

Neil Mercer

LANGUAGE FOR TEACHING A LANGUAGE

Introduction

THIS CHAPTER IS ABOUT THE use of language as a medium for teaching and learning, with special relevance to the teaching of English. However, many of the issues I will deal with, especially those in the early parts of the chapter, are not specific to the use of any particular language in the classroom, or the teaching of any particular curriculum subject. Of course, languages of instruction and curricula vary from country to country, region to region and even from school to school. Teachers differ in their style and approach, and their classes are made up of individuals of various personal characteristics and cultural backgrounds, who differ in the ways they respond to teachers and particular styles of teaching. But, as I will explain, observational research suggests that some ways that language is used in interactions between teachers and students are common features of classroom life throughout the world. I will illustrate some of these features of classroom language with real-life examples, and discuss their possible educational functions. In the latter part of the chapter, I will use the theoretical perspective of socio-cultural psychology to relate the earlier analysis of classroom language to a consideration of the nature and quality of classroom education. In these ways, I hope to demonstrate the practical educational value of a careful analysis of the interactive process of teaching-and-learning.

Language and teaching

Wherever they are and whatever they are teaching, teachers in schools and other educational institutions are likely to face some similar practical tasks. They have to organize activities to occupy classes of disparate individuals, learners who may vary considerably in their aims, abilities and motivations. They have to control unruly behaviour. They are expected to teach a specific curriculum, a body of knowledge and skills which their students would not normally encounter in their out-of-school lives. And they have to monitor and assess the educational progress the students make. All these aspects of teachers' responsibilities are reflected in their use of language as the principal tool of their responsibilities. As examples of this, I would like you now to consider two transcribed sequences of classroom talk, Sequences 1 and 2 overleaf. For each in turn, consider:

- 1 Can you identify any recurring patterns of interaction in the talk between teacher and pupils?

- 2 What would you say were the main functions of the teacher's questions in each of the sequences? Do the sequences differ at all in this respect?

I have made my own comments after both the sequences.

(Note: in the transcriptions words spoken particularly emphatically are underlined. Words which were unclear during transcription are in curled brackets { }. The onset of simultaneous speech is marked with a square bracket [.]

Sequence 1: Toy animals

This sequence was recorded in an English lesson in a Russian primary school. The teacher has just set up a collection of soft toy animals in front of the class.

- T: Have you got any toy animals at home? Be quick. Raise your hand (*she raises her own hand*) and show me. Have you got any toy animals? S- {Name of child}
 S: (*Standing up*) I have got a cat, a
 T: No, sit down, in your place.
 S: Yes, I have.
 T: I have got many?
 S: Toys at home.
 T: Toy animals at home.

Sequence 2: Personal qualities

This next sequence comes from a TESOL class for young adults in a college in London. A little earlier, the teacher had asked each of the students to list their own personal qualities, both positive and negative.

- T: Who would like to tell the class about their personal qualities? Dalia?
 D: I am polite, friendly, organized, trustworthy, responsible but sometimes I am impatient and unpunctual. Sometimes (*laughs*).
 T: Good, isn't it? (*Addressing the class*) Thank you, Dalia. That was good. Now can you tell me the positive qualities you have just said.
 D: Yeah?
 T: That is, friendly, um, organized.
 D: {Right}
 T: How is it helping you . . .
 D: Yeah?
 T: . . . with your friends [in the class?
 D: [It help me to get along with people and to understand them and help them.
 T: That's good. And what about the, the not very positive ones [like punctual
 D: [Sometimes
 T: What happens then?
 D: Sometimes I lose my friend basically of that because I lose my temper very quickly.
 T: And what happens with me? I don't smile at you that much do I?

Comments on Sequences 1 and 2

Sequence 1 illustrates some patterns which typify most classroom talk. First, the teacher took longer turns at speaking than any students. Second, she asked all the questions. Observational research has shown that in classroom conversations teachers usually ask the great majority of questions, usually – as in this case – to elicit some kind of participatory response from the students. She then *evaluates* the replies they give. She is also using questions to direct the topic or content of the talk towards issues that she wishes to focus attention on. Looking more carefully at Sequence 1, we can see that there is a structural pattern to the talk: a *teacher's question* is followed by a *student response*, followed in turn by some *teacher feedback or evaluation*. This structural element of classroom talk was first described by the linguists Sinclair and Coulthard (1975; see also Mehan, 1979; Van Lier, Chapter 5 of this book) and usually known as an Initiation-Response-Feedback (IRF) exchange. For example:

T:	. . . Have you got any toy animals? S- {Name of child}	I
S:	(<i>Standing up</i>) I have got a cat, a	R
T:	No, sit down, in your place.	F

IRF exchanges can be thought of as the archetypal form of interaction between a teacher and a pupil – a basic unit of classroom talk as a continuous stretch of language or 'text'. They do not typify the pattern of talk in all classroom activities; other kinds of talk involving different patterns of exchanges (e.g. in which students ask questions of teachers, or of other students) may happen too. And outside the most formal and traditional of classrooms, they may not often be found in their classic, simple form. But IRFs have been observed as a common feature in classrooms the world over, and in other languages besides English.

