

Education, Culture and Cognition: intervening for growth
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**CULTURE, DIALOGUE AND LEARNING:
NOTES ON AN EMERGING PEDAGOGY**

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INTRODUCTION

Intentions and origins

This paper is about work in progress on an ‘emerging pedagogy’ of the spoken word. It is a pedagogy which exploits the power of talk to shape children’s thinking and to secure their engagement, learning and understanding during the developmentally critical years when they are in primary or elementary schools. The topic itself is familiar enough, but I hope you will find the angle less so.

I shall draw mainly on three areas of my research over the past two decades: first, a long-term comparative study of the relationship between culture and pedagogy in five countries – England, France, India, Russia and the United States (Alexander 2001); second, subsequent development work on classroom talk and specifically the idea of ‘dialogic teaching’ (Alexander 2005a); third, observational research in UK classrooms which preceded both of these and which ignited my desire to discover whether the identified features and problems of British pedagogy were universal or whether radical alternatives were available.

The line of enquiry began with my UK classroom observational research in the 1980s and early 1990s, especially the Leeds (1986-91) and ESRC CICADA (1990-92) projects (Alexander 1997; Alexander 1995, pp 103-269; Alexander, Willcocks and Nelson, 1996). Both projects yielded somewhat depressing findings about the character of the talk through which children’s learning was being mediated in English primary classrooms. Planning for the international study started in 1992, the first round of fieldwork was undertaken between 1994 and 1998, and the project is now in its second, follow-up phase during which I am returning to each of the five countries to explore issues of change and continuity. The initial study culminated in comparative analysis of classroom discourse from the five countries, and pointed the way towards the possibilities of interaction with a dynamic and content which at that time were rarely seen or heard in British classrooms. This work is currently

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represented in development projects in which I am applying and refining the idea of 'dialogic teaching' with teachers in various parts of the UK, but principally in North Yorkshire and the London Borough of Barking and Dagenham.

My points of purchase are anthropological, sociological, historical and linguistic as well as psychological. No less important, much that I do starts in classrooms, with what happens there in normal rather than ideal circumstances, and draws on over two decades of observation together with the analysis of audiotapes, videotapes and lesson transcripts.

In this paper I will:

- outline the perspective on classroom talk towards which my international data has steered me;
- outline my idea of dialogic teaching as it currently stands and as teachers in various parts of the UK are at this moment trying to apply it;
- present some interim findings from the schools involved in the dialogic teaching development projects, both positive and problematic.

Five propositions

Five key propositions frame what follows. I list them as succinctly as possible.

Proposition 1. Pedagogy is not a mere matter of teaching technique. It is a purposive cultural intervention in individual human development which is deeply saturated with the values and history of the society and community in which it is located. Pedagogy is best defined, then, as the act of teaching together with the ideas, values and collective histories which inform, shape and explain that act.

Proposition 2. Of all the tools for cultural and pedagogical intervention in human development and learning, talk is the most pervasive in its use and powerful in its possibilities. Talk vitally mediates the cognitive and cultural spaces between adult and child, between teacher and learner, between society and the individual, between what the child knows and understands and what he or she has yet to know and understand. Language not only manifests thinking but also structures it, and speech shapes the higher mental processes necessary for so much of the learning which takes place, or ought to take place, in school.

Proposition 3. It follows that one of the principal tasks of the teacher is to create interactive opportunities and encounters which directly and appropriately engineer such mediation.

Proposition 4. Yet though most educators subscribe to this argument in broad terms, and classrooms are places where a great deal of talking goes on, talk which in an effective and sustained way engages children cognitively and scaffolds their understanding is much less common than it should be. Teachers rather than learners control what is said, who says it and to whom. Teachers rather than learners do most of the talking. And, as many UK and US researchers have consistently found, one kind of talk predominates: the so-called 'recitation script' of closed teacher questions, brief recall answers and minimal feedback which requires children to report someone else's thinking rather than to think for themselves, and to be judged on their accuracy or compliance in doing so (Tharp and Gallimore 1988). This script is remarkably resistant to efforts to transform it. 'When recitation starts', notes Martin Nystrand, 'remembering and guessing supplant thinking.' (Nystrand *et al* 1997, p 6).

[Actually, my observations from the 1980s and 1990s show that the tendency is subtler than this. It is true that the so-called 'recitation script' of a closed IRF exchange (initiation – response – feedback) remains dominant; but in British primary schools, as in those American schools influenced by progressivism and so-called 'open education', another script is also common: an endless sequence of ostensibly *open* questions which stem from a desire to avoid overt didacticism, are unfocused and unchallenging, and are coupled with habitual and eventually phatic praise rather than meaningful feedback (Alexander 1995, chapter 4). So we have two deeply seated pedagogical habits to contend with: recitation and pseudo-enquiry.]

Proposition 5. There are three consequences of the demonstrably one-sided and cognitively undemanding character of much classroom talk: (i) children may not learn, in classrooms at least, as quickly or as effectively as they might; (ii) children may not sufficiently develop the narrative, explanatory and questioning powers necessary to demonstrate to their teachers what they know and understand, or don't know and understand, and to engage in decisions about how and what they should learn; (iii) teachers in these situations may remain ill-informed about learners' current understanding, and therefore lose the diagnostic element which is essential if their teaching is to be other than hit-or-miss. For if children need talk in order to learn about the world, then teachers need talk in order to learn about children.

