Investigations into children's participation and agency: working towards change in classroom practices and cultures

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1 List of selected publications:

Research and related selected publications:

The research projects relevant to this commentary are listed below along with the selected related publications (refereed journal articles or book chapters). For ease of reference they are numbered in the chronological order in which they were carried out.

Project 1: Intention and Meaning in Young Children's Drawing.

Cox, S. (2005) Intention and Meaning in Young Children's Drawing. *International Journal of Art and Design Education*, 24:2.

Project 2: Critical Enquiry in Art.

Cox, S. (2000) Critical enquiry in Art in the Primary School. *International Journal of Art and Design Education*, 19:1.

Project 3: Empowering Children through Visual Communication.

Cox, S. and Robinson-Pant (2005a) 'Communicative Practices and Participation in Schools Councils in Primary Schools in the United Kingdom' in B. Street (Ed.), *Literacies Across Educational Contexts: Mediating Learning and Teaching*. Philadelphia: Caslon.

Cox, S and Robinson-Pant, A. (2005b) Challenging Perceptions of School Councils in the Primary School *Education 3-13*, 33:2.

Cox, S and Robinson-Pant, A (2006) Enhancing participation in Primary School and Class Councils through Visual Communication. *Cambridge Journal of Education*, 36:4.

Project 4: Children Decide: Power, participation and purpose in the primary classroom

Cox, S and Robinson-Pant, A (2008) Power, participation and decision-making in the primary classroom: children as action researchers. *Educational Action Research* – *an international journal*, 16:4.

Cox, S and Robinson-Pant, A (2010) 'Children as Researchers- a question of risk?' in S. Cox, C. Dyer, A. Robinson-Pant, M. Schweisfurth, (Eds.), *Children as Decision Makers in Education*. London: Continuum.

Further selected publications:

Cox, S. (2004) 'Teachers Values and Professional Practice in Primary Schools', in A. Browne and D. Haylock (Eds.), *Professional Issues for Primary Teachers*. London: Paul Chapman

Cox, S. (2011) New Perspectives in Primary Education: meaning and purpose in learning and teaching. Maidenhead: Open University Press

Research reports:

Project 3:

Cox, S. and Robinson-Pant, A; with Elliott B., Jarvis, D. Lawes, S. Millner, E., Taylor, T., (2003) Empowering Children through Visual Communication CfBT/University of East Anglia (available at: www.cfbt.com/research/projects/emp_vis_com.html)

Project 4

Cox, S., Currie, D., Frederick, K., Jarvis, D., Lawes, S., Millner, E., Nudd, K., Robinson-Pant, A., Stubbs, I., Taylor, T., White, D. (2006) *Children Decide: Power; Participation and Purpose in the Primary Classroom.* CfBT/School of Education and Lifelong Learning University of East Anglia Research report.

2 Abstract

My research broadly has two strands. The first has contributed to work on young children's use of representational practices, showing how children's drawing activities are grounded in intention and meaning-making in social contexts. In drawing attention to what children do and how they actively use visual representation it added new insights to theoretical work on learning in a socio-cultural framework where learning is understood as participation in social practices; as joint activity, mediated by other people and cultural activities and artefacts. The second strand was based in these understandings of learning but explored, and also developed communicative practices in classrooms and children's role in decision-making. The research investigated the extent of the children's democratic engagement and the development of a more democratically participatory space where they can exercise agency both as learners and as participants in democratic communities. This work also contributed in new ways to children's agency as researchers. I argue that these two strands are inter-related, a position also represented in my sole-authored book (Cox 2011). In relation to development in pedagogical practices across important areas of teachers' work, including classroom interaction and communication, curriculum and assessment, I argue in this book that principles can be based in sociocultural ways of theorising learning, as well as in democratic values, suggesting more 'participative' (empowered) participation. Using research evidence and argument I show how changes in classroom practices can be appropriated by conventional theorisations of learning (person-to-person accounts) and existing cultures of 'schooling', limiting children's learning. I explore the tensions that arise, especially in a wider context of performance-driven, market-led policies. An underlying theme is that a shift towards socio-cultural understandings of learning might help to resolve these tensions and achieve changes in practices in possibly transformative ways, creating a more educational culture and embracing the idea of children as agents of cultural change. I aim, in the commentary, to convey the thematic connections and contributions across my work in relation to my role as teacher educator as well as researcher.

3 Introduction

A central aim in my career has been to make a principled and informed contribution to the education of children in the primary phase and to do this in practice rather than only through the production of knowledge. To clarify this and to contextualise the work that is the subject of this commentary, some key biographical information may be helpful. Through my professional activities as an educational researcher as well as through my activities both as a primary school teacher and as a teacher educator, my work has had an 'applied' focus. My career has been characterised by the continuous inter-relationship between its practical and academic elements. I taught for a total of 12 years in schools (between 1971 and 1985) mostly in Primary schools, with one year teaching Art and Design in a Secondary school, and I gained a MA in Philosophy of Education (with Professors R.S. Peters; John White; David Cooper and Ray Elliott, amongst others), at the Institute of Education, University of London on a one-year full-time ESRC scholarship in 1974. I entered higher education in 1985 and have since spent a large proportion of my time engaged in teacher education. This has included teaching and co-ordinating different aspects of Initial Teacher Education, at both undergraduate and post-graduate levels and also Continuing Professional Development at Masters' level. As designer and leader of several MA courses, I have supported the development of teachers' practice mostly through practitioner research. In addition, in the context of Initial Teacher Education I have taught courses in Philosophy of Education (from 1985 to 1996) and in Teaching Art and Design (Primary) (1985 to present) as well as professional development elements of BA Education and PGCE courses, including teaching practice supervision. I have also engaged in educational research, bidding for and directing a number of funded projects.

In my various roles and activities I have been deeply concerned with the relationship between theory and practice, and in my research as well as my practical teaching I have used approaches such as action research, with its focus on theorising and developing practice in specific contexts. Teacher development and action research have been appropriate to my long-standing concern with the values base of education and practical teaching, which is also reflected in my interest in Philosophy of

Education. All these elements of my work are reflected in the range and content of the publications I have selected for this submission.

In this Introduction, I shall outline the different strands of my research activity showing how they are related to the selected publications, and how they interconnect. I will then go on to develop critical discussion of the work, exploring in more depth its common themes and the underlying theoretical positions, at the same time explaining its development and the contribution it makes.

A central focus that provides a common thread across all the selected published work is the key idea of children's participation and agency. This has featured in my work in several ways. With regard to my research projects, it has broadly taken two directions.