In Sequence 1, the IRF exchanges are being used to perform a common function in classrooms, one that is almost certainly familiar to you from your own schooldays: a teacher is eliciting from learners their knowledge of the relevant curriculum subject (in this case, English). Research shows that this particular kind of use of question-and-answer by a teacher – asking questions to which the teacher knows exactly what answers she seeks – is the most common function of IRFs in classrooms. Here students are essentially trying to provide the information that the teacher expects them to know. As the classroom researchers Edwards and Westgate say:

Most classroom talk which has been recorded displays a clear boundary between knowledge and ignorance . . . To be asked a question by someone who wants to know is to be given the initiative in deciding the amount of information to be offered and the manner of telling. But to be asked by someone who already knows, and wants to know if you know, is to have your answer accepted, rejected or otherwise evaluated according to the questioner's beliefs about what is relevant and true. (1994, p 48)

Teachers need to check students' understanding of procedural, factual matters, and that is commonly the function of IRF exchanges. Sequence 1 illustrates also how 'feedback' from a teacher may also be used to control students' behaviour. These are quite legitimate functions of teacher-talk, and all teachers might expect to use language in this way quite frequently. But the danger of relying heavily and continuously on traditional, formal question-and-answer reviews for guiding learning is that students then get little opportunity for using language in more creative ways – such as experimenting with new types of language constructions.

As in much classroom talk, in Sequence 2 we can also see IRF exchanges occurring, though here as slightly more complex, linked structures, in which the student interjects during the teacher's elicitations, perhaps seeking clarification which the teacher provides. And if we consider the content and function of the question-and-answer exchanges in the two sequences, we can see that something rather different is going on in each of them. In Sequence 1, the teacher is asking her primary school pupils to produce English sentences which conform to the models she has in mind. The children respond by trying to provide these 'right answers'. The teacher in Sequence 2 is not doing that. Instead, she is asking questions to encourage the students to elaborate, in English, on what they have written. In this way, the teacher is not so much trying to elicit particular forms or structures of English, but rather encouraging the student to use English in a practical, communicative manner. I am not suggesting that either teacher is using their questioning techniques to better or worse effect, but simply illustrating the fact that IRF exchanges can be made to serve a variety of pragmatic, educational functions.

Techniques for teaching

Having identified the archetypal structure of teacher-student talk, I will next describe some specific ways of interacting with students which are commonly used by teachers. I call these 'techniques', because I believe that they represent teachers attempting to shape language into a set of suitable tools for pursuing their professional goals. I will illustrate each technique and consider how they can contribute to the process of teaching-and-learning. The techniques are summarised in Table 15.1 below.

Table 15.1 Some techniques that teachers use

... to elicit knowledge from learners

Direct elicitations

Cued elicitations

... to respond to what learners say

Confirmations

Rejections

Repetitions

Reformulations

Elaborations

... to describe significant aspects of shared experience

amplifications

explanations

'we' statements

recaps

Eliciting knowledge from learners

We have seen that when a teacher initiates an IRF sequence, this usually has the function of eliciting information from a student. If this is simply a straightforward request, we can describe the teacher's verbal act as a *direct elicitation*. But teachers also often engage in what can be called *cued elicitation*, which is a way of drawing out from learners the information

they are seeking – the ‘right’ answers to their questions – by providing visual clues and verbal hints as to what answer is required. Here is an example recorded in an English lesson in a Zimbabwean primary school. The teacher has set up a number of objects on her desk, and also has a set of cards on which various consonants (‘b’, ‘f’, ‘j’ etc.) are written. The children have to come to the front of the class and match the consonants to the name of an object.

Sequence 3: say the sound

Teacher: (*to child*): Say the sound.

Child: b-b-b

Teacher: b-b-b is for?

(*Child does not answer. Teacher waves her hand over the nearest objects, one of which is a book*)

Child: b-b-b is for book.

Teacher: Well done!

The use of cued elicitation as a teaching technique is widespread. It can be traced to the Socratic dialogues constructed by Plato (Edwards, 1988). By using this technique, the teacher avoids simply giving the child the right answer. Sequence 3 also illustrates how non-verbal communication – the use of gestures and other signs – can be an important component of classroom talk.

