various ways of symbolising, not just visual ones.) Only pupils can work on understanding: teachers can encourage and support but cannot do it for them. In this reshaping, pupils' 'old' knowledge is as important as the new experiences that are to challenge it. It is this challenge that provides the dynamic for the accommodation, the changing of previous ways of understanding for new ones. Adults and children alike are not always ready to make such adjustments and sometimes cling to views of the world that are familiar but are also ineffective or even untrue. It can be uncomfortable to have to change our ideas about how things are or how we should behave or interpret the world about us.



There are various ways of working on understanding, appropriate for different kinds of learning. Teachers commonly ask pupils to talk or write in order to encourage this, but drawings and diagrams, numerical calculations, the manipulation of objects, and silent thought may also provide means of trying out new ways of understanding. At the centre of working on understanding is the idea of 'trying out' new ways of thinking and understanding some aspect of the world: this 'trying out' enables us to see how far a new idea will take us, what it will or will not explain, where it contradicts our other beliefs, and where it opens up new possibilities.

The readiest way of working on understanding is often through talk, because the flexibility of speech makes it easy for us to try out new ways of arranging what we know, and easy also to change them if they seem inadequate. Not all kinds of talking (or writing) are likely to contribute equally to working on understanding. A great deal of the writing that goes on in school is a matter of imitating what other people have said or written, and the same is true, at least in part, of the talk.

It is clearly important to consider what kinds of discussion contribute most to working on understanding. When young people are trying out ideas and modifying them as they speak, it is to be expected that their delivery will be hesitant, broken, and full of deadends and changes of direction. This makes their learning talk very different from a well-shaped presentation such as a lecture. For this reason I found it useful to make a distinction between exploratory talk which is typical of the early stages of approaching new ideas, and presentational talk. Exploratory talk is hesitant and incomplete because it enables the speaker to try out ideas, to hear how they sound, to see what others make of them, to arrange information and ideas into different patterns. The difference between the two functions of talk is that in presentational talk the speaker's attention is primarily focused on adjusting the language, content and manner to the needs of an audience, and in exploratory talk the speaker is more concerned with sorting out his or her own thoughts.

I can illustrate exploratory talk by quoting a short extract from the recording that in 1970 first challenged me to think about its nature and functions. Four 11-year-old girls were talking about a poem that they had read. They were discussing what would happen if, as in the poem, a pupil fell asleep in class.

Anne: Well the teacher's bound to notice.

Beryl: Yes really..... because I mean I mean it

Carol: Or she could have gone out because someone had asked for her or something....She probably felt very sorry for him so she just left him....The teachers do

Anne:What really sorry for him....so she just left him so they could stick pins in him (*tone of horrified disbelief*)

Dinah: Oh no she probably ... with the 'whispered' ... said 'whispered'

Beryl: Yes really..... because I mean I mean it

Carol: Yes but here it says ... urn ... [rustling paper] ... Oh '*Stand away from him children. Miss Andrews stooped to see.*'

Beryl: Mm.

Anne: So you'd think that she would do more really.

Beryl: Yes ... you'd think she'd urn ... probably wake ... if she would really felt sorry for ... sorry for him she'd ...

Dinah: She'd wake him.

Beryl: [continuing] ... wake him.

Carol: Oh no! No, she wouldn't send him home alone ... because ... nobody's ...

Anne: His mother's bad.

Although many of the contributions were disjointed and hesitant, the girls were undoubtedly sorting out their thoughts and making sense of the poem, and a few moments later arrived at an insight crucial to its understanding. The broken utterances, the changes of direction, the corrections of themselves and one another, even the disagreements, all were part of their struggle to assign meaning to the poem. The talk, for all its incompleteness, seemed to be enabling the girls to use their existing knowledge of people and behaviour to construct a meaning for the words of the poem. Soon after making this recording I began to realise that it was not only in reading literature that we need to bring existing knowledge to give meaning to what we hear or read. All understanding depends on this, whether in school or elsewhere. This encouraged me to gather material from other parts of the school curriculum that would throw light on how putting ideas into words contributes to learning.

Exploratory talk provides an important means of working on understanding, but learners are unlikely to embark on it unless they feel relatively at ease, free from the danger of being aggressively contradicted or made fun of. Presentational talk, on the other hand, offers a 'final draft' for display and evaluation: it is often heavily influenced by what the audience expects. Presentational talk frequently occurs in response to teachers' questions when they are testing pupils' understanding of a topic that has already been taught. It also occurs when anyone, child or adult, is speaking to a large or unfamiliar audience. Such situations discourage exploration: they persuade the speaker to focus on getting it right, on 'right answers' - providing expected information and an appropriate form of speech. Much of the talk that teachers invite from pupils is presentational in nature, and it is not my intention to deny the value to learners of having to order ideas and present them explicitly to an audience. Teachers should, however, consider at what point in the sequence of learning this should take place. In my view many teachers move towards presentational talk (and writing) too soon, when pupils are still at the stage of digesting new ideas. In the earlier stages of a new topic, it is likely to be exploratory talking and writing that will contribute more to the interrelating of old ways of thinking and new possibilities: in other words, they will be more likely to enable learners to 'work on understanding'. Requiring presentational reports, spoken or written, before pupils have come to terms with new ideas is to ask for confused speech or writing. Both presentational and exploratory talk are important in learning. Teachers need to be sensitive to the differences between them and use them appropriately.