PART I. CULTURE, PEDAGOGY AND DISCOURSE: ISSUES FROM COMPARATIVE RESEARCH

A model of teaching

So to the five-nation 'culture and pedagogy' comparative programme. The work on talk formed part of a three-level macro-micro study - nation, school, classroom - which located the analysis of pedagogy in prior investigation of educational systems, policies and histories, and of schools as organisations and micro-cultures; and at the classroom level, interaction was but one element of teaching which we studied using a culture-neutral model encompassing what we defined as its invariants: space; student organisation; time and pace; subject-matter; routines, rules and rituals; learning task; teaching activity; student differentiation for teaching; teacher assessment of learning (see figure).

A generic model of teaching		
<u>Teaching, in any setting, is the act of using method x to enable students to learn y</u>		
Frame	Form	Act
Space		Task
Student organisation		Activity
Time	Lesson	
Curriculum		Interaction
Routine, rule and ritual		Judgement

Source: Alexander 2001, p 325

Research procedures and data

The research procedures included interview, non-participant observation, video, photography, and documentary analysis. For the analysis of talk we had observation field

notes from over 100 observed lessons, 130 hours of videotape, and transcripts of all lessons observed and taped, plus additional data from 60 lessons in England for re-analysis. Much of the non-English material was translated not once but twice, with checks after each translation by native speakers to ensure that they came as close to the original in terms of tone and nuance as translation can ever get. The treatment of translated material in discourse analysis is problematic, so as we moved down the Hallidayan hierarchy from lesson to transaction, exchange, move and act (Halliday 1989), we exercised increasing caution.

Here are some issues germane to our theme of culture, dialogue and learning.

The language and cultural constructs of education

Comparative enquiry reminds us that the language of education contains few universals, and educational conversation across cultures is laced with pitfalls for the unwary. For example, the English *education* draws out – *educare* – what is already there, but its Russian equivalent, *obrazovanie*, forms something new; in French, *l'éducation* is closer to the Russian *vospitanie* than it is to the English *education* which in turn doesn't carry the same overtones of moral and cultural upbringing as either *vospitanie* or *l'éducation*. *Instruction* is not the same as *obuchenie*, nor is *la formation* as narrowly instrumental as *training*, even though the dictionaries tell us that these French and Russian terms equate. In English, *didactic* expresses disapproval, usually of teaching which is expository and by extension is assumed to be authoritarian; elsewhere, *la didactique* and *die Didaktik* celebrate the place in teaching of the subject and its conceptual imperatives. *Development* in English is something that happens naturally to the child; in Russian it also connotes a process of intervention by others. *Ability* and *effort*, key terms in the debate about the determinants of children's attainment, are in other languages not the absolutes they are deemed in English. In one culture in our study the most able child was deemed to have the most *potential*; in another the exact opposite applied, because the zone of next development to be crossed was greater. And the term *intelligence*, which bears an immense weight of social as well as educational baggage, to the extent it can boost or scar an individual for life, can signal very different capacities in different cultures. As Robert Sternberg's work shows (Sternberg 1997, 2005), drawing on studies undertaken in many different cultures, once one challenges the dominance of theories of general intelligence and considers alternatives like Gardner's 'multiple intelligences' (Gardner 1983) or Sternberg's own theory of 'successful intelligence', the idea of 'culture fair' tests seems decidedly shaky. Indeed, to an anthropologist striving to understand the almost unfathomable complexity of culture, the 'culture fair' test strikes a frankly ludicrous note – quite apart from the fact, as Berliner and Biddle (1995) also show, that far from being fixed, intelligence is highly susceptible to the effects of schooling.

And so on. Perhaps, if we want to be Vygotskian about this, we might tentatively suggest that in English – or perhaps in the Anglo-Saxon tradition more generally – the various terms veer towards the 'natural line' of development and are more fatalistic and determinist, whereas in French, Russian (and Spanish) they are more suggestive of the 'cultural line', of human perfectibility, and of external agency in human learning. These terminological shadings are not academic. Subtly yet profoundly, they may influence how teachers perceive children as learners and their own task as educators. For all, including 'childhood' itself, are cultural constructs, and (Alexander 1984) the power differential of classrooms makes it virtually impossible for children to resist these constructs' typificatory consequences, especially when classroom interaction is too limited to provide evidence of sufficient depth and detail to counter the typification.

The place of talk in the curriculum

With these shifting terminological sands in mind, consider for example the place of talk in the curriculum. On this side of the Straits of Dover we have England's traditional and unchanging definition of the educational 'basics' as reading, writing and calculation, but emphatically not speaking. On the other, French schools celebrate the primacy of the spoken word. Here, literacy: there, language. And while literacy is defined in England as a 'basic skill', in France it reflects a confident nexus of linguistic skills, literary knowledge, republican values and civic virtues. The citizen is one who speaks, reasons and argues on the basis of a broad education, not merely someone who reads and writes with tolerable competence and swallows the myth that Britain is a democracy.

Versions of human relations

What, similarly, of the place of talk in teaching? Once again, we must be alert to values. Our international evidence shows how within both the wider context of education and the more specific domain of teaching, ideas about how people should relate to each other are paramount. Teachers in the five-nation study articulated, enacted, or steered an uncertain path between three versions of human relations: *individualism*, *community* and *collectivism*.

- *Individualism* puts self above others and personal rights before collective responsibilities. It emphasises unconstrained freedom of action and thought.
- *Community* centres on human interdependence, caring for others, sharing and collaborating.
- *Collectivism* also emphasises human interdependence, but only in so far as it serves the larger needs of society, or the state (the two are not identical), as a whole.

Within the observed classrooms, a commitment to *individualism* was manifested in intellectual or social differentiation, divergent rather than uniform learning outcomes, and a view of knowledge as personal and unique rather than imposed from above in the form of disciplines or subjects. *Community* was reflected in collaborative learning tasks, often in small groups, in 'caring and sharing' rather than competing, and in an emphasis on the affective rather than the cognitive. *Collectivism* was reflected in common knowledge, common ideals, a single curriculum for all, national culture rather than pluralism and multiculturalism, and on learning together rather than in isolation or in small groups.