Responding to what learners say

As illustrated by the sequences above, one of the ways that teachers sustain dialogues with their students is to use what students say as the basis for what they say next. In this way, the learners’ own remarks are incorporated into the teaching-learning process. The most obvious way of doing this is through *confirmation* (as, for example, a teacher’s ‘Yes, that’s right’ to a pupil’s answer). *Repetitions* of things learners say are another way, one which allows the teacher to draw to the attention of a whole class an answer or other remark which is judged by the teacher to have educational significance.

Teachers often paraphrase or *reformulate* a pupil’s remark, usually so as to offer the class a revised, tidied-up version of what was said which fits in better with the point that the teacher wishes to make or the form of response being sought. For example, in this extract from Sequence 1:

S: Yes, I have.

T: I have got many?

S: Toys at home.

T: Toy animals at home.

There are also *elaborations*, when a teacher picks up on a cryptic statement made by a pupil and expands and/or explains its significance to the rest of the class. Wrong answers or unsuitable contributions may be explicitly *rejected* by a teacher. But we should also note a popular technique that teachers have for dealing with wrong answers – simply ignoring them.

Describing shared experience

Classroom activities often rely on students reading instructions, whether in print or on a computer screen. It is important that they understand properly what is expected of them, if the activity is to succeed. Teachers therefore often *amplify* instructions with the intention of making them clearer and less ambiguous. Other texts may also contain information which students need to make sense of before they continue any further. In classrooms it is common to hear teachers *explaining* these texts to students as either a preliminary to activities or if some confusion about them seems to arise. For example, in this extract from a Spanish lesson for adult students:

Sequence 4: *Ser and Estar*

Teacher: It says (*reading from text*) 'This is one of the main difficulties for English speaking learners' meaning the two verbs *ser* and *estar* which both, uh, translate as 'to be' in English. (*Reading again*) '*Ser* means to exist while *estar* means to be situated'. That sounds horribly complicated, I think to start by thinking of *ser* as being about permanent things and *estar* as temporary ways of being. *Vamos a ver . . .* (*He continues in Spanish*)

An important task for a teacher is to help learners see how the various activities they do, over time, contribute to the development of their understanding. Education cannot be merely the experience of a series of consecutive events, it must be a developmental process in which earlier experiences provide the foundations for making sense of later ones. For those involved in teaching and learning, continuous shared experience is one of the most precious resources available. There are many ways that teachers try to create continuities in the experience of learners – by sequencing activities in certain ways, by dealing with topics in order of difficulty, and so on. Teachers can help learners perceive *continuity* in what they are doing. Through language there is the possibility of repeatedly revisiting and reinterpreting that experience, and of using it as the basis for future talk, activity and learning.

'*We*' statements (as in a teacher saying to a class 'last week we learned how to measure angles') are often used when teachers are trying to represent past experience as relevant to present activity. They show how teachers help learners see that they have significant past experience in common and so have gained shared knowledge and collective understanding which can be drawn upon to progress further. Teachers also often *recap* shared classroom experience from earlier in a lesson, and from previous lessons, usually emphasising the points or events they consider of most educational significance.

I have described and illustrated each of the techniques as separate items, each with an obvious function; but this is a simplification, for the sake of clarity of exposition, of the relationship between language form, function and context. An analyst of classroom discourse has to recognize that (a) any particular utterance can perform more than one function (so that, as in the first part of Sequence 3, a *repetition* can also be an *elicitation*); (b) any particular technique can serve more than one pedagogic purpose, and be used effectively or otherwise; and (c) the functional meaning of any interaction for participants may be shaped by contextual factors not available to the analyst (such as information gained from their shared past experience of interaction; see Breen, Chapter 7, for further discussion of such matters). However, despite these caveats, I have found the identification of these techniques a useful, practical aid to analysis.

Interaction in bilingual and multilingual settings

In the next part of the chapter I will consider some aspects of teacher–student interaction in classrooms where English is being used as a classroom language, but is not the first language of the children. I hope to show through these examples some of the qualities these bilingual settings have in common with monolingual classrooms, while also pointing out some of the special interactional features they may generate. There are two main sorts of situation which can be included here. The first occurs in countries where English is not the usual everyday language and the mother tongue of most of the children is not English. The second is where pupils whose mother tongue is not English enter schools in a predominantly English speaking country. I will provide examples from both of these types of situation.

