

Content and content knowledge in teaching literacy

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The importance of content and content knowledge

It has been claimed (Ausubel, 1968) that the most important factor determining what learners take from any experience of teaching is what they already know about what is being taught. Such a view is readily accepted by most researchers and theorists in the field of learning and rests on an analysis of learning as the progressive building, reshaping and fine tuning of learners' schemas, that is, their mental maps of various aspects of the world around them (Rumelhart, 1980). If this view of learning is accepted, then in order to maximise students' learning, teachers need to have ways of taking into account the knowledge and ideas that students bring to a particular lesson. Bennett (1993) has argued that teachers are generally poor at doing this and he attributes this to an inadequate grasp of the content being taught.

Such a concern for teachers' subject knowledge has underpinned the research of Shulman (1986) who argued that research on teaching had almost always ignored a key feature of classroom life: the content of what was being taught. This content knowledge has since become a key focus for research following Shulman's (1987) delineation of the knowledge bases which underlie teacher understanding. These included content knowledge (the amount and organisation of knowledge about a subject in the mind of the teacher) and pedagogical-content knowledge (knowledge of ways of transforming content in order to represent it for others). Teachers' subject knowledge was thus defined as embodying not only their knowledge of the content they taught but also knowledge of how to represent this for learners.

There is now substantial evidence about the importance of content knowledge in effective teaching. Borko et al (1988), for example, found that trainee teachers with strong subject knowledge tended to plan lessons in less detail and were more responsive to the needs of particular groups of pupils. Grossman, Wilson & Shulman (1989) found that trainee teachers with specialist knowledge tended to teach it in a way which encouraged students to develop complex conceptual structures of their own. Teachers without this knowledge tended simply to 'deliver' the content prescribed, relying more heavily on the abilities of students to memorise it. Bennett and Carré (1993) found that trainees with specialist knowledge in Music and Science were significantly more able to engage their pupils at a conceptual level in these subjects than were trainees without these specialisms.

Content knowledge in teaching literacy

This evidence notwithstanding, it has not yet been established that effective teachers of literacy are in a similar position with regard to their 'subject'.

Part of this problem is to do with the nature of the subject. Literacy is not, in fact, a 'subject' in the usual sense, with clearly defined boundaries and conventions. Its content draws upon a number of disciplines including the psychology of learning, language development, linguistics and literary criticism and is best expressed as a series of inter-linking processes rather than a body of knowledge. Defining content knowledge in literacy is, therefore, problematic. Content in literacy covers both knowledge (e.g. knowledge of literature, knowledge of the linguistic system) and skills. Literacy teachers teach students *how to* read and write as well as *about* reading and writing.

One of the main purposes of the study described in this article was, thus, to explore the nature of the content of literacy lessons and, by extension, the content knowledge of the teachers conducting them.

Studying literacy content

In the study, we compared the literacy content knowledge of a group of British primary school teachers who had been identified as effective at teaching literacy with that of a group of teachers not so identified. Our major hypothesis was that the effective teachers of literacy would show higher levels of literacy content knowledge than the control group. The project overall used a range of methods for exploring literacy content knowledge. In this article, we shall discuss the insights into this that we were able to glean from observations of literacy lessons and subsequent interviews with teachers regarding the content of these.

In the project we identified two main sample groups, one a group of primary teachers identified as effective in the teaching of literacy, and the second a control group of primary teachers randomly selected (the validation group). A number of steps were taken to identify the effective literacy teachers. We firstly asked for recommendations from education personnel such as advisers and inspectors in a number of areas of the United Kingdom. Having achieved a list of over 600 teachers recommended as effective in the teaching of literacy, we then checked such external data sources as we could locate about these teachers and their schools. National test data from each school and external inspection reports were combed for any indications that the literacy teaching of these teachers might not be as effective as we had been led to believe. A number of teachers were deleted from the list as a result.

The school principals of the remaining teachers were then contacted and asked if they agreed that the teacher in question was effective in teaching literacy, and if they had objective evidence to indicate this was the case. The key criterion here was whether principals could supply us with evidence, in the form of standardised reading test scores, of above-average learning gains in reading for the students in the classes of these teachers. Satisfactory responses to both these questions led to the inclusion of that teacher in the final sample of effective teachers of literacy. The final sample consisted of 345 teachers.

Teachers in the validation group were selected to represent a range of effectiveness in teaching literacy. Primary schools in similar areas of the country and similar catchment areas to those of the effective teachers were chosen and the Mathematics

specialists of these schools were invited to be part of the validation sample. (It is important to note that, although the validation teachers were Mathematics specialists, they were still responsible for teaching literacy to their classes. British primary schools are organised into age-grouped classes, with teachers responsible for covering the whole curriculum with their particular class.) The validation sample consisted of 98 teachers.

Teachers in both groups completed a questionnaire designed to enquire into their beliefs about literacy and literacy teaching approaches, their feelings about students' needs in literacy development, their reported use of a range of teaching techniques and their professional development experience in literacy. The results of this questionnaire are reported elsewhere (Medwell et al., 1998). We then selected, at random, sub-samples of the two main groups: that is a sub-sample of 26 teachers from the group of teachers identified as effective in the teaching of literacy and a sub-sample of 10 of the teachers from the validation group. The teachers in both sub-samples were twice observed teaching and then interviewed about each of these teaching episodes and, in particular, about the literacy content of these lessons and why it had been selected.