These values were pervasive at national, school and classroom levels. We are familiar with the contrast between the supposedly egocentric cultures of the west, with the United States as the gas-guzzling arch villain, and the supposedly holistic, sociocentric cultures of south and east Asia. Actually, there is evidence to support this opposition (Shweder 1991), even though it is easy to demonise one pole and romanticise - or orientalise - the other. But I think when it comes to pedagogy the tripartite distinction holds up, and it seems by no means accidental that so much discussion of teaching methods should have centred on the relative merits of whole class teaching, group and individual work. In France this debate can be traced back to arguments at the start of the nineteenth century about the relative merits of *l'enseignement simultané*, *l'enseignement mutuel* and *l'enseignement individuel* (Reboul-Scherrer 1989). As a post-revolutionary instrument for fostering civic commitment and national identity as well as literacy, *l'enseignement simultané* won. Only now, reflecting decentralisation and the rising tide of individualism, has its hegemony begun to be questioned.

Individualism, community and collectivism – or child, group and class – are the organisational nodes of pedagogy not just for reasons of practical exigency but because they are the social and indeed political nodes of human relations. Such differences profoundly influence the dynamics and communicative relationships of classroom talk. If as a teacher you arrange desks in a horseshoe or square so that each child can see and interact with all the others as well as with yourself, and you sit with the children rather than stand apart from them, you provoke a very different kind of talk, and a different relationship, to that signalled by having separate desks in rows facing the front, when children can establish eye-contact with the teacher but not each other, and the teacher stands while the children sit.

Versions of teaching

Alongside these three relational values there emerged from our data a second set. Where individualism, community and collectivism start with the relationship of individuals to society and each other, and move from there into the classroom, the six pedagogical values start with the purposes of education, the nature of knowledge and the relationship of teacher and learner.

- *Teaching as transmission* sees education primarily as a process of instructing children to absorb, replicate and apply basic information and skills.
- *Teaching as initiation* sees education as the means of providing access to, and passing on from one generation to the next, the culture's stock of high-status knowledge, for example in literature, the arts, humanities and the sciences.
- *Teaching as negotiation* reflects the Deweyan idea that teachers and students jointly create knowledge and understanding rather than relate to one another as authoritative source of knowledge and its passive recipient.
- *Teaching as facilitation* guides the teacher by principles which are developmental (and, more specifically, Piagetian) rather than cultural or epistemological. The teacher respects and nurtures individual differences, and waits until children are ready to move on instead of pressing them to do so.
- *Teaching as acceleration*, in contrast, implements the Vygotskian principle that education is planned and guided acculturation rather than facilitated 'natural' development, and indeed that the teacher seeks to outpace development rather than follow it.
- *Teaching as technique*, finally, is relatively neutral in its stance on society, knowledge and the child. Here the important issue is the efficiency of teaching regardless of the context of values, and to that end imperatives like structure, economic use of time and space, carefully graduated tasks, regular assessment and clear feedback are more pressing than ideas such as democracy, autonomy, development or the disciplines. This approach, incidentally, is not the proud creation of the DfES Standards Unit, but has its origins in the *Didactica Magna* of Jan Komensky (Comenius), first published in 1657.

The value-systems applied: pedagogical hybridisation and ambiguity

Without wishing to oversimplify, I draw on this pair of value frameworks to offer two observations. First, they help us to escape from the universal but debilitating tendency to see pedagogy in terms of simple dichotomies: didactic / exploratory, traditional / progressive, formal / informal, telling / discovering (and, for that matter, egocentric / sociocentric). Second, they offer the alternative, and historically more attuned idea of pedagogical layering, hybridisation and indeed contradiction. Thus, English primary education is best understood not as a pendulum swinging back and forth between 'traditional' and 'progressive' poles, but as a complex and unstable amalgam of (i) 19th century mass

elementary education (the ‘cheap but efficient’ class teacher system, the dominance of curriculum ‘basics’ defined as reading, writing and number), and (ii) the 1960s progressive backlash (the ‘whole child’, small groups, affectivity, the visual environment, resistance to the hegemony of the ‘basics’), alongside (iii) the current neo-elementary rubric of the UK government’s ‘standards’ strategies in literacy and numeracy. At any one time, reflecting wider cultural trends and preoccupations, one of these will be dominant, but the others are sedimented into our collective consciousness and continue to exert their influence.

The same kind of analysis can be applied to our other countries. Indian basic education carries the simultaneous residues of the brahmanical guru-disciple relationship with its ritualised teaching exchanges, Victorian colonial elementary education with its emphasis on the 3Rs and rote learning, and Gandhian post-independence resistance to both of these. Russian pedagogy is not merely Soviet pedagogy cleansed of its ideology but an amalgam of Soviet, Tsarist and central European traditions in which the contrasting legacies of Komensky (Comenius) and Vygotsky are as apparent as those of the Soviet era and pre-Soviet autocracy, all thinly overlaid by recent ‘humanising’ and ‘individualising’ government reforms.

The hybrid account of pedagogy means also that the tensions and ambiguities of classroom life can be understood as historically inevitable rather than, somehow, an aberration or the fault of the teacher. Nowhere were these more pronounced than in our American classrooms, where we found teachers trying to reconcile individual self-fulfilment with commitment to the greater collective good; sharing and caring with aggressive win-at-all-costs competitiveness; environmentalism with materialism; and altruism with self-absorption. So, too, negotiated pedagogy was compromised by the imperative of transmission. The imperatives of developmental facilitation and readiness were frustrated by the syllabus and the clock. Though usually organised for collaborative group work the centre of gravity veered more between the class and the individual. These tensions reflected not just a lack of professional consensus about ‘best practice’ but at a deeper level some of the complexities and unresolved tensions of American culture.