In any situation where English is used as a classroom language but is not the main language of children's home or community, teachers may have the multiple task of teaching (a) the English language, (b) the educational ground rules for using it in the classroom, and (c) any specific subject content. Jo Arthur (1992) carried out observational research on teaching and learning in primary school classrooms in Botswana. English was used as the medium of education, but it was not the main language of the pupils' local community. She observed that when teachers were teaching mathematics, they commonly used question-and-answer sessions as opportunities for schooling children in the use of appropriate 'classroom English' as well as maths. For example, one primary teacher commonly insisted that pupils reply to questions 'in full sentences', as shown below:

Sequence 5: How many parts?

- Teacher: How many parts are left here (first pupil's name)?
 First pupil: Seven parts.
 Teacher: Answer fully. How many parts are there?
 Pupil: There are . . . there are seven parts.
 Teacher: How many parts are left? Sit down my boy. You have tried. Yes (second pupil's name)?
 Second pupil: We are left with seven parts.
 Teacher: We are left with seven parts. Say that (second pupil's name).
 Second pupil: We are left with seven parts.
 Teacher: Good boy. We are left with seven parts.

(Arthur, 1992, pp. 6–7)

Sequence 5 is made up of a linked series of IRF exchanges. For example:

- How many parts are left here? [Initiation]
 Seven parts [Response]
 Answer fully [Feedback/Evaluation]

The Botswanan students therefore needed to understand that their teacher was using these exchanges not only to evaluate their mathematical understanding, but also to test their fluency in spoken English and their ability to conform to a 'ground rule' that she enforced in her classroom – 'answer in full sentences'. Arthur comments that for pupils in this kind of situation, the demands of classroom communication are complicated because their teacher is attempting to get them to focus on both the medium (English) and the message (maths).

Arthur reports that such dual focus is common in Botswanan classrooms, as the following sequence from another lesson shows:

Sequence 6: the continent of Africa

- T: In which continent is your country? In which continent is your country? Give an answer
 P1: In Africa is my country
 T: He says in Africa is my country. Who could frame her sentence? In Africa is my country
 P2: Africa is my continent
 T: My question was in which continent is your country?
 P3: Its continent is in Africa
 T: It is in the continent of Africa. everybody
 Ps: It is in the continent of Africa

(Arthur, 1992, p. 13)

Bilingual code-switching in the classroom

In circumstances where one language is being used as a classroom language, but where the pupils' first language is a different one, a teacher may sometimes 'code-switch' to the first language if they judge it necessary. (We saw this kind of switch taking place between Spanish and English in Sequence 4 above). Sometimes the first language may be used only for asides, for control purposes or to make personal comments. However, when code-switching amounts to translation by the teacher of the curriculum content being taught, its use as an explanatory teaching strategy is somewhat controversial. On the one hand, there are those who argue that it is a sensible, common-sense response by a teacher to the specific kind of teaching and learning situation. Thus in studying its use in English-medium classrooms in Hong Kong, Angel Lin (Chapter 17 of this book) explains a particular teacher's use of code-switching as follows:

by always starting in L1, Teacher D always starts from where the student is – from what the student can fully understand and is familiar with. (p. 282)

Researchers of bilingual code-switching (as reviewed by Martyn-Jones, 1995) have often concluded that it is of dubious value as a teaching strategy, if one of the aims of the teaching is to improve students' competence in English. Thus Jacobson comments:

the translation into the child's vernacular of everything that is being taught may prevent him/her from ever developing the kind of English language proficiency that must be one of the objectives of a sound bilingual programme (Jacobson, 1990, p. 6.)

It seems, however, that teachers often use code-switching in more complex ways than simply translating content directly into another language. On observing classrooms in Hong Kong, Johnson and Lee (1987) observed that the switching strategy most commonly employed by teachers had a three-part structure as follows:

- 1 'Key statement' of topic in English
- 2 Amplification, clarification or explanation in Cantonese
- 3 Restatement in English

They comment that 'direct translation was comparatively rare; the general effect was of a spiralling and apparently haphazard recycling of content, which on closer examination proved to be more organised than it appeared.' (1987, p 106). The implication here is that such teachers are pursuing the familiar task of guiding children's understanding of curriculum content through language, but using special bilingual techniques to do so.

An interesting study of code-switching in bilingual classrooms in Malta was carried out by Antoinette Camilleri (1994). She showed that code-switching was used as a teaching technique by teachers in a variety of ways. Look for example at these two extracts from the talk of a teacher in a secondary school lesson about the production and use of wool, and based on a textbook written in English. The teacher begins by reading part of the text (*A translation of talk in Maltese is given in the right hand column*)

Sequence 7: Wool

Extract 1

England Australia New Zealand and
Argentina are the best producers of wool

*dawk l-aktar li ghandhom farms li j
rabbu n-naghagghas-suf O.K. England
tghiduli minn licma post England
ghandhom Scotland maghrufin tant
ghall-wool u gersijiet taghhom O.K.*

they have the largest number of farms
and the largest number of sheep for wool
O.K. England where in England we really
mean Scotland they are very well-known
for their woollen products

Extract 2

wool *issa* it does not crease but it has to be
washed with care *issa din importanti*
ma ghidtilkomx illi jekk ikolli nara xaghra jew
sufa wahda under the microscope *ghandha*
qisha hafna scales *tal. huta issa jekk ma nah*
slux sewwa dawk l-iscales jitghaqqdu go xulxin
u indahh gersi daqshekk gol- washing
machine *u nohorgu daqshekk ghax jixxrinkjali*
u jitghaqqad kollu

now this is important didn't I tell you that
if I had a look at a single hair or fibre
it has many scales which if not washed
properly get entangled and I put a jersey
this size into the washing machine and it
comes out this size because it shrinks and
gets entangled

(Adapted from Camilleri, 1994)

Camilleri notes that the first extract shows the teacher using the switch from English to Maltese to expand or *amplify* the point being made, rather than simply repeat it in translation. In the second extract, she *explains* the English statement in Maltese, again avoiding direct translation. Camilleri comments that the lesson therefore is a particular kind of literacy event, in which these are 'two parallel discourses – the written one in English, the spoken one in Maltese' (p 12).

Studies of code-switching in classrooms have revealed a variety of patterns of bilingual use (Martyn-Jones, 1995). For example, Zentella (1981) observed and recorded events in two bilingual classes in New York schools, one a first grade class (in which the children were about six years old) and the other a sixth grade (in which the average age would be about 12). The pupils and teachers were all native Spanish speakers, of Puerto Rican origin, but the official medium for classroom education was English. One of the focuses of her analysis of teacher-pupil interactions was IRF sequences. Both Spanish and English were actually

used by teachers and pupils in the classes, and Zentella was able to show that there were three recurring patterns of language-switching in IRF sequences, which seem to represent the use of certain 'ground rules' governing language choice. These are summarized below:

Rules governing language choice	teacher initiation	student reply	teacher feedback
1. Teacher and student: 'follow the leader'	English Spanish	Spanish Spanish	English Spanish
2. Teacher: 'follow the child'	English Spanish	Spanish English	Spanish English
3. Teacher: 'include the child's choice not yours'	English Spanish	Spanish English	both languages both languages

(Adapted from Zentella, 1981)

From this example, we can see that distinctive patterns of language use emerge in bilingual classrooms, but these can be interpreted as adaptations of the common IRF structure and language strategies used by teachers in monolingual settings. What is more, the distinctive patterns of switching which emerge in teacher-talk can be explained in terms of the special communicative resources that arise in a modern language classroom and the ways that teachers decide to respond to these special circumstances. The extent to which code-switching between English and another language occurs in a particular setting will therefore be influenced by factors such as (a) the degree of fluency in English that members of a particular class have achieved; (b) the bilingual competence of teachers (c) the specific teaching goals of teachers; and – crucially – (d) the attitudes of both children and teachers to the practice of code-switching and to the languages involved.

What learners have to understand about classroom language

When students enter an English medium or EFL classroom having grown up speaking another language, it may be difficult for both teachers and children to distinguish between two 'learning tasks' – acquiring a basic fluency in English and learning the social conventions of using English as a classroom language. Some patterns of classroom language – such as IRF sequences – are likely to be familiar to any student who has had experience of school, even if they had encountered them in another language. As I noted earlier, however (in the comparison of Sequences 1 and 2), IRFs can be used for different purposes, some of which may not be familiar to students from their previous educational experience (say, if they have arrived as immigrants in an English-speaking country having been educated elsewhere in another language). Depending on their experiences within their own language communities, students might also be unfamiliar with some other conventions or 'ground-rules' for using English that are associated with particular social settings inside and outside school.

For these reasons, it can be difficult for a teacher to tell whether a new pupil who is not fluent in English, and who appears to be having difficulties with using the language in the classroom, is struggling with general aspects of using English or having difficulties with grasping the 'local' ground rules for classroom language use. This kind of difficulty may arise

in relation to the learning of written as well as spoken English, and is well illustrated by the research of Alex Moore (1995) who studied the progress of children of non-English speaking immigrant families entering secondary schools in Britain.

Because of his close and continuous involvement in classroom events as a kind of 'action researcher' (Elliot, 1991), Moore was able to observe, describe and analyse teaching and learning over several weeks or months in one class. One of his special 'case studies' was of the progress of a Sylheti boy of 15 who had been in Britain one year since coming from Bangladesh (where he had been educated in Bengali). Moore focused on Mashud's classroom education in writing English. Mashud had quite a few problems with 'surface features' of English such as handwriting, spelling and grammatical structures, but was an enthusiastic writer. However, Moore and Mashud's teacher (Mrs Montgomery) both noticed that:

his work had a particular idiosyncrasy in that whenever he was set creative writing – or even discursive writing – assignments, he produced heavily formulaic fairy-story-style moral tales which were apparently – according to information volunteered by other Sylheti pupils in the class – translations of stories he had learnt in his native tongue. (Moore, 1995: 362)

Despite being a willing pupil, Mashud seemed unable to transcend this traditional style of genre, and write in the genres that his teachers knew would be required of him in the British education system and in wider society. Further consideration led Moore and Mrs Montgomery to some hypotheses about why this was so:

It has to be said that neither Mrs Montgomery or I knew enough about Bangladeshi or Sylheti story-telling traditions to be able to expound with any degree of confidence on the cause of Mashud's particular way of going about things. The key to our future pedagogy, however [. . .] lay in Mrs Montgomery's very wise recognition that "there could be the most enormous difference between what Mashud has been brought up to value in narratives and what we're telling him he should be valuing". (Moore, 1995: 366)

This insight into Mashud's difficulties with genres of writing was supported by a more careful analysis of Mashud's texts, which had a linear, additive, chronological structure associated with oral, rather than literate cultural traditions (Ong, 1982). The outcome was the teacher designing activities for Mashud which would support or 'scaffold' (Bruner, 1986; Maybin, Mercer and Stierer, 1992) his development as a writer of English:

If we responded appropriately, Mashud would, we hoped, learn something of what was valued in expressive writing in his new school, and how that was different from – though no better than – what he may have learned to value at school in Bangladesh. (Moore 1995: 368)

This approach proved successful, as during the remaining period of Moore's research Mashud showed clear progress in coming to understand and cope with the demands of writing in the genres of English required in the British school system. Describing research with children in a Spanish-English bilingual program in Californian schools, Moll and Dworin (1996) also highlight the important role of a teacher in helping learners make the best educational use of their bi-cultural language experience in developing their literacy skills in the second language.

A socio-cultural perspective on classroom interaction

I now wish to relate the above discussion of language as the medium of teaching-and-learning to a consideration of the quality of education. To do this, I will draw on a particular approach to human learning and development which is known as *sociocultural psychology*. This approach has emerged during the final decades of the twentieth century from a belated appreciation of the pioneering research on the relationship between language and cognitive development carried out by the Russian psychologist Lev Vygotsky (for example, Vygotsky, 1962). Vygotsky worked in Moscow in the 1920s and 30s, in an institution for children who had special educational needs, but his ideas on the process of teaching and learning have much broader educational relevance than the specific institutional settings in which he put them into practice. Vygotsky gave language a special, important role in human cognitive development, describing human individuals and their societies as being linked by language into a historical, continuing, dynamic, interactive, spiral of change. Led by the example of Jerome Bruner (1985, 1986), a considerable body of research has now emerged which uses a 'neo-Vygotskian', socio-cultural perspective in the analysis of educational processes. Some of the most significant and distinctive implications of adopting a socio-cultural perspective on classroom education are, I believe, as follows:

- 1 *Language is our most important pedagogic tool.* Although they do not necessarily make this explicit, I suggest that the most influential socio-cultural theorists of cognitive development (as represented by such as Bruner, 1986; Wertsch, 1991; Rogoff, 1990) ascribe three important functions to language: (a) as a *cognitive tool* whose acquisition enables children to gain, process, organize and evaluate knowledge; (b) as a *cultural tool*, by which knowledge is shared, stored and made available to successive generations; (c) as a *pedagogic tool* by which intellectual guidance is provided to children by other people. These roles are inextricably intertwined. To this specification of the roles of language we might add the comment: learning how to use language effectively as a cultural tool is an important educational goal for native speakers as well as second language learners. So language is both the tool for carrying out teaching-and-learning and also that which is meant to be learnt and taught.
- 2 *Education is a dialogical, cultural process.* The development of students' knowledge and understanding is shaped by their relationships with teachers and other students, and by the culture in which those relationships are located. (Newman, Griffin and Cole, 1989; Gee, 1996). The educational success students achieve is only partly under their own control, and only partly under the control of their teachers. This is where the sociocultural concept of 'scaffolding', which I mentioned briefly earlier, is useful. The essence of this concept, as developed by Bruner (1986), Wood (1988) and others, is that an effective teacher provides the kind of intellectual support which enables learners to make intellectual achievements they would never accomplish alone; and one way they do so is by using dialogue to guide and support the development of understanding.
- 3 *Language carries the history of classroom activity into its future.* The socio-cultural perspective suggests that if we want to understand the process of learning, we must study not only what a learner does but also the activities of parents, teachers, peers who create – indeed, constitute – the dynamic context of their learning experience (Edwards and Mercer, 1987; Hicks, 1996). Rogoff (1990) talks of children being involved in a process of 'guided participation' in the intellectual life of their communities, which implies the necessary involvement of others. For similar reasons,

I have described the process of teaching-and-learning as 'the guided construction of knowledge' (Mercer, 1995). This is a process which is carried on over time, so that, as the language researcher Janet Maybin (1994) has put it, the talk on any occasion between a teacher and their regular class of students can be considered part of the 'long conversation' of their relationship. Language is a tool for building the future out of the past: the meaningfulness of current and future joint activities of teachers and learners depends on the foundations of their common knowledge (Mercer, 2000).

- 4 *Classroom interaction follows implicit 'ground rules'*. The socio-cultural perspective emphasises that everyday human activity depends heavily on participants being able to draw on a considerable body of shared knowledge and understanding, based on their past shared experience or similar histories of experience. The conventions or 'ground rules' which ensure that speakers and listeners, writers and readers are operating within the same genres of language are rarely made explicit, but so long as participants can safely assume shared knowledge, the language of everyday interaction follows its conventional patterns. If the contextual foundations of shared knowledge are lacking – such as when students' home backgrounds have not prepared them well for making sense of the language and culture of the classroom – misunderstandings may easily arise and persist unresolved (Heath, 1983; LoCastro, 1997). Making the 'ground rules' of classroom activity explicit can help overcome misunderstandings and misinterpretations, and there is growing evidence that students' progress is significantly enhanced if teachers do so (Christie, 1990; Mercer, Wegerif and Dawes 1999).

Conclusion

Recordings and transcriptions of classroom talk, analysed from a socio-cultural perspective, offer us glimpses of the social, cultural, communicative process of education being pursued and, with varying degrees of success, accomplished. They may capture illustrations of the best practice, in which teachers enable students to achieve levels of understanding which might never, or at least not nearly so quickly, have been achieved without a 'scaffolding' guidance; they as often reveal misunderstandings being generated, and opportunities for guided development being squandered. As teachers, as well as researchers, we can learn much from what they reveal. It is of course unrealistic to expect any busy teacher to monitor and evaluate every interaction in their classroom; but recent research (in areas of the curriculum other than language teaching) has shown that through a better understanding of the use of language as a pedagogic tool, teachers can help students improve their curriculum-related learning and their use of language as a tool for constructing knowledge. (Brown and Palincsar, 1989; Wegerif, Rojas-Drummond and Mercer, 1999; Mercer, Wegerif and Dawes, 1999.) A socio-cultural perspective has only quite recently been brought to bear on teaching and learning in the modern language classroom (see Chapters 5, 16 and 19 of this book, by Van Lier, Gibbons and Breen), but I am convinced that its application will have significant practical implications for this field of educational endeavour.

References

- Arthur, J. (1992) 'English in Botswana classrooms: functions and constraints'. *Centre for Language in Social Life Working Papers No.46*. University of Lancaster, U.K.

- Brown, A. and Palincsar A.S. (1989) 'Guided, cooperative learning and individual knowledge acquisition', in L. Resnick (ed.) *Knowing, Learning and Instruction*. New York: Lawrence Erlbaum.
- Bruner, J.S. (1985) 'Vygotsky: a historical and conceptual perspective', in J.V. Wertsch (ed.) *Culture, Communication and Cognition: Vygotskian perspectives*. Cambridge: Cambridge University Press.
- Bruner, J.S. (1986) *Actual Minds, Possible Worlds*. London: Harvard University Press.
- Camilleri, A. (1994) 'Talking bilingually, writing monolingually'. Paper presented at the Sociolinguistics Symposium, Lancaster University, March 1994.
- Christie, F. (1990) *Literacy for a Changing World*. Melbourne: Australian Council for Educational Research.
- Edwards, A.D. and Westgate, D. (1994) *Investigating Classroom Talk (Second Edition)*. London: The Falmer Press.
- Edwards, D. (1988) 'The Meno', in Billig, M., Condor, S., Edwards, D., Gane, M., Middleton, D. and Radley, A. (eds) *Ideological Dilemmas: a social psychology of everyday thinking*. London: Sage.
- Edwards, D. and Mercer, N. (1987) *Common Knowledge: the development of understanding in the classroom*. London: Methuen/Routledge.
- Elliot, J. (1991) *Action Research for Educational Change*. Milton Keynes: Open University Press.
- Gee, J.P. (1996) 'Vygotsky and current debates in education: some dilemmas as afterthoughts to *Discourse, Learning and Schooling*', in D. Hicks (ed.) *Discourse, Learning and Schooling*. Cambridge: Cambridge University Press.
- Heath, S.B. (1983) *Ways with Words: language, life and work in communities and classrooms*. Cambridge: Cambridge University Press.
- Hicks, D. (1996) 'Contextual enquiries: a discourse-oriented study of classroom learning', in D. Hicks (ed.) *Discourse, Learning and Schooling*. Cambridge: Cambridge University Press.
- Jacobson, R. (1990) 'Allocating two languages as a key feature of a bilingual methodology', in R. Jacobson and C. Faltis (eds) *Language Distribution Issues in Bilingual Schooling*. Clevedon: Multilingual Matters.
- Johnson, R.K. and Lee, P.L.M. (1987) 'Modes of instruction: teaching strategies and students responses', in R. Lord and H. Cheng (eds) *Language Education in Hong Kong*. Hong Kong: The Chinese University Press.
- LoCastro, V. (1997) 'Politeness and pragmatic competence in foreign language education'. *Language Teaching Research*, Vol. 1, No. 3, 239–268.
- Martyn-Jones, M. (1995) 'Code-switching in the classroom', in L. Milroy and P. Muysken (eds) *One Speaker, two languages: cross disciplinary perspectives on code-switching*. Cambridge: Cambridge University Press.
- Maybin, J. (1994) 'Children's voices: talk, knowledge and identity', in Graddol, D, Maybin, J. and Stierer, B. (eds) *Researching Language and Literacy in Social Context*. Clevedon: Multilingual Matters.
- Maybin, J., Mercer, N. and Stierer, B. (1992) "'Scaffolding" learning in the classroom', in Norman, K. (ed.) *Thinking Voices*. London: Hodder and Stoughton.
- Mehan, H. (1979) *Learning Lessons: social organization in the classroom*. Cambridge, Mass: Harvard University Press.
- Mercer, N. (1995) *The Guided Construction of Knowledge: talk amongst teachers and learners*. Clevedon: Multilingual Matters.
- (2000) *Words and Minds: how we use language to think together*. London: Routledge.
- Mercer, N., Wegerif, R. and Dawes, L. (1999) 'Children's talk and the development of reasoning in the classroom'. *British Educational Research Journal*, 25, 1, 95–113.
- Moll, L. and Dworin, J. (1996) 'Biliteracy development in classrooms: social dynamics and

- cultural possibilities', in D. Hicks (ed.) *Discourse, Learning and Schooling*. Cambridge: Cambridge University Press.
- Moore, A. (1995) *The Academic, Linguistic and Social Development of Bilingual Pupils in Secondary Education: issues of diagnosis, pedagogy and culture*. Unpublished Ph.D. thesis, The Open University.
- Newman, D., Griffin, P. and Cole, M. (1989) *The Construction Zone*. Cambridge: Cambridge University Press.
- Ong, W. (1982) *Orality and Literacy*. London: Methuen.
- Rogoff, B. (1990) *Apprenticeship in Thinking*. Oxford: Oxford University Press.
- Sinclair, J. and Coulthard, M. (1975) *Towards an analysis of discourse: the English used by teachers and pupils*. London: Oxford University Press.
- Vygotsky, L.S. (1962) *Thought and Language*. Cambridge, Mass.: MIT Press. (Originally published in Russian in 1934.)
- Wegerif, R., Rojas-Drummond, S. and Mercer, N. (1999) 'Language for the social construction of knowledge: comparing classroom talk in Mexican pre-schools', *Language and Education*, Vol. 13, No. 2, pp. 133–150.
- Wertsch, J. (1991) *Voices of the Mind: a socio-cultural approach to mediated action*. Cambridge, Mass.: Harvard University Press.
- Wood, D. (1988) *How children think and learn*. Oxford: Basil Blackwell.
- Zentella, A.C. (1981) 'Ta bien, you could answer me in cualquier idioma: Puerto Rican code-switching in bilingual classrooms', in R. Duran (ed.) *Latino Language and Communicative Behavior*, pp 109–132. Norwood, N.J.: Ablex Publishing Corporation.