First, some aspects of my research activity have focused on developing theory around how children, and indeed adults, learn. Project 1 (see above) was an investigation that took place over a year during which I made regular visits to a nursery setting in a First School in Nottinghamshire to carry out observations. The project focused specifically on children's spontaneous mark-making and helped to elucidate how children's early representational activity is grounded in intention and meaning-making. This work reflects my interests as a researcher, a teacher and a teacher educator in young children's use of drawing. The research is located in a socio-cultural paradigm. It revealed how children's use of visual representation contributes to their developing thinking and how this is shaped in agentive, communicative, social situations. It drew attention to what the child *does* and how they *actively use* visual representation to make sense of their worlds and construct meaning.

Second, some of my research (Project 3 and Project 4) has taken the theme of children's agency in a different direction. These projects were less focused on an explication of learning itself in terms of participation in communicative practices and more focused on achieving participation and agency for children in the social situation of the classroom. They explored and developed the communicative practices in the school and classroom and children's role in decision-making. This shifts the emphasis to the theme of children's participation in practice. The research

explores the extent of their democratic engagement and the development of a more democratically participatory space where children can exercise agency not only as learners but as participants in democratic communities.

Bearing in mind that my professional work includes both research and teacher education and development, understandably some of my research projects have combined these two areas of activity. As well as providing knowledge and insights into the means of improving children's democratic participation in classroom contexts, Projects 3 and 4 were themselves, methodologically speaking, participatory. As such, they led to change, supporting the development, in a practical way, of participatory practices in schools and classrooms. A group of teachers working in different schools along with the children they taught were directly involved in the research projects, carried out collaboratively with myself and my colleague as university researchers,

Project 3 was action orientated. It 'explored how visual means could be used to improve communication amongst children and between children and adults in the primary school.' (Cox and Robinson-Pant et al 2003 p.7). The contexts for this project were class councils and school councils within three participating primary schools, located in Norfolk. Project 4 involved the children themselves in action research, through which they were enquiring into and developing the opportunities they had for making decisions about matters that affected them. It 'aimed for children and teachers to develop a more collaborative approach to making decisions that affect children's lives in primary schools' (Cox et al 2006 p.7) and took place in six primary schools with nine teachers and the children in their classrooms. In keeping with the participatory approach, related publications and research reports were collaboratively written.

These projects were followed up with an ESRC funded international seminar series in 2006/7, which brought together an international group of researchers, campaign groups and NGOs to discuss work around 'Children as Decision Makers' and resulted in the publication of an edited book: Cox, Robinson-Pant, Dyer and Schweisfurth (2010).

At this point, the difference in emphasis of the two distinctive strands might be summed up as follows: through Project 1, I aimed to develop a way in which

children's agency might be understood through the relationship between a) their participation in visual mark-making (drawing) as a communicative practice and b) their learning. The work made a contribution to theoretical accounts of learning *as* participation, as I shall explain later, with the analysis of data grounded in the wider research and theory in this area. In Projects 3 and 4, in the research into classroom communicative practices (including visual strategies) and decision-making, I explored and developed children's agency in terms of the characteristics and levels of democratic participation in classrooms and focused, in particular, on the decisions they make. These projects contributed new insights into and developments of classroom practices.

These two different directions or strands are, I argue, inter-related. I shall say more about this later, arguing that the understandings about children's learning arising from Project 1, which I shall summarise below, can be seen as inter-related with children's empowered participation in the classroom (Projects 3 and 4): I suggest that the socio-cultural analysis of learning-as-participation has implications for practice in classrooms and for classroom cultures, pointing towards approaches to teaching and learning that embody democratic principles. This is the position that I develop in my book. (Cox 2011). In this publication, through critical exploration of how children learn and how teachers mediate their learning, I attempted to show how directions for action and principles for practice in primary education might be grounded in socio-cultural understandings of learning and pedagogy. This book is not a presentation of research findings as such, but discursively develops argument for these particular understandings of primary education and a principled approach to primary teaching. In building a learner-centred approach to pedagogy I drew on my own and others' research and philosophical thinking and techniques, as well as developing further the socio-cultural theoretical framework that contextualises my research and thinking.

From this socio-cultural perspective, pedagogical practices cannot be seen in isolation from their contexts. From the point of view of Cultural, Historical Activity Theory, for instance (Cole 1996; Wells and Claxton 2002), '[a]nalyses typically focus simultaneously on individuals as thinkers and actors, their relationships with others and the purposes, values and knowledge to be found in the practices in the

institutions or systems they inhabit. These three elements (individual, interactional and systemic) are not seen as separate; rather they are in a constant mutually shaping dialectic.' (Edwards 2011). Exploration of practices in schools thus entailed discussion of the contexts within which teachers work. I showed how these have shaped patterns of activity and pedagogical choices within schools and classrooms - the particular dominant practices and beliefs that constitute the cultures of primary education. This area of my work necessarily included engagement with the existing research and literature around the prevailing practices in classrooms. The wide range of evidence available suggests that these are possibly entrenched practices and historically, long-established cultures of schooling (see P.23). I explored the wider cultural and political context of 'performativity' within a neo-liberal market-driven system that, arguably, has sustained these traditional teacher activities and also constrained and controlled what teachers might do (Cox 2011 Chapter 2). (I discussed the values-based contexts of teachers' work in Cox 2004, also).

While recognising the constraints within which teachers work, an underlying position of my book is that socio-cultural understandings of learning might enable teachers to take more control of their own practice in school. They might help to achieve a shift in practices in possibly transformative ways across important areas of teachers' work in relation to learning and teaching, including interaction and communication, curriculum and assessment. My intention was to explore theoretical grounds for challenging existing cultures and practices, opening up possibilities for developing alternative cultures, where teachers and children enact different principles and values - different from those that have traditionally been implicit in teachers' practices and possibly creating a more *educational* culture.

Project 2 in effect provides a practical example of how the two strands of my research interests identified above are inter-connected. This project was carried out in a Year 5/6 classroom in an ex-mining community in Nottinghamshire around critical enquiry in art. This work was similarly focused on children's agency and participation: it combined an explanatory focus on how children actively construct meaning within the discourse of art history with a focus on the development of children's participation in that discourse in practice. The findings of this project were analysed to reveal how approaches to children's critical engagement with art can be

situated and framed within specific paradigms of art criticism: I contrasted a more conventional modernist paradigm with the socio-cultural theoretical constructs of the 'new art history'. I developed new insights into how an experienced teacher tacitly enacted those contemporary constructs in her practice, extending the children's learning. Again, the work involved collaboration between the teacher and myself, as a university-based researcher, conducting action research. Together we explored how such practices might be developed in a classroom.