In teaching both adolescents and adults I made much use of small group discussion as an element in an overall pattern of learning, partly because it makes it more likely that a larger proportion of a class will be actively involved in thinking aloud. However, I do not want to

overemphasise small groups in spite of the role they played in my investigations. I was often more interested in finding out how young people use talk as a tool of thinking in the absence of adult guidance than in recommending small-group methods. It is important not to allow ourselves to idealise group discussion: it is a valuable resource in a teacher's repertoire, but it is not a universal remedy. Not all group discussions are as successful as the poem discussion quoted above: the very presence of a researcher with a tape-recorder encourages young people to put on a show. Group discussion should also never be seen as a *laissez faire* option. Successful group work requires preparation, guidance and supervision, and needs to be embedded in an extended sequence of work that includes other patterns of communication. With new classes some instruction in the ground rules may be needed. By early adolescence some young people have already developed considerable social abilities, no doubt from sharing in the life of a family and the activities of other groups as well as from school. However, the ability to think aloud and to share thoughts with others is not universal, and is not necessarily linked to academic intelligence. Some young people need help to develop these skills and even to discover what discussion is.

I do not want to seem to suggest that class discussions led by the teacher are less important than group work. On the contrary, they are essential. It is important, however, for teachers to make it possible for pupils to think aloud even when they are talking with the whole class. This is difficult, as every teacher knows, since in a lively class the competition to hold the floor will discourage extended speech. Moreover, pupils competing for attention do not always listen to and reply to one another's contributions, and it is part of the task of the skilled teacher to persuade them to do so. There are other problems as well. One unpredicted outcome of several small-scale studies of teachers in action was that it is surprisingly difficult for teachers to achieve insight into pupils' thinking merely by asking a question and listening to their brief answers. As a result, they may fail to grasp what pupils had been thinking and what would give them useful support. Thus their contribution to the discussion can sometimes be less than helpful in advancing their pupils' thinking. Teaching is by no means easy.

Setting up a supportive context for learning during lessons is central to good teaching. It is through talking over new ideas with their teachers and peers that pupils can most readily move towards new ways of thinking and feeling. Indeed, for many learners the support of a social group is essential. The term 'common knowledge' reminds us that the construction of knowledge is essentially a social process. How teachers behave in lessons, and particularly how they receive and use their pupils' written and spoken contributions, is crucial in shaping how pupils will set about learning and therefore what they will learn. It is by the way that a teacher responds to what a pupil offers that he or she validates - or indeed fails to validate - that pupil's attempts to join in the thinking. In an inquiry called 'Interpretation and Transmission' I found that the way teachers interact with their pupils is closely linked to their preconceptions about the nature of the knowledge that they are teaching. If they see their role as simply the transmission of authoritative knowledge they are less likely to give their pupils the opportunity to explore new ideas.

This previous paragraph illustrates an alternative tradition in the psychology of learning called social constructivism. This represents learners as essentially social beings who are being inducted into cultural practices and ways of seeing the world that are enacted by the groups to which they belong. Even what we call 'firsthand experience' is partly shaped by the meanings available in the culture we participate in. Learners must indeed 'construct' their models of the world, but the models they construct are not arbitrary; the experiences on which they are based do not come from nowhere. They are responses to activities and talk that they have shared with other members of the community - many of them older. This tradition provides a useful counterbalance to what I have written in earlier paragraphs from a more individualistic (Piagetian) perspective. Exploratory talk does not provide new information. When learners 'construct' meanings they are manipulating what is already available to them from various sources, exploring its possibilities, and seeing what can and cannot be done with it.

later becomes individual. By participating in activities and talk, children come to make as their own the purposes, practical categories and ways of going about things that are essential to their social environment, to their families and to the other groups they belong to. Central to this learning is speech - not just the forms of words and sentences that we all learn to use, but more importantly the meanings and purposes that they represent, and the social relationships in which they are embedded. We learn to participate not only in activities but also in the meanings which inform them.

This brings us to a paradox that underlies all deliberate teaching. School learning is at once social and individual. Our culture offers to young learners powerful ways of understanding and influencing the world, so that much learning is a matter of 'getting inside' an adult view of the world in order to use it for thinking and acting. Schools provide for pupils the opportunity of partially sharing the teacher's perspective, for successful lessons build up cumulatively a set of meanings that it is the task of each pupil to make his or her own. Each must deal with new experiences that challenge existing schemes and pictures of the world, for only he or she has access to the particular preconceptions and misunderstandings which need to be reflected on and modified. One of the challenges that face all teachers is how to help pupils to try out new ways of thinking that may be disturbingly different from what they are used to, and at the same time to give more responsibility to those learners to develop their own understanding of the matter. Courtney Cazden puts the teacher's dilemma precisely: 'How to validate a student's present meaning, often grounded in personal experience, while leading the child into additional meanings, and additional ways with words for expressing them that reflect more public and educated forms of knowledge.' Teachers teach classes but pupils learn as individuals, each constructing slightly different versions of the meanings made available during the interchanges shared by the whole class and the teacher. Both the shared construction and the individual struggle to reinterpret are essential.

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