The content of literacy lessons

In terms of content, the effective teachers' lessons which we observed showed a number of consistent features which strongly suggest an underpinning content knowledge.

The effective teachers were focused in their aims for the lessons observed. They were all able to identify the main focus and aims of a literacy lesson to the interviewers and this coincided with observers' accounts of that lesson. This was not always the case for the validation sample teachers who often claimed a lesson focus which was at odds with that apparent to an observer.

In addition, the effective teachers tended to identify the literacy focus of the lesson *to* the class of students, usually more than once during a lesson. The way they did this was often by discussion with the class about *why* a particular piece of literacy knowledge, or a particular reading or writing skill was useful. This sort of discussion was much less common in the lessons of the validation group.

A brief example of this is the way Mrs J began her introduction to the class.

“Right, today, we are going to look at one of the features of The Demon Headmaster which you might not have noticed. That’s the dialogue. What is dialogue? Can someone find some in the book?” (writes the word ‘dialogue’ on the board and takes answers and examples from three students)

“The characters speaking to each other. It’s one of the things that makes a character interesting and it is really important that we, the readers, understand exactly what the characters do say to each other. So we are going to see how that speech is set out in the book, so that the readers know who is speaking and how they are speaking”.

After discussing the details of the conventions of dialogue Mrs J again reinforced this point in introducing the task to the students.

“I want you to be able write out dialogue so that you can make your characters this interesting. You need to use this way of setting out speech to do this, so I am getting you all to write a dialogue today to practice these points. I want you to write a dialogue between two characters from the book, setting it out so that a reader can easily see who is speaking. What are you going to use to set this out? (writes down the words ‘capitals’, ‘commas’, ‘inverted commas’, ‘new lines’ on the board as the students call them out).

At the end of the session Mrs J went over the main points of setting out direct speech and concluded with the words;

“OK, now we’ve practised setting out dialogue with characters you know from the book, we’ll have to go on and write some for the characters we make up. And I want you to remember how to set out the speech so that you can write clear, interesting dialogue. So that a reader can understand easily. Good dialogue that’s easy to read brings a character alive. It’s vital to a good plot - one of you could be the next Gillian Cross.”

Not only was Mrs J teaching her class here about a specific punctuation rule, she was also signalling to them why it was important and what purpose it served. She was helping them make a connection between word level and text level knowledge and her teaching clearly drew upon her own knowledge of the features she was teaching.

A lesson about setting out dialogue by one of the validation teachers, in contrast, included reference to “the rules for setting out direct speech” and discussion of these rules with the students. However, no mention was made of why direct speech was set out like this.

The difference here between these two groups of teachers suggests a difference in their content knowledge in literacy, but not necessarily in the extent of this. Rather the distinction lies in the ways this knowledge was represented. The effective teachers appeared more able to see connections between the content they knew about, particularly between content at the textual and sentence/word levels. They were thus able to set items of sentence/word level content into a whole text context and to ensure that these connections were made apparent to their pupils. This knowledge enabled them to be less dependent on published materials in their teaching and to work with pupils’ own understanding, confident in the knowledge that they would be able to relate this readily to the goals for a particular lesson.

These connections tended not to be made by the validation teachers, which suggests that their knowledge was probably internally represented as discrete items of content. Because of this discreteness they had much less scope for demonstrating at a deeper level the workings of the English language, lacking the knowledge to see opportunities for pointing out examples as they occurred in their own or their pupils’ language use.

Conclusion

As far as we know, this is the first research study to attempt this kind of exploration of literacy content knowledge and, perhaps unsurprisingly, our findings do not altogether support the hypotheses we generated in this area. In particular, we failed to find any real separation in the effective teachers of literacy between their content knowledge and their pedagogical content knowledge in literacy. It seems to us that the effective teachers of literacy 'knew' their subject in quite a special way which itself has many implications for teacher preparation and continuing professional development.

For these teachers it did not seem to be the case that they knew a body of knowledge (content) and then selected appropriate ways to represent it to their students (pedagogy). Rather, they appeared to know the material in the way they taught it to the students, which was usually as material which helped these students read and write. The knowledge base of these teachers thus *was* their pedagogical content knowledge. This is rather a different concept of pedagogical content knowledge from that of Shulman (1987), as described earlier, for whom this refers to knowledge of ways of transforming content in order to represent it for others. Our interpretation of what we have observed is that the effective teachers did not transform their knowledge in this way. In fact, at the time we studied them, they appeared only to know their material by how they represented it for their students (they had great difficulty in describing to us the content they were teaching). They may, of course, once have known this material differently. But, through experience of teaching it, their knowledge seemed to have become totally embedded in their pedagogical practices.

If this conclusion is correct, it has strong implications for initial and continuing teacher education. Teachers do require extensive content knowledge in order to become effective teachers of literacy, but such knowledge needs to be presented to them through teaching practice rather than as abstract sets of facts to be learnt. What we are suggesting here is that teachers might best learn to be effective in teaching literacy through exposure to and guided reflection upon effective literacy teaching practices. The knowledge base of such practices needs to figure largely in teacher education, but cannot successfully be taught outside the content of literacy teaching itself.

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