The value systems applied: classroom talk

How does all this relate to classroom talk? Well, the collective ambience of Russian and French classrooms and the dominance of whole-class teaching were buttressed there by the collective and very public nature of teacher-pupil exchanges: children were expected to talk clearly, loudly and expressively, and they learned very early to do so. Further, because both knowledge transmission and cultural initiation were explicit educational goals, the distinctive registers and vocabularies of different subjects were firmly and consistently applied, and language was no less rule-bound than personal conduct.

In contrast, in many of the American classrooms antipathy towards transmission teaching pushed interaction into an unfailingly questioning mode, whether or not it was appropriate, while objections to the hegemony of school subjects created a situation where children individually expressed their own mathematical meanings, say, but lacked a common language collectively to make sense of and evaluate them. Indeed in a climate of sometimes extreme relativism any ‘version’ of knowledge might be accepted whether or not it made sense and all answers might be deemed equally valid. Talk, overall, had a markedly conversational ambience and tone. The teachers themselves defined it thus, usually by reference to negotiated pedagogy and the importance of ‘sharing’ – the notion of the class as

a community - whereas in interview some Russian teachers explicitly distinguished conversation from dialogue and highlighted their role in fostering that dialogue.

Yet was what we recorded really conversation? Like other aspects of the American and English teaching which we observed, such interaction was hedged by ambiguity and dissonance, being conversational in intonation, lexis and syntax but rather less so in content and control. And in England, the ostensibly heuristic device of mainly open questions coupled with the genial paralinguistic features of chatty conversation masked an essentially closed agenda, for only certain answers were accepted and teachers would go on asking or paraphrasing their questions and cueing or even mouthing the required answers until these at last emerged. In contrast, in the French classrooms the ambience was more direct and honest: talk might be conversational in tone, but it was never other than firmly directed by the teacher, and the subject-specific referents kept it on its intended epistemic track. There, induction into *les disciplines* remained central.

Conversation and dialogue

So the critical questions here concern not so much the *tone* of the discourse as its meaning and where it leads. I want to suggest a stipulative distinction, for the classroom context, between 'conversation' and 'dialogue', which is necessary because most dictionaries treat the two as synonymous. Where the end point of conversation may not be clear at the outset, in classroom dialogue, for the teacher at least, it usually is. Where conversation often consists of a sequence of unchained two-part exchanges as participants talk at or past each other (though it *can* be very different), classroom dialogue explicitly seeks to make attention and engagement mandatory and to chain exchanges into a meaningful sequence.

This, I admit, is an overtly Bakhtinian version of dialogue. Here it is the act of *questioning* which differentiates conversation from dialogue, and the critical issue is what follows from *answers*: 'If an answer does not give rise to a new question from itself, then it falls out of the dialogue'. (Bakhtin, 1986, p 168)

One of the most significant demarcation lines in our international discourse data, then, was between those questions and responses which were chained into meaningful and cognitively demanding sequences, and those which were blocked: whether by the repetitive initiation-response (IR) exchange of rote (as in many of the Indian classrooms); by the ambiguities and vagaries of quasi-conversation (as frequently in the United States); by an emphasis on participation at the expense of engagement and thematic continuity (as in England); or by initiation-response-feedback (IRF) sequences in which the initiating move of each exchange was rarely grounded in the response and feedback moves of the exchange which preceded it.

In fact, much of the interaction which we recorded in English primary classrooms was neither conversation nor dialogue. Thus:

- Interactions tended to be brief rather than sustained, and teachers moved from one child to another in rapid succession in order to maximise participation, or from one question to another in the interests of maintaining pace, rather than developed sustained and incremental lines of thinking and understanding.
- Teachers asked questions about content, but children's questions were confined to points of procedure.
- Closed questions predominated.

- Children concentrated on identifying 'correct' answers, and teachers glossed over 'wrong' answers rather than used them as stepping stones to understanding.
- There was little speculative talk, or 'thinking aloud'.
- That the questions were – in Nystrand's terms – 'test' rather than 'authentic' (Nystrand *et al* 1997) was further demonstrated by the fact that teachers gave children time to recall but less commonly gave them time to think.
- The child's answer marked the end of an exchange, and the teacher's feedback closed it.
- Feedback tended to encourage and praise rather than to inform, and in such cases the cognitive potential of exchanges was lost.

Versions of communicative competence

Though in the real world communicative competence may be defined by reference to the Gricean maxims of *quantity, quality, relation* and *manner* (Grice, 1975), in classrooms the unequal power relationship of teacher and taught may produce a very different set of rules. For students they are dominated by listening, bidding for turns, spotting 'correct' answers, and other coping strategies which anywhere outside a school would seem pretty bizarre.

Since this tendency was identified by Philip Jackson and others on the far side of the Atlantic nearly 40 years ago (Jackson, 1968), one might suppose that this is the way, everywhere, that classrooms inevitably are. It isn't. Our international data show that these so-called 'rules' of communicative competence, which have come out of mainly British and American classroom research (Edwards and Westgate 1994), are neither universal nor inevitable and that they can be subverted by genuine discussion or by a version of whole class teaching which is rather different from the classic British and American recitation teaching of 'test' questions, minimal 'uptake' and evaluative but otherwise uninformative feedback.

Again, France and Russia provide useful counterpoints. The English tradition emphasises the importance of equal distribution of teacher time and attention among all the pupils, and participation by all of them in oral work, in every lesson. So with only one teacher and 20-30 pupils in a class it is inevitable that competitive bidding and the gamesmanship of 'guess what teacher is thinking', and above all searching for the 'right' answer, become critical to the pupil's getting by. But in many of the Russian lessons we observed, only a proportion of children were expected to contribute orally in a given lesson. Here, instead of eliciting a succession of brief 'now or never' answers from many children, the teacher constructs a sequence of much more sustained exchanges with a smaller number. Because the ambience is collective rather than individualised or collaborative, the child talks to the class as much as to the teacher and is in a sense a representative of that class as much as an individual. This reduces the element of communicative gamesmanship; but it also - crucially - may be a more powerful learning tool. And because there is time to do more than parrot the expected answer, the talk is more likely to probe children's thinking, and indeed in such settings it is common to see children coming to the blackboard and explaining the way they have worked through a problem while the others listen, look and learn (though of course not always).

Such differences provoke an important question. From what pattern of classroom exchange do children learn more: questioning involving many children, brief answers and little follow up; or questions directed at fewer children which invite longer and more considered answers which in turn lead to further questions? In the one scenario, children bid for turns if they know the answer, or try to avoid being nominated if they do not; in the other, they listen to each other. In the English approach, communicative competence is defined by whether, having been nominated for or bid for what is probably one's sole oral contribution to the

lesson, one provides the answer which the teacher judges to be acceptable or relevant. In the alternative approach, communicative competence is judged by how one performs over the whole transaction rather than whether one gives the single 'right' answer; and by the *manner* of the response - clarity, articulateness, attention to the question - as well as its substance. Closer to Grice, in fact, than to Philip Jackson or John Holt.

PART II. DIALOGIC TEACHING

Perspectives

I said at the beginning that the collective, extended and cumulative kinds of interaction which I recorded outside the UK during the late 1990s were at that time rarely encountered in England, but that things are changing. They are changing partly because of the UK government national literacy, numeracy and primary strategies' somewhat muddled emulation - in the form of 'interactive whole class teaching' - of what I and others have recorded; and partly because in England, as in the United States, there is a growing band of people for whom the notion of 'dialogue' crystallises what the evidence on learning shows is most urgently needed, and what the evidence on teaching shows is most palpably absent. In other words, a movement is gathering momentum.

Lest it be suggested that I base my strictures on a version of British pedagogy which has been seen off by recent reforms, let me register two points. First, long-term follow-up studies such as Maurice Galton's (Galton and Simon 1980, Galton *et al* 1999) and my own (Alexander *et al* 1996) have shown that 'deep structure' pedagogical change in the realm of interaction is extremely slow, and that basic interactive habits are highly resilient. Second, this is confirmed in a series of recent studies of the impact of the Blair government's flagship pedagogical reforms, the National Literacy and Numeracy Strategies. Here, the new formalism of highly structured lessons, whole class plenaries and focused group work, coupled with a much greater emphasis on the hitherto neglected National Curriculum attainment target of 'speaking and listening', might appear to provide a recipe for the empowerment of children as talkers and thinkers comparable to that for which the dialogic teaching projects are striving. Yet once one escapes from government rhetoric about the unbridled success of these initiatives - which in any case is challenged by the government's own evaluation (Earl *et al* 2003) - one encounters this, and it needs to be quoted in full:

The findings suggest that traditional patterns of whole class interaction have not been dramatically transformed by the Strategies ... In the whole class section of literacy and numeracy lessons, teachers spent the majority of their time either explaining or using highly structured question and answer sequences. Far from encouraging and extending pupil contributions to promote high levels of interaction and cognitive engagement, most of the questions asked were of a low cognitive level designed to funnel pupils' response towards a required answer. Open questions made up 10% of the questioning exchanges and 15% of the sample did not ask any such questions. Probing by the teacher, where the teacher stayed with the same child to ask further questions to encourage sustained and extended dialogue, occurred in just over 11% of the questioning exchanges. Uptake questions occurred in only 4% of the teaching exchanges and 43% of the teachers did not use any such moves. Only rarely were teachers' questions used to assist pupils to more complete or elaborated ideas. Most of the pupils' exchanges were very short, with answers lasting on average 5 seconds, and were limited to three words or fewer for 70% of the time.

(Smith *et al* 2004, p 408)

This comes from the latest of a sequence of studies of the impact of the UK government's pedagogical reforms from Hardman, Smith and their team. Its findings are in line with those of other studies referred to below.

Our stance on these problems, and our view of dialogic teaching, is - in a nutshell - Vygotskian, Brunerian and Bakhtinian (especially Vygotsky 1962, Bruner 1983, 1987 and 1996, Bakhtin 1986), with a heady mix of insights from socio-cultural theory, activity theory (especially Daniels 2001) and the classroom-based research of Courtney Cazden (2001), Douglas Barnes (1979, 1995), Shirley Brice-Heath (1983), Gordon Wells (1999), Barbara Rogoff (1990), Ann Brown (especially Palincsar and Brown, 1984), David Wood (Wood, Bruner and Ross 1976, Wood 1998), Neil Mercer (2000) and many others. This is sobered up somewhat by cautionary evidence on the intractability of recitation and transmission teaching, and the discursive habits with which these are associated, from Martin Nystrand in the United States (Nystrand *et al* 1997) and, in England, Fay Smith and Frank Hardman in Newcastle (Hardman *et al* 2003, Smith, Hardman *et al* 2004), Phil Scott in Leeds (Mortimer and Scott 2003), David Skidmore in Bath (Skidmore *et al* 2003), Debra Myhill in Exeter (Myhill 2005), Richard Eke in Bristol (Eke 2004), and my Cambridge colleagues Maurice Galton and Linda Hargreaves (Galton *et al* 1999; Moyles, Hargreaves *et al* 2003). In parallel, Sylvia Wolfe is undertaking the difficult but necessary task of testing activity theory's capacity to frame analysis of teacher-student discourse (Wolfe 2005) by linking Engeström's activity system with my model of teaching referred to earlier (Engeström 1996, Alexander 2001) and using analytical protocols based on those of Linnell (1998).

Mikhail Bakhtin was neither a psychologist nor a classroom researcher. But his lifelong application of dialogism to literature, history, culture, politics and human affairs generally maps convincingly onto pedagogy. And so it should if I am right in my claim that pedagogy and culture are inextricably linked. Further, though apparently Vygotsky and Bakhtin never met, Vygotsky's claim that 'the true direction of the development of thinking is not from the individual to the socialised, but from the social to the individual' is close to Bakhtin's account of social and semiotic influences in the development of thinking, and dialogue provides a potent form of peer or adult intervention in the child's progress across the zone of next or potential development (I refuse to say 'proximal').

Here then, is the essence, though not the detail, of the approach on which I am currently working with teachers (see Alexander 2005a for a full account).

The need for pedagogical repertoire

First, the idea of *repertoire* is paramount. The varied objectives of teaching cannot be achieved through a single approach or technique (and in case you are thinking that I have a rosy view of Russian pedagogy I would add that it can be as unproductively monolithic as teaching anywhere else, and indeed often is. My main reason for citing Russia is because it offers such a striking contrast to approaches with which we are more familiar). Instead, teachers need a repertoire of approaches from which they select on the basis of fitness for purpose in relation to the learner, the subject-matter and the opportunities and constraints of context.

The idea of repertoire can be extended infinitely, down to the finest nuance of discourse. But to make it manageable, we concentrate in the first instance on three broad aspects of pedagogical interaction: *organisation*, *teaching talk* and *learning talk*.

Repertoire 1: organising interaction

The *organisational* repertoire comprises five broad interactive possibilities reflecting our earlier distinction between individualism, community and collectivism, or child, group and class:

- *whole class teaching* in which the teacher relates to the class as a whole, and individual students relate to the teacher and to each other collectively;
- *collective group work*, that is group work which is led by the teacher and is therefore a scaled-down version of whole class teaching;
- *collaborative group work* in which the teacher sets a task on which children must work together, and then withdraws;
- *one-to-one activity* in which the teacher works with individual children;
- *one-to-one activity* in which children work in pairs.

Thus the organisational possibilities are whole class, group and individual, but group and individual interaction subdivide according to whether it is steered by the teacher or the children themselves. A competent teacher, I would argue, needs to be able to manage all five kinds of interaction, and select from them as appropriate.

Repertoire 2: teaching talk

The *teaching talk* repertoire comprises the five kinds of talk we observed in use across the five countries in the international study. First, the three most frequently used:

- *rote*: the drilling of facts, ideas and routines through constant repetition;
- *recitation*: the accumulation of knowledge and understanding through questions designed to test or stimulate recall of what has been previously encountered, or to cue students to work out the answer from clues provided in the question;
- *instruction / exposition*: telling the student what to do, and/or imparting information, and/or explaining facts, principles or procedures.

These provide the familiar and traditional bedrock of teaching by direct instruction. Less frequently, but no less universally, we find some teachers also using:

- *discussion*: the exchange of ideas with a view to sharing information and solving problems;
- *dialogue*: achieving common understanding through structured, cumulative questioning and discussion which guide and prompt, reduce choices, minimise risk and error, and expedite the 'handover' of concepts and principles.

Each of these, even rote, has its place in the teaching of a modern and variegated curriculum, but the last two - discussion and dialogue - are less frequently found than the first three. Yet discussion and dialogue are the forms of talk which are most in line with prevailing thinking on children's learning.

It's important to note that there's no necessary connection between the first and second repertoires. That is to say, whole class teaching doesn't have to be dominated by rote and recitation, and discussion isn't confined to group work. Discussion and dialogue, indeed, are available in all five organisational contexts (see figure).

	Rote	Recitation	Instruction /exposition	Discussion	Dialogue
Whole class teaching	✓	✓	✓	✓	✓
Collective group work (teacher-led)		✓	✓	✓	✓
Collaborative group work (pupil-led)				✓	✓
One-to-one (teacher led)		✓	✓	✓	✓
One-to-one (pupil pairs)				✓	✓

Repertoire 3: learning talk

The third repertoire is the child's rather than the teacher's. It constitutes not how the teacher talks or organises interaction, but how the children themselves talk, and the forms of oral expression and interaction which they need to experience and eventually master. This *learning talk* repertoire includes the ability to:

- *narrate*
- *explain*
- *instruct*
- *ask different kinds of question*
- *receive, act and build upon answers*
- *analyse and solve problems*
- *speculate and imagine*
- *explore and evaluate ideas*
- *discuss*
- *argue, reason and justify*
- *negotiate*

together with four contingent abilities which are vital if children are to gain the full potential of talking with others:

- *listen*
- *be receptive to alternative viewpoints*
- *think about what they hear*
- *give others time to think.*

Learning talk repertoires such as this - and others are clearly possible, depending on how one conceives of human development on the one hand and the curriculum on the other - are often missing from discussion of classroom interaction. Because the teacher controls the talk, researchers tend to start and finish there, focusing on teacher questions, statements, instructions and evaluations and how children respond to them, rather than on the kinds of talk which children themselves need to encounter and engage in.

Principles of dialogic teaching

So far we have a view of classroom talk which requires the judicious selection from three repertoires - organisation, teaching talk and learning talk. Now we come to the heart of the matter. I submit that teaching which is dialogic rather than transmissive, and which provides

the best chance for children to develop the diverse learning talk repertoire on which different kinds of thinking and understanding are predicated, meets five criteria. Such teaching is:

- *collective*: teachers and children address learning tasks together, whether as a group or as a class;
- *reciprocal* teachers and children listen to each other, share ideas and consider alternative viewpoints;
- *supportive*: children articulate their ideas freely, without fear of embarrassment over 'wrong' answers; and they help each other to reach common understandings;
- *cumulative*: teachers and children build on their own and each others' ideas and chain them into coherent lines of thinking and enquiry;
- *purposeful*: teachers plan and steer classroom talk with specific educational goals in view.

The genealogy of these criteria is complex, and I would need another keynote session to elucidate it in full. Suffice it to say that it combines (i) a positive response to what I and others have observed by way of effective classroom interaction in the UK and elsewhere; (ii) an attempt to counter the less satisfactory features of mainstream classroom interaction (which, for example, tends not to exploit the full collective potential of children working in groups and classes, is one-sided rather than reciprocal, is fragmented or circular rather than cumulative, and is often unsupportive or even intimidating to all but the most confident child); (iii) distillation of ideas from others working in this and related fields – thus, for example, in the criterion of *reciprocity* you will spot the pioneering work of Palincsar and Brown (1984) among others, and in *cumulation*, of course, Bakhtin and indeed conventional wisdom on how human understanding, collectively as well as individually, develops.

Indicators of dialogic teaching

The final element in our framework for dialogic teaching is a set of classroom indicators which help teachers to get the conditions right for talk which meets the five criteria, and to consider how best to structure and manage the different kinds of teaching and learning talk in the various organisational formats which are available – whole class, group, individual. There are some 61 of these indicators (all listed in Alexander 2005a) and they enlist the various aspects of teaching in the *Culture and Pedagogy* framework I referred to earlier – space, time, student organisation, lesson structure, assessment and so on – in support of the dialogic pursuit. Too many accounts of classroom interaction have concentrated on talk alone, without perceiving how it is shaped and constrained by these other aspects of teaching (let alone by culture), and our approach encourages teachers to think, plan and act in a more holistic fashion.

PART III. DIALOGIC TEACHING IN PRACTICE

Two development projects

In the London and Yorkshire dialogic teaching development projects, different strategies are being used to meet identical ends – the fostering of the extended repertoires of organisation, teaching talk and learning talk which I have outlined, and achieving the shift in the dynamics, structure and content of such talk which is necessary for the dialogic criteria to be met.

At the same time, teachers in both LEAs are using video to study and evaluate their practice, to record the baselines from which it develops, and to identify aspects of the talk in the

classrooms on which they need to work. The bonus of using video is that in several classrooms it has become a powerful teaching tool. Observing the camera observing them, many children have asked to see the videotapes and, naturally, have commented on what they see and hear. Some teachers have decided to exploit this interest and have built video analysis by children into their language teaching. We now have evidence of growing meta-linguistic awareness among these children as they discuss with increasing sophistication and sensitivity the dynamics and mechanisms of interaction: the use of eye contact, listening, taking turns, handling the dominant individual and supporting the reticent one, engaging with what others say rather than merely voicing one's own opinions, and so on.

The two projects are being evaluated formatively and – later – summatively, using a combination of observation, interview, video analysis and, as a relatively stable outcome measure in the North Yorkshire project, performance in national Key Stage 2 tests in English and mathematics. The videotapes provide an evaluative baseline for the project as a whole, as well as for each of its participating teachers. Only three years into one of the projects and two years into the other, we cannot read too much into the albeit encouraging trends in test scores, and for the time being must rely more on the process data.

Interim findings

The Yorkshire year-on-year process data (Alexander 2003, 2004) offers evidence of the following changes:

- There is more talking about talk, by children as well as teachers.
- Teachers and children are devising ground rules for the management of discussion.
- Teachers are making their questions more focused yet more genuinely open than hitherto, and are reducing their reliance on questions which cue a specific response.
- There is a discernible shift in questioning strategies away from competitive hands-up bidding to the nominating of particular children, and questions are being formulated more with these children's individual capacities in mind.
- Teachers are giving children more thinking time, and are reducing pressure on them to provide instant responses.
- Children are answering more loudly, clearly and confidently, and at greater length.
- Children are speculating, thinking aloud and helping each other, rather than competing to spot the 'right' answer.
- Teachers are avoiding over-use of the stock response to children's contributions of merely repeating or reformulating them but doing nothing further with them.
- Teachers and children are beginning to build on questions and answers, adopting a questioning strategy of extension (staying with one child or theme) rather than rotation (questioning round the class).
- In discussion, children are listening more carefully and respectfully to each other, and are talking collectively to a common end rather than at or past each other.
- There is greater involvement of less able children, who are finding that the changed dynamics of classroom talk provide them with alternative opportunities to show competence and progress, and of those quiet, compliant children 'in the middle' who are often inhibited by unfocused questioning, the competitiveness of bidding and the dominance of some of their peers. The interactive culture in these classrooms is becoming more inclusive.
- The reading and writing of all children, especially the less able, is benefitting from the greater emphasis on talk, thus confirming that the traditional English idea of literacy

without oracy makes little sense. Frequently, this gain is most strikingly noted in the context of lessons in which the proportion of time spent on oral and written tasks is changed to allow more discussion and a shorter but more concentrated period of writing. This, incidentally, is more like the continental, episodic lesson trajectory which we observed in the *Culture and Pedagogy* research.

And from the London project (Alexander 2005b):

- Teachers are constructing their questions more carefully. Questions starting with 'What?', 'Who?' and 'How many?' are giving way to those starting with 'Why?' and 'How?'. Teachers, then, are balancing factual recall or test questions with those which probe thinking and encourage analysis and speculation. 'Now who can tell me...?' questions, and competitive hands-up bidding to answer them, are being used more discriminatingly.
- Student-teacher exchanges are becoming longer.
- Student answers are less likely to be merely repeated, more likely to be built upon.
- Teachers are directing and controlling discussion less, prompting and facilitating it more.
- There is a more flexible mix of recitation, exposition and discussion.
- Information and opinion – rather than yet more questions – are being used to take students' thinking forward, so the balance of questioning and exposition is changing.
- Students are showing a growing confidence in oral pedagogy: more are speaking readily, clearly and audibly.
- Students are offering longer responses to teacher questions.
- Student contributions are becoming more diverse. Instead of just factual recall there are now contributions of an expository, explanatory, justificatory or speculative kind.
- There is more pupil-pupil talk.
- More pupils are taking the initiative and commenting or asking their own questions

Problems

All this is encouraging. But it is far from plain sailing, and I need to be honest about the problems we are encountering in attempting to encourage what, in British classrooms, is in effect a transformation of the culture of talk and the attendant assumptions about the relationship of teacher and taught. Of the various challenges we are encountering, and which are discussed in full in the evaluation reports, I'd like to mention just five.

First, there is a growing gap between those teachers who are achieving real change and those whose interaction has shifted rather less. The proportion of teachers in the two projects whose work comprehensively and consistently exhibits the properties of repertoire, fitness for purpose and dialogism remains as yet fairly small. Without doubt, the task is a tough one.

Second, although children are being given more generous time for thinking through their responses to questions, and are more frequently encouraged to provide extended answers, it is rather less common to find the remaining conditions being met: that is, that answers should be responded to in a way that helps the child and/or the class to learn from what has been said. It remains the case that after such extended responses the feedback is often minimal and judgemental ('excellent', 'good girl', 'not quite what I was looking for' or the not-so-ambiguous 'Ye-es...') rather than informative. Apart from failing to exploit a critical moment in the dialogic exchange, teachers providing this traditional form of feedback are

probably also signalling an equally traditional message to their pupils: that in the end, though there is now more time to think, and space to provide a fuller answer, the answers which count are still those that the teacher expects, and extended thinking time is not so much for thinking from first principles as for deducing even more accurately than hitherto what it is that the teacher wishes to hear. In other words, extended talk and dialogic talk are not the same, and the most frequently observed kind of teacher-pupil talk still remains closer to recitation than to dialogue.

Third, teachers are striving to extend their repertoire of teacher talk, but as yet, rather less attention is being given to the repertoire of *learning talk*, and the systematic building of children's capacities to narrate, explain, instruct, question, respond, build upon responses, analyse, speculate, explore, evaluate, discuss, argue, reason, justify and negotiate, and to judge when each form of talk is most appropriate. This means that the intellectual and social empowerment which dialogic teaching can offer may remain limited even when in other respects talk displays dialogic properties.

Fourth, our efforts to shift from monolithic to repertoire-based models of teaching and classroom interaction have confirmed even more strongly than previously that recitation remains the default teaching mode. It takes little for 'test' questions to reassert their historic dominance, for children's contributions to regress to the monosyllabic or dutiful, and for feedback to become once again phatic or uninformative. Nomination, extended thinking time and longer answers are a step in the right direction but dialogue requires an interactive loop or spiral rather than linearity. A long answer is not enough. It's what happens to the answer that makes it worth uttering, and transforms it from a correct or incorrect response to a cognitive stepping stone.

Finally, our evidence shows that one of the criteria – cumulation – is much more difficult to achieve than the others, yet it is perhaps the most important one of all. The first three (collectivity, reciprocity and support) are essentially concerned with the *conduct* and *ethos* of classroom talk. The other two (cumulation and purposefulness) are concerned no less with its *content*. Working with teachers has shown that we can dramatically change the dynamics and ethos of classroom talk by making it more collective, reciprocal and supportive, and by setting out 'rules for speaking and listening' which translate these principles into guidelines which children will understand and identify with. The dynamics and climate of talk then begin to change, often quite quickly.

But what of the *content* of talk, as opposed to its dynamics? Cumulation is possibly the toughest of the five principles of dialogic teaching. Collectivity, reciprocity and support require us to rethink classroom organisation and relationships. But cumulation simultaneously makes demands on the teacher's professional skill, subject knowledge, and insight into the capacities and current understanding of each of his/her pupils. Except in a context where teachers take a strictly relativist view of knowledge (such as in the *Culture and Pedagogy* research we encountered in several American classrooms), cumulation requires the teacher to match discourse to the learner while respecting the form and modes of enquiry and validation of the subject being taught, seeking then to scaffold understanding between the child's and the culture's ways of making sense. Compounding the challenge, cumulation also tests the teacher's ability to receive and review what has been said and to judge what to offer by way of an individually-tailored response which will take learners' thinking forward, all in the space of a few seconds, hundreds of times each day. Who dared to suggest that teaching is easy?

So although the five dialogic teaching principles or criteria are intended to be taken as a package, for none of them is dispensable, it is probably helpful to teacher development to divide them into two groups, and this is what in the Yorkshire and London projects we have now started working on. If we want to make the transformation of classroom talk achievable for others than the most talented teachers, we might concentrate first on getting the ethos and dynamics right, that is, making talk collective, reciprocal and supportive. In those classrooms where these conditions and qualities are established, we can then attend more closely to the other two principles. Here, we can identify the purposes of the talk and use cumulation to steer it towards those purposes. We can work on listening to and building on answers and getting children to do the same. We can reflect on the feedback we provide. We can re-assess the balance of drawing out (questioning) and putting in (exposition). We can consider how ideas can not merely be *exchanged* in an encouraging and supportive climate but also *built upon*

As I cautioned, this is work in progress. We are not there yet. But then, that's dialogue.

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