Using video to look at scaffolding

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Introduction
When a participant on a summer in-service teacher development course asked me the question 'What does scaffolding look like?', I decided, after consulting her group, to use an extract of a videoed lesson in order to try to make this clearer.

What follows is a brief explanation of scaffolding, an account of the session that used video to look at scaffolding, and a reflection on issues the session raised for me about scaffolding.

What is scaffolding?
The metaphor of scaffolding came originally from first language acquisition and cognitive psychology research. Wood, Bruner and Ross (1976) examined the role tutoring played in helping thirty three, four and five year olds construct a pyramid from wooden blocks, a task they would be unable to do without help. They named the support the tutor provided in the one-to one interactions *scaffolding*, and identified six distinctive features that seemed to help the children to complete the task.

These were:

- Recruiting the child's interest in the task
- Simplifying the task for the child by breaking it down into smaller steps
- Reminding the child of the aim of the task if attention began to wander (this tended to happen frequently with the three-year-olds)
- Explaining key aspects of the task, or showing other ways of doing the task
- Controlling children's frustration
- Demonstrating an idealised way of doing the task

The metaphor of scaffolding suggests temporary support, which is gradually withdrawn as the child is more able to work independently. Bruner (1983:60) refers to a 'handover principle', which involves a 'process of setting up the situation to make the child's entry easy and successful, and then gradually pulling back and handing the role to the child as he becomes skilful enough to manage it'.

Bruner (1986; 75) later described the role of the tutor (Ross) in the pyramid experiment as 'consciousness for two', and linked the concept of scaffolding to Vygotsky's positing of the Zone of Proximal Development (ZPD). Vygotsky (1978 : 86) describe this as ' the distance between the actual developmental level as determined by independent problem–solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers'. Bruner appears to agree with Vygotsky's view of learning as a socially constructed process, one in which a more knowledgeable other can help the child develop cognitive abilities and language through interaction.

Though scaffolding was first discussed in a context unconnected with foreign language learning, van Lier (1988) argues convincingly that the same process may operate in second or foreign language learning classrooms.

Using a videoed lesson to look at scaffolding
I am unaware of a commercially published video that has a focus on scaffolding, but fortunately, a Polish colleague kindly gave me permission to use a video of 9 year-old learners of English in a state primary school. They were starting their third year of English, and were studying the theme of dinosaurs. The videoed lesson was based around the story of *Meg's Eggs* (Nicoll and Pienkowski). The extract shown and discussed involved the teacher using the pictures in the book to tell the story of the dinosaurs that hatch from Meg's eggs. The task for the learners was to understand the gist of the story.

The participants in the session were asked first to identify specific strategies the teacher used to help learners understand the story, and later to compare these to the six-point characterisation noted above. They were later asked to see if they could find examples from Cameron' s summary (2001:9) of Wood's suggestions for ways in which teachers can scaffold children's learning:

Teachers can help children to	By
Attend to what is relevant	Suggesting
	Praising the significant
	Providing focussing activities
Adopt useful strategies	Encouraging rehearsal
	Being explicit about organisation
Remember the whole task and goals	Reminding
	Modelling
	Providing part-whole activities

The teachers noted examples which matched two of the original six characteristics of instruction, and four of the categories in Cameron's table. However, they also noted other strategies which they thought helped the children to learn, and which they felt did not fit neatly into any of the categories mentioned thus far. They noted in particular the teacher's use of gesture, of visual aids, and of ski-jump questions (see Cameron 2001:46). A lively discussion followed on these strategies. At the end of the three –hour session the participants said that they felt much clearer about the concept of scaffolding, and also about other ways the teacher might help learners to understand a story.

Reflection from the session on the nature of scaffolding
It will be clear from the account of the session that it was sometimes difficult to decide whether strategies the teacher used were scaffolding or not. Scaffolding was originally used to describe a strategy the teacher uses to help a child who is in difficulty. It was not always clear from the video, however, if the teacher was using strategies to help learners with difficulty, to pre-empt difficulty, or both.

Another illustration of the slightly slippery nature of scaffolding can be seen from course participants' observation of the amount of non-linguistic support provided by the teacher.

They wondered if there was a sense in which this, although not talk, helped control the children's frustration during the story, and in this way might be categorised as scaffolding. The categorisation itself is perhaps less important than the simple reminder that scaffolding may be only one strategy the teacher may wish to use with learners, as the context in which it occurs is specific.

A related thought concerned the suitability of the choice of video extract itself. The task the children had to perform was to understand the main points of a story. This concept of task may, in hindsight, have been rather loose, and may not be analogous with the kind of problem-solving task exemplified by the pyramid construction experiment. As an example, it was difficult to be confident from the video that the teacher's strategies helped children to understand the story, as the children's mental processes were not observable, whereas with the pyramid task, a clear result would have been observable.

Conclusion

Maybin et al (1992: 189) comment. 'We find the metaphor of scaffolding tremendously appealing in principle, and at the same time, problematic, or at least elusive, in practice.' My experience with the session certainly echoes their view. As a trainer, I think I learned something from the session. Should I use video to look at scaffolding again, I would still feel comfortable looking at the nature of the interaction itself, but would feel more aware of potential fuzzy areas surrounding the concept of scaffolding. In addition, though I feel the videoed lesson was a useful analytical tool, I might next time film a more clearly-defined problem solving task, and record both teacher and students' reactions to their interaction after the lesson. This could be used as a follow up to session participants' discussion of the scaffolding strategies they observe. The use of lesson extract transcripts (Cullen 1995) might be another worthwhile option.

References

Bruner, J. S. 1983 *Child's Talk: Learning to Use Language.* Oxford: Oxford University Press
Bruner, J.S 1986 *Actual Minds, Possible Worlds.* Cambridge, Mass. Harvard University Press
Cameron, L. (2001) *Teaching Languages to Young Learners.* Cambridge: Cambridge University Press
Cullen, R. (1995) *The Use of Lesson Transcripts in Teacher Development* in The Teacher Trainer vol 9 no 1
Lightbown, P. and Spada, N. (1999) *How Languages are Learned.* Oxford: Oxford University Press (Revised Edition).
Maybin, J., Mercer, N. and Stierer, B (1992) 'Scaffolding' Learning in the Classroom. In K. Norman (ed.) *Thinking Voices* (186 - 195). London: Hodder & Stoughton.
Wood, D, Bruner, J.S, Ross, G (1976) *The Role of Tutoring in Problem Solving* Journal of Child Psychology and Psychiatry vol 17/2 pp 89-100
van Lier, L (1988) *The Classroom and the Language Learner* New York: Longman
Vygotsky, L. S. (1978) *Mind in Society.* London: Harvard University Press