These ideas and themes have been shaped by my own activities in different contexts and communities of practice¹ for example, as a practising researcher working with teachers in schools; as a teacher educator and as a participant in practices of Philosophy of Education. Working closely with both student-teachers and experienced practitioners in supporting the development of their practice, and bringing some of the critical perspectives and analytical tools of philosophical discourse to those activities, has provided the activity context for my own learning, as a researcher. These activities have themselves been shaped by particular political and policy contexts. At the time of writing my book, for example, a new coalition government was coming to power, responding to two major reviews of primary education in England (see Cox 2011 Introduction): the 'Rose Review' (DCSF 2009) set up by central government and 'The Cambridge Primary Review', led by Alexander (Alexander 2010).

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¹ 'Community of practice' is a term coined by Lave and Wenger (Lave and Wenger 1991; Wenger 1998). It implies 'participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities' (Lave and Wenger 1991 p. 98 cited in Cox 2011 p.6).

4 Participation and agency in theories of learning: constructivism; social constructivism; socio-cultural theory

Looking at how learning might be theorised, it seems that what became known as 'learning theory' in the early 20th century might be classified as 'non-participatory' and more recent analyses as 'participatory' accounts. In Chapter 1 of my book, I explore – albeit briefly - these different theories of learning. I consider the behaviourist accounts of 'learning theory' and contrast them with constructivist (for example, those of Piaget) and social constructivist accounts (for example, Vygotsky 1978; Bruner 1986; 1996).

As I explain, the constructivist and social constructivist accounts differ from behaviourist 'learning theory'. In summary: 'Rather than seeing learning in causal terms – and the learner as being 'acted upon' – children themselves are understood to be active in their own learning.' (Cox 2011 p.23). I go on to outline Piaget's account:

'One way of looking at the process of learning, then, is as the active construction, by the learner, of a mental model. It was Piaget who developed the idea of the child as active in the process of learning in this way. ... From a Piagetian perspective, the child's development occurs through physically interacting with the environment and the problems it presents: thought was internalised *action*. On this account, the child's knowledge and understanding are built through schemes of activity that the child develops through exploration and practical problem solving. Existing activity schemes enable the child to 'assimilate' a new experience and to 'accommodate' it...the activity schemes that the child develops are constructed by the child, using what they already 'know' to make sense of the new. This constructive process takes place as the child acts in and on the world around them.' (Cox 2011 p.23).

I develop the discussion to show how both Vygotsky and Bruner took a different turn, foregrounding the social nature of learning. This meant that while sharing some of Piaget's perspectives, they saw the role of language differently. Processes of thought are formed in social interaction:

'What is distinctive about Vygotsky's ideas is that language is, in itself, one of the activities that helps to construct thought; a tool through which thinking – the higher intellectual processes such as planning, evaluating and reasoning - comes about (Wood 1998). ...Vygotsky's analysis, then, resonates with that of Wittgenstein [1953]. It is not a case of labelling pre-existing concepts with language – thought is, rather, *constituted* by language. As Bruner points out (Bruner 1986), Vygotsky recognised the potential of language for shaping the culture as well as for transmitting it – he highlighted its generative role: "Piaget's [view] expresses his faith in the inherent logic of thought and subordinates language to it. Vygotsky's gives language both a cultural past and a generative present." (Bruner 1986 p.145).' (Cox 2011 p.27.)

I show how the pivotal role of language in the formation of thought highlighted by both Vygotsky and Bruner shifts the emphasis from the material to the social environment – to the centrality of joint activity with other people in children's learning. Bruner's analysis of learning as 'communal activity, a sharing of the culture' (Bruner 1986 p.127) shows, as Vygotsky does, how

'language embodies cultural history, and that it is also more than "being simply a vehicle for the transmission of cultural history". (Bruner 1986. p.143). Language users, within a culture, actively construct the categories, classifications and forms of representation that are the languages and discourses that constitute that culture.' (Cox 2011 p.28).

As noted above and as I discuss in my book, there are multifarious resources for sign making beyond spoken language. This was an important element of my research: in Project 1, I analysed children's mark-making (drawing) as one of the mediational means (Wertsch 1991; Vygotsky 1978) that children actively use to construct meaning as they participate in the activities of their social-cultural worlds. I show how

'[i]n participating in the activity of drawing, [children] construct their own representations and develop their thinking, making use of their own existing conceptual resources and the resources of the culture as they experience it. These resources, or tools, are not only the physical 'stuff'- the artefacts and materials -

but the range of sign making systems that can be used to represent and conceptualise their worlds.' (Cox 2011 p.60).

In my article, (Cox 2005) which pre-dated the writing of my book, I had already analysed the findings from my research (Project 1) in social-constructivist terms. In developing new insights into children's use of representational practices, this work contributes to 'the developing discourse on young children's thinking and meaning making' (p.115), adding to work of researchers such as Athey (1990) Kress (1999); Matthews (1999; 2003); Pahl (1999). In challenging conventional interpretations of children's drawings and drawing activity it builds on the work of Matthews in particular, as well as, for example, Costall (1995); Light (1985) and Stetsenko (1995). Analysis of my extensive observations of the drawing activity of children aged three to five had led me to conclude that meanings 'are constructed and negotiated in a social context' (Cox 2005 p.123). They showed how drawing is part of 'children's broader, intentional, meaning-making activity. As an aspect of the interactive, communicative practices through which children's thinking develops, representation is a constructive, self-directed, intentional process of thinking in action, through which children bring shape and order to their experience' (ibid. p.115).

These interpretations present alternatives to conventional views of both drawing and learning. Through a critical investigation of the literature on conception and its relation to perception, I challenged the idea that the two processes of knowing and seeing are divergent; that there is a '"given" transparent relationship between reality, perception and representation.' (Cox 2005 p.117). I questioned the common assumptions around drawing as 'life-like depiction or replication of what is in the world' (p.118), a perspective from which children's drawing would be seen as 'a developing ability to make visual reference to objects in the world.' (p.123.) In doing so, like Matthews I contested the traditional ideas around the stage theory of development, arguing – as I did in Cox (2011) also - that the 'stages' identified by Piaget carry cultural assumptions. I argued that the idea that visual realism is the end-point of drawing development is 'culturally specific rather than neutral' (Cox 2005 p.118) as a criterion for evaluating children's drawings.

I argued for a shift of focus from this traditional kind of approach, where the drawings are seen as neutral artefacts to be evaluated or interpreted in isolation. Since children's drawings often fail to meet the visual realism criterion, the traditional approach encourages a view of children's drawing – and of children - as deficient (the 'deficit' view), so there is an ethical dimension to this. Over and above this, however, the theoretical analysis is compelling in terms of how children's drawing might be viewed. I argued for a focus on the *activity* of drawing, the activities associated with it (its social context) and the children undertaking it. Rather than focusing on how children's drawings – as products - measure up in terms of their verismilitude, I focused, instead, on what children were *doing* through drawing, in the particular situation and in the context of their existing conceptions and present purposes.

What was revealed is discussed in more detail in the article, but, in summary:

'My observations showed how, in being situated in specific contexts of cultural and personal significance, the children's drawing activity is illuminated by the way in which it occurs and the other activities linked to it.' (p.118).

It is important to note, that once the drawing was seen as activity in specific contexts, it not only evidenced a wide variety of intentions on the part of the children, but it embodied complex purposes and processes of encoding, decoding, construction and transformation of meanings and, furthermore, it became clear how the children were discovering that they were in control. There was 'a continual interplay of intention and mark' (p.122), of interpretation and re-interpretation. 'Transformations... occurred on a number of levels. The meanings of marks were progressively transformed through multiple interpretations of similar marks or the same marks...; through progressive changes to the marks themselves and their meanings...and also within the flow of ideas.' (p.119.)

This shift in focus to activity and context also has implications for the interpretation of the children's verbal commentary accompanying the drawing. Researchers such as Kellogg (1969) believed that the drawings must stand alone. Golomb (1974) and Gardner (1980) acknowledged the role of talk, but, as I showed (Cox 2005 p.122), they nevertheless gave it a dominant role, over-riding the significance of drawing

itself as a communicative practice. Rather, I argued, the verbal commentary is to be seen as an integral aspect of the 'multi-modal' (Kress 1997) meaning making activities of the child. Both talk and drawing function in similar ways: 'Drawing offers one range of possibilities, amongst others. When children are making their drawings they are constructing signs...exploring how different forms can be made to carry meaning.' (Cox 2005 p.123).

These observations showed that rather than thinking in terms of talk or drawing, it is more useful to think more broadly in terms of *representational practices* (Cox 2011 p.57; p.60-61). From my data and interpretations I inferred that the children were 'playing with the process of "signing".' (ibid.). As Vygotsky showed, in the social context, their own representational activities engage with the resources of the culture – the sign making systems that have been socially and historically constructed. (Vygotsky 1978). In this sense, drawing functions as language, as Goodman argues (Goodman 1976; Cox 2011 p.59-61).

It is this identification of children's playful exploration of intention and meaning that offers an original contribution to the research around children's drawing. Through close observation of their activities (Cox 2005), I was able to present new insights into the different kinds of transformation of meaning that occur through the drawing activity, and the range of ways that children play with signmaking, to make sense of their material and social worlds, from humour to persuasion to dealing with fear and loss for example. By exploring further the interdependency with others in the construction of meaning, and its contextbound specificity, I was able to add to the existing research in the area. I identified the ways in which children explore the potential that sign-making gives them to shape their world and take creative control in knowledge-making (which, by the way, is arguably what artistic activity affords in the wider culture), locating children's drawing activity in a wider theoretical paradigm of social constructivism and suggesting a move from philosophical realism towards (but not necessarily fully embracing) philosophical constructivism (Cox 2011 p.61-64). (See also P. 60 below).

² Multi-modality refers to 'the multiplicity of ways in which children make meaning and the multiplicity of modes, means and materials they employ in doing so' Kress (1997 p.6)

In summary, key elements of my analysis of the research data, then, are recognition of drawing as a representational and communicative practice (one amongst others) and recognition of the importance of the social contexts in which it is located. I argued for attention to be paid to the purposes the drawing process served for the children themselves and its central place, as a representational practice, in their learning.

In Cox (2011) I related these ideas to the socio-cultural theories of Lave and Wenger (1991). They further clarify the significance of social and cultural contexts in relation to learning and of their specificity; of 'social practices' which are shaped by both history and culture. In being social, practices are always inter-subjective, communicative and dialogic (Street 1993; Barton and Hamilton 1998). They are shaped by the activities and purposes of social groups and wider cultural practices; by social institutions and power relationships. (ibid.). For Lave and Wenger, participation in specific social practices is central to the *explanation* of learning. Their work raises a clear challenge to more traditional views of learning - to '...the conventional view of learning – including that of Piaget – that it is primarily a cognitive process whereby the individual internalises knowledge. For Lave and Wenger, the cognitive accounts presume a dichotomy between inside and outside.' (Cox 2011 p.29).

'...[they] suggest that on the cognitive accounts, the emphasis is on the changes within the individual. Though learning "takes place" *in* a social context, on those accounts, this context is not part of the explanation of learning itself. From Lave's and Wenger's point of view, the cognitive accounts would beg the question: what *is* this learning process that occurs in a social situation and involves other people? How can it be described or explained? For them, a social theory of learning relates to cognition in social situations in a different way. As they explain it:

"learning is not merely situated in practice – as if it were some independently reifiable process that just happened to be located somewhere; learning is an integral part of the generative social practice in the lived-in world." (Lave and Wenger ibid. p.35).' (ibid.).

In other words: "learning is an aspect of all activity" (ibid. p.38). On their argument, because learning cannot be understood in any other way than in terms of social situations, it can only be understood in terms of their particularities. It challenges the very idea of generalisation. In other words, the social context provides the explanation of the process of learning not only in a general sense: a social theory of learning, they suggest, situates cognition in *specific* social practices in particular times, places, and cultures - or, to use their terminology, in "communities of practice"... In short, and at risk of misrepresenting the subtlety of their argument, it is not a matter of "learning" occurring through participation *in* "social practices"; rather, learning *is* participation in social practices. As Sfard (2009) puts it, this is "learning-as-participation". It is not a matter of learning *by* doing; learning and doing are indivisible. It is by participating in the activities of the communities to which the child belongs that they actively and literally make sense of their experience and transform their worlds.' (Cox 2011 p.29).

I have quoted this passage from my book at some length here as it locates the way I interpret 'participation' in my work within a socio-cultural framework. It shows how it is informed by the work of researchers such as Lave and Wenger (1991) who provide a theoretical account of learning itself *in terms of* participation: learning is 'an integral and inseparable aspect of social practice' (ibid.1991 p.31, cited in Cox 2011 p.73). This point of view, that learning is to be theorised as social activities, helps to explain the distinctiveness of the two strands of participation that I have been discussing and, also, the way they inter-relate, as I hope to make clear later.

5 Learning and Classroom practices and cultures

Throughout my work, I developed this socio-cultural analysis of learning as participation, exploring schools as sites for learning - as 'communities of practice'-bearing in mind the context of children's everyday worlds and the worlds and communities beyond the school.

According to Lave and Wenger, newcomers in a community of practice are 'legitimate, peripheral participants' in those practices (see Lave and Wenger ibid. pp 33-36 cited in Cox 2011 p.73) and legitimate, peripheral participation is how they learn. 'People learn in the process of engaging with activities along with other members of the community of practice, whatever the nature of that community and its practices.' ³ (Cox 2011 p.73). Given that learning is understood not as the consequence of de-contextualised, dis-embedded inter-personal interactions, but as constituted by participation in the joint activities within specific communities of practice (social practices), the nature of those practices is highly significant.

This is a key point as, on the face of it, there may well *appear* to be less, and more, 'participatory' classroom situations. For example, a classroom may appear to be less participatory where the teacher talks and the child listens. The teacher might be described as 'active', instructing, informing or directing the child perhaps, while the child is a 'passive recipient'. In this situation the teacher has the more dominant role. By contrast, a classroom which apparently has the opposite social and interactive characteristics – for example, of sharing of knowledge, of collaborative rather than directive communication, and of more equal power relationships - may seem to be a more obviously 'participatory' situation. It is important to be clear here. These distinctions are based, I would argue, on descriptive differences between one situation and another; differences in the kind of communicative exchanges and patterns of interaction. The first example does *not* imply that the child is not participating. They are, rather, participating in different activities. It is, perhaps, less confusing to describe these different classroom situations as circumstances in which

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³ 'As Lave and Wenger explain, a 'community of practice' does not necessarily imply a fixed, clearly identifiable or located group who are 'co-present' (in each other's presence).' (Cox 2011 p. 6).

children are more or less empowered, rather than in terms of more or less participation.

The implication is that, even, for example, where the practices in a school and classroom are not, seemingly, practices that promote self-motivated, intentional activity on the part of the child, the child is nevertheless participating. They are motivated and engaged in intentional activity of some kind – they may, for example, be listening or they may be daydreaming. Their *learning* is thereby shaped by those practices. The child learns; what they might be learning is another matter. (For further discussion of the apparent paradox and the issues of power, see Cox 2011 pp 78-80).

In summary, from the socio-cultural perspective, as participants in social worlds, situated in specific contexts, children are learning. (Cox 2011 p.75). The key question is: in what ways is their learning being shaped by the nature of the social practices in which children take part, in their immediate communities - whether in everyday settings or classrooms - and how are these shaped by the activities of wider communities?

Transitions: schools as disempowering cultures?

From this perspective, it should be clear that when children are in social settings that might be described as adult dominated, with apparently little opportunity for the exercise of agency they are, nonetheless, learning, albeit as 'inactive'- or, to use the more accurate and less misleading description 'disempowered' – participants. They are learning, through their participation in these situations, whatever these undemocratic, 'non-participatory' situations afford. This may include learning about unequal power relations; their place as a child in the classroom; the way the adult voice is valued over their own and the way that classroom communication follows particular adult dominated patterns (see Cox 2011 Chapter 4 and 5). They may learn that knowledge is produced by adults and controlled and transmitted within the classroom by the teacher (see Cox 2011 Chapters 3 and 7) and the way that assessment of their learning is focused on the success of that transmission (see Cox 2011 Chapters 2, 3 and 8).

These kinds of cultures of adult dominated activity have tended to be prevalent in schools. I reviewed the evidence for this in my publications, drawing on existing research (particularly in Chapters 4 and 5 of Cox 2011) as well as on my own research data (Cox 2011; Cox et al 2003; 2006; Cox and Robinson-Pant 2005; 2008; 2010). It indicates how the communicative practices of the community of practice of primary schools 'tend to be of a kind...that can inhibit children's propensity to participate and collaborate in self directed meaning making activities and, furthermore, in the activities of the wider culture that the school ostensibly offers.' (Cox 2011 p.72). Moreover, these cultures can be very different from those of children's everyday worlds and those outside school. Howe and Mercer (2007) identified the very wide range of research that documents the range and richness of language that children use in non-formal or out-of-school contexts. (Cox 2011 p.81). Researchers such as Tizard and Hughes (1984; 1987; 2002, see Cox 2011 pp 76-78) and Wells (1986; 2009) have shown that in the informal settings and communities in which children live, children's activities tend to be self-directed and communication with adults is often more responsive to their intrinsically motivated interests. They 'show how in their everyday worlds, the child's learning is focused around their own intentions and purposes, which are mediated by the 'tools' available in the environment, including the activities and purposes of other children and adults. The intuitive responses of their parents, for instance ... are contingent on what the child is currently doing and saying and help the child to achieve their own goals. ... This means, of course, that when the child arrives at school, they come with ways of acting and ways of understanding their world that are specific to a very different kind of community, with different sorts of relationships and activities.' (Cox 2011 p. 117).

As Wells noted in relation to his research findings, '...the mother and child's joint participation in the activity ensures that there is inter-subjectivity of attention to what interests the child, which enables the mother to provide relevant information at the moment when the child is most able to appropriate it.' (Wells 2011 p.164). In effect, members of their communities, in the 'domain' (Barton and Hamilton 1998; Cox 2011 p.78) of the home and local community tend to support the child in their spontaneous, intentional meaning making as they engage in the activities within the naturalistic social situations in which they live. Such affordances are not always

characteristic of classrooms. As I discuss in Cox (2011 pp 116-118 for example), children's experience, once they enter school, changes considerably. As Wells' (1986; 2009) research showed: 'On entry to school the quality of linguistic interaction that the children experienced in the classroom was inferior on all measures to that experienced at home; this was true for all children in the study, whatever their class or family background.' (Wells 2011 p.162). As well as reviewing the evidence in the literature, (see, for example, Cox 2011 Chapter 4 pp 75-80; Chapter 6) I offer my own examples (for example Cox 2011 p.141). This discontinuity between the domains of home and school has been widely recognised (see, for example Gallimore and Tharp 1990; Howe and Mercer 2007; Wood 1991 cited in Cox 2011 Chapter 4 pp 84-85). It seems that "exploratory talk" (Barnes 1976; 1992; 2008; Barnes and Todd (1977;1995) Mercer 1995; 2000; 2002; Mercer and Littleton 2007; Mercer and Dawes 2008; Mercer and Hodgkinson 2008) or "intellectual search" (Tizard and Hughes 1984;1987) can be less in evidence in formal situations at school.' (Cox 2011 p.115). I also refer to findings that highlight the disparity between home and school activities once children are already in primary school, including original findings from the research for Project 4 (Cox et al 2006 cited in Cox 2011 p.83).

Researchers have investigated these different domains with a view to improving collaboration between home and school. Given the dominance of the school over the home, and the subsequent view of the home as deficient, they have argued for improved relationships. For example, Pollard (1996); Bastiani (1987); Vincent (1996) argue for parent-teacher partnerships (see Cox 2011 p.126) and through The Home School Knowledge Exchange Project researchers aimed in practice to achieve the 'transfer of knowledge' from home to school, to develop teachers' valuing of children's knowledge (Hughes, Andrews, Feiler, Greenhough, Johnson, McNess, Osborn, Pollard, Salway, Scanlan, Stinchcombe, Winter and Wan Ching Yee (2005); Hughes and Greenhough 2006 discussed in Cox 2011 pp.117-118).

Further transitional changes are evident when children move from Foundation Stage (early years) settings to Year 1 in the primary school. I discuss how this is shown, for example, in the major study (REPEY) undertaken in 2002 by Siraj Blatchford et al (Siraj Blatchford 2002). The study by Sanders, White, Burge, Sharp, Eames, McEune and Grayson (2005) (discussed in Cox 2011 pp 114 – 116) clearly shows

that the children themselves have recognised their loss of agency – the decrease in opportunities for play, for instance.

Enduring cultures

It is of particular note that school cultures have tended to remain unchanged over time and these patterns still prevail. I discussed the patterns of interaction and communicative practices, particularly talk, between teachers and children in classrooms and schools. I reviewed the evidence that demonstrates the prevalence of these 'particularly resilient patterns of interaction...' (Cox 2011 p.72). As I concluded in Chapter 4 (Cox 2011): 'The empirical evidence seems to show that teachers' and children's talk in the classroom is, as a social practice, still structured in favour of the teacher.' (p.93). I referred to research from earlier periods (e.g. Wood 1991; Gallimore and Tharp 1990 cited in Cox 2011 pp 84-85; Richards 1999 cited in Cox 2011 p.13) to show how long-established and unchanging these patterns are. In considering whether this situation has altered in any way more recently (Cox 2011 p.81), I discussed the changes in Early Years policy and practice (ibid.). Government initiatives and guidance, such as Sure Start and the introduction of the Foundation Stage and the Early Years Foundation Stage (EYFS) Framework (DCSF 2008) were recognising the learning in the home and the role of play. I referred again to the research by Siraj Blatchford et al (Siraj Blatchford 2002) which suggested, however, continuation of this historical disparity, despite these changes (Cox 2011 pp. 81-82).

I discussed the work of Galton (Galton, Simon, and Croll 1980; Galton, Hargreaves, Comber, Wall, with Pell, 1999; Galton 2007), for instance. His research for the ORACLE project in the 1970s (Galton et al 1980) revealed how little 'higher order' thinking was promoted by the kind of classroom interactions his team observed. He compared these findings with those from the replication of the study twenty years later (Galton1999) to demonstrate how this trend had persisted over time. Galton and his team found that there was considerable increase in 'whole class' interactions in response to policy level recommendations. However, these organisational changes resulted in no significant changes in the nature of the interactions themselves or their quality (Cox 2011 p.89). Similar findings were reported from the EPPE project (Sylva, Melhuish, Sammons, Siraj-Blatchford, Taggart 2008, cited in Cox 2011 p.

89), for example. Furthermore Galton's review (Galton 2007) of the research around the implementation of the Literacy and Numeracy Strategies (Cox 2011 p.90) such as Hargreaves' work (Hargreaves, Moyles, Merry, Patterson, Pell, and Esarte-Sarries, 2003); that of Webb and Vuillamy (2006); the official evaluation of the Strategies (Earl, Watson, Levin, Leithwood, Fullan, Torrance (2003) and OFSTED reports (2002a; 2002b) revealed that the supposed changes in pedagogical practices were, again, in reality, 'changes in organisational practice rather than to the nature of the interaction taking place during classroom talk' (Galton 2007 p.25 cited in Cox 2011 p.90). Such views were shared by Alexander and his team (Alexander 2010; Howe and Mercer 2007). There is wide ranging evidence, then, that particular classroom cultures have endured, despite changes in what Galton refers to as 'surface features'.

Arguably, these cultures are sustained by entrenched practices and beliefs and persisting assumptions around learning theory. These enduring beliefs might be related to one of Bruner's characterisations of 'lay theory' and 'folk pedagogy'. He describes four models of mind and pedagogy: the second is a conception of mind as 'passive, a receptacle waiting to be filled'; it presumes a didactic view of teaching and learning, viewing the child 'from the outside, from a third person perspective, rather than trying to "enter her thoughts." It is blankly one-way: teaching is not a mutual dialogue, but a telling of one to the other' (Bruner 1996 p.56). In broad terms, classroom practices tend to reflect a linear model of learning and teaching (which I explain further in Cox 2011 Chapters 2 and 8, for example) and a directive approach - an understanding of teaching and learning as a process of 'transmission of information from one who knows more to one who knows less' (ibid. p.94). Rogoff describes this as 'one-sided' activity on the part of the teacher (Rogoff 1994, cited in Cox 2011 p.73).

Throughout the book, I draw on researchers' work to clarify the *nature* of these long-standing practices, embodying these kinds of assumptions. They have been widely investigated by researchers over time such as, for example, Mortimer, Sammonds, Stoll, Lewis, and Ecob (1988); Wood (1991); Alexander (1992); Smith. Hardman, Wall, and Mroz (2004); Howe and Mercer (2007); Mercer and Littleton (2007); Mercer and Dawes (2008) as well as Galton (Galton et al 1980;

1999; Galton 2007). In Chapters 4 and 5, I explore the nature and role of questioning, which has been a focus of some of these researchers: the value of questioning over the imparting of information and the relative merits of different kinds of questioning, for instance. It seems that questioning 'continues to be appropriated and controlled by the teacher, with children being given little opportunity to initiate exchanges' (Cox 2011 p.94). I discuss the prevalence of inauthentic questions, which do not promote genuine, collaborative enquiry, but rather function only as 'test' questions (see, also, the discussion in Cox 2011 Chapter 8) reflecting a theory of learning where the role of the child is to find the answers that the teacher already knows (Cox 2011 p.94). In Chapters 2 and 8 (ibid.) in particular I challenge the entrenched and limiting doctrine of objectives-driven teaching (which I discuss further below) that derives from this transmission model. The evidence, overall, suggests that it is 'adults who have control and that when they are interacting with children, teachers do not always engage with children's thinking or encourage them to explore or develop their ideas.' (Cox 2011 p.117).

To summarise: children are active in the social, cultural worlds in which they live their lives. According to socio-cultural accounts, as participants in social practices children are agents of their own learning, whether their activities are situated in the worlds they already experience in their home communities or those of new communities of practice such as the school. Research shows (see above) that interaction and communication between children and their teachers can differ markedly from that with their parents, peers and others in their everyday communities. It seems that practices within the school and classroom might, in reality, be working against the child's participation in authentic, purposeful, valued activities that their social, cultural worlds - both beyond and within the classroom - might otherwise afford. I show in my work 'how in their everyday worlds the child's learning is focused around their own intentions and purposes, which are mediated by the "tools" available in the environment, including the activities and purposes of other children and adults.' (Cox 2011 p.117). By contrast, "[s]chool", it seems, might be a setting that presents barriers to participation in the kinds of activities that it is meant to promote.' (Cox 2011) p.79).

Learning about learning

It seems that as children enter school and move through it, '[t]he focus shifts from the child's active quest for meaning from the everyday or naturalistic contexts of their own lives to making sense of the new 'contrived' (Wood 1991) world of the school.' (Cox 2011 p.116). If children's motivated and intentional engagement is restricted to participation in limited pedagogical activities, inevitably this also has implications for children's learning about learning. Shaped by these 'school' practices, this will be in contrast to what they learn about learning from the affordances of more informal situations in their early years and, in non-formal situations beyond and outside the school. If 'one-way' interaction is prevalent in children's classrooms then these pedagogical practices will not only constitute what children actually learn, but also what they learn about learning (Cox 2011 p.87; pp 149-150). As an example of this I draw attention to the work of Denvir and Askew (2001 cited in Cox 2011 p.88) who, in observing whole class interaction in mathematics lessons, showed how children can learn to play the game of providing answers for the teacher in ways that cover up their lack of actual engagement with the mathematics. Children learn what it is to be a 'pupil', taking on this particular identity. (Cox 2011 p.122). Drummond's analysis of a child taking a test (Drummond 2003) provides a further illustration (Cox 2011 pp 50-51). By contrast, as I showed in Project 2 (Cox 2000), where socio-cultural understandings of learning were enacted, and these reflected, in some ways, the meta-linguistic discourses of contemporary art theory, there were affordances for very different kinds of metacognitive engagement with learning.

6 Implications for teachers

The inter-relationship of the two strands of participation in my research

This socio-cultural analysis of learning potentially provides ways for teachers to see their teaching differently and, moreover, what goes on in their classrooms. As I indicated earlier, my work has taken two directions in relation to the theme of 'participation' and these strands inter-relate. I will discuss this further here, as it relates to the implications for teachers' actions and the potential transformation of classroom practices and cultures. As I hope I have shown in the preceding discussion, when learning is *theorised* as participation in social practices or activity systems - as the making of meaning in motivated, intentional joint activity (the first strand of my research) – then the specific characteristics of the classroom as a community of practice, and what its members do, are key to any analysis of learning taking place.

Given this focus on what teachers are *doing* in classroom settings, ethical questions (why do this rather than that?) are implicit (Cox 2004 p.34). Decisions about what to do 'are not autonomous decisions in any absolute sense, but are shaped by the community of practice in which they are made and embody its values.' (Cox 2011 p. 7). I have discussed, above, the evidence that classroom activities can be of a kind that limits children's learning; that by being a member of a school community, conforming to new practices and norms, 'children learn about being a pupil and what to do in that role. In practice, the children are legitimate participants in...the predominantly non-participatory culture of the classroom. Non-participatory, that is, in the sense of a lack of opportunity to exercise agency...' (Cox 2011 p.116). There are grounds, therefore for doing things differently as a matter of ethical and educational principle.

With regard to the second strand of my research, I argue in my publications from the ethical position that children's participation is to be promoted as a matter of *democratic* principle: from this ethical perspective there are grounds for ensuring that children are empowered participants in classrooms, in the sense of exercising agency in decision-making, for example. (See Cox 2011 pp.124-126; 154-5 for

further discussion of educational aims). Democratic principles such as equality, freedom and respect for persons, the rights of the child (United Nations 1990) and children's well-being are implicit in the aim of achieving such participation.

A central idea is that of 'children's voice' (Cox 2011 Chapter 6). 'The use of this term from a socio-cultural perspective "serves as a constant reminder that mental functioning in the individual originates in social, communicative processes." (Wertsch 1991 p.13). Conceptualising learning in a socio-cultural way means that children's voice is closely aligned to the participation that is central to learning. The notion of "voice," here is a broad one, developed by Bakhtin: the "speaking subject's perspective, conceptual horizon, intention, and world view" (Wertsch 1991 ibid. p.51).' (Cox 2011 p.113).

It seems that there are arguments coming from both directions for an ethically grounded approach; for actively creating classroom cultures of empowered participation and agency that foster children's voice: for promoting children's agency and participation, as learners, in the context of valued, authentic, purposeful, collaborative activities (between children, their teachers, other adults and their peers) and creating democratic communities of practice in classrooms and schools.

To conclude, I will quote from the End-piece of my book, which shows how these two strands might come together as more 'participative' participation in the transformation of teachers' practice. In the apparent tautology, the significance of the adjective, 'participative' is prescriptive (ethical); that of 'participation' is descriptive and explanatory (theoretical):

"...the child exercises agency in constructing meanings and coming to know, and this is situated in collaborative activities with their teachers where the adults can provide the necessary cultural tools to support that. First, [the alternative view of learning] entails a more active, or participative, participation than is afforded in the established classroom culture... A teacher who enacts these principles understands the value of collaborative activity that is wide open to the collective resources of the culture and the interests of the cumulative meaning making of both children and teachers. Second, it is one where children are more equal partners with adults." (Cox 2011 p.185).

Alternative frameworks for teaching

In this section I will say more about the implications of socio-cultural ways of theorising learning for teachers' pedagogical practices and school cultures. I then go on to discuss my own research into children's participation and agency in the context of promoting democratic practices in classrooms. As I've noted in the introduction above, a key aspect of my professional activity is the development of teachers' practice. On the learning-as-participation analysis this translates as the development of the social practices of the school and classroom that constitute the learning of the children, and in which teachers play a key part.

I have suggested that transformation of children's learning requires critical appraisal of what is going on in classrooms (Cox 2011; Cox 2004) and a principled approach to pedagogical practices. My own motivation to explore principles for pedogogical practice derives from my professional interest and roles in teacher development in a context of market driven policies (Cox 2011 Introduction; Chapter 2; Cox 2004 p.39). I suggest that: 'Where learning and teaching are seen differently, from a sociocultural perspective, there is the potential for doing things differently. The articulation of principles for pedagogical decision-making and action within school settings, grounded in this view of learning, provide an alternative to the decontextualised prescription for teacher behaviours that has been a major factor in shaping teachers' current interactive practices, and has not achieved the desired effects.' (Cox 2011 p.111)

My work and research with teachers has continued to reveal the resilience of existing practices in a performance-driven culture and reflects the kind of conclusions drawn by other researchers. We found from our own research for Projects 3 and 4 that changes tend to be assimilated within the existing culture: 'unless a critical approach is adopted, the imported changes can remain inert in classrooms, adapted to existing, entrenched ways of acting.' (Cox 2011 p.99. See P. 41 below.). In Project 3 we concluded that 'the visual strategies should not be viewed as an end in themselves, but as one part of a principled approach that promotes genuine participation, communication and decision-making. Project 4 started from this principled position and focused on the development of collaboration between children and teachers in decision-making.' (Cox et al 2006 p.12). Similarly, Galton (Cox 2011 p.97)

concluded that articulation of the principles governing organisational change was necessary for the achievement of pedagogical change (ibid. p.99) and Alexander (2010 p.308) argues for "right action framed by well-grounded principles" (Cox 2011 p.99). I would argue that collective, critical engagement with theoretical and ethical principles and the way they are enacted in the social practices of schools and classrooms could bring positive change to pedagogical practices. (Cox 2011 for example: pp.6-7; pp52-54; p.185).

In Chapter 5 of Cox (2011), I considered how change might be achieved in patterns of interaction in classrooms: 'what kinds of interaction might be introduced into classrooms to support children's meaning making and challenge their thinking.' (ibid. p.96). I discussed how, 'rather than identifying specific kinds of interactive strategies it is more a question of looking at the specific situations in which language is used and for what purposes... The long-standing, familiar communicative practices have tended to reflect the goals and purposes of teachers. When purposes are shared collaboratively between children and teachers and exploratory and dialogic communicative practices develop, learning can be of a different order.' (ibid.). I discussed 'exploratory and dialogic practices' (ibid.). I further developed my argument that if learning is not to be bound by the existing practices there is a need for a shift in understanding of learning to ensure that such practices become embedded in classrooms.

Once learning is theorised and understood as participation, 'the one-way transmission mode of teaching clearly comes under strain'. (Cox 2011 p.65 and see Chapters 3 and 5, for instance). The socio-cultural understandings lead teachers instead to attend to children's active meaning making and to fully engage with children's own intentions and purposes in order to support their developing thinking: to be "contingently responsive". (Wells and Chang-Wells 1992 p.60; Gallimore and Tharp 1990; Bruner 1996).' (Cox 2011 p.57).

This kind of approach is illustrated by Mercer. In investigating questioning practices, Wood (1986) and Brown and Wragg (1993) argued that 'particular forms of exchange, such as questioning, or specific sorts of questioning, limit children's learning.' (Cox 2011 p.97). For Mercer, however, it is not so much a matter of whether interaction takes the form of questions rather than statements, or closed

rather than open questions, but the purposes of the strategies. (ibid.). 'For Mercer, like Dewey (1916) before him, it is the *purposes* inherent in children's enquiring and investigative activities that generate productive dialogue (Mercer and Littleton 2007; Mercer and Hodgkinson 2008).' (Cox 2011 p.98). Once again, this draws attention to the contexts in which children make meaning rather than to the strategies themselves. Again, it highlights that the existing practices derive from the pervasive views in educational contexts and within classrooms – that cognitive development is an 'outside-in' process. The views that learning results from the transfer of knowledge – and, as Moll (1990) points out, particularly skills - from one individual to another; from one who knows more to one who knows less (Cox 2011 p.67). 'The established practices arguably derive from the conception that learning and teaching are simply a person-to-person matter. So, the grounding of such principles in a different, socio-cultural, participative understanding of learning may be what is required at the classroom level, to help teachers break with the traditional habits of communication and interaction.'(Cox 2011 p.99).

Vygotsky's work (Vygotsky 1978) has made a major contribution to the development of socio-cultural learning theory. For Vygotsky, development is 'deeply rooted in the links between individual and social history' (Vygotsky 1978 p.30). A key idea for teachers, derived from Vygotsky, is that of working within the child's Zone of Proximal Development. For Vygotsky, the 'ZPD marks out what children can achieve with the support of others: "It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers." (Vygotsky 1978 p.86).' (Cox 2011 p.66). 'As Vygotsky argues, by working with others, in the ZPD, children can go beyond their independent capabilities: "children are capable of doing much more in collective activity or under the guidance of adults." (Vygotsky 1978 p.88 ibid.).' (Cox 2011 p.70). But there is more to this process than supporting a child in achieving certain levels of skilled performance.

Moll (1990) makes an important contribution⁴, showing how the focus on the person-to-person, individual view of cognition has led to misinterpretations of Vygotsky. (Cox 2011 p.103). It is easy to misconstrue Vygotsky's ideas that 'the child's thinking develops through interaction with others in social situations using mediational means, including spoken language' (Cox 2011 p.103). The dominant person-to-person conception can lead to an interpretation of Vygotsky that could justify any kind of instructional practice, including one-way teaching, and rote drill and practice. Clearly, this has far reaching implications for both learning and teaching and classroom cultures.

'Moll questions the common characterisation of Vygotsky's ZPD as individual change ("being able to do something independently today that they could only do with assistance yesterday" Moll ibid. p.12).' (Cox 2011 p.103). He challenges the common interpretation of working within a child's ZPD: establishing a level of difficulty and 'providing assisted performance' to enable the child to achieve it. (Cox 2011 p.67). 'Construed too simplistically in this way, Vygotsky's ideas may be used to justify practices...that prompt children towards desired responses...' (Cox 2011 p.103). Moll suggests that the 'role of the adult is not necessarily to provide structured cues but, through exploratory talk and other social mediations such as importing everyday activities into classrooms, to assist children in appropriating or taking control of their own learning.' (Moll 1990 p.13, cited in Cox 2011 p.102) According to Moll, the

'essence of the zone of proximal development concept...is the qualitatively different perspective one gets by contrasting students' performance alone with their performance in collaborative activity....Vygotsky...viewed thinking as a characteristic not of the child only but of the child-in-social-activities with others (Minick 1985).'(Moll ibid. p.12).' (Cox 2011 p.103).

I explain how this emphasis on discursive activity presents a clear alternative to the dominant 'recitation' script, or the 'Initiation-Response-Feedback' cycle (see Cox 2011 p.87). This is a position that Mercer develops in his work around 'exploratory talk' (Mercer Mercer 1995; 2000; 2002; Mercer and Littleton 2007;

⁴ Discussed in Cox (2011) Chapters 3 and 5

Mercer and Dawes 2008). Mercer's work builds on that of Barnes (1976) who 'used this term to describe the "groping towards meaning" (p.28) that he observed as children "think aloud" interactively with others.' (Cox 2011 p.85).

Mercer and Littleton (2007), like Moll, question the sort of practices that inadvertently might represent a misinterpretation of Vygotskyan ideas about the collaborative nature of learning. (Cox 2011 p.104). For instance, they offer a critique of the process of 'scaffolding' learning.' (ibid.). 'Scaffolding' was a term first introduced by Wood (Wood, Bruner and Ross 1976) reflecting Bruner's work on the interactions between parents and young children as the children learn to use verbal language (Bruner 1977a). It refers to the way parents provide structured situations to support young children as they learn to use words and make meaning; a process 'that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his [sic] unassisted efforts. This scaffolding consists essentially of the adult "controlling" those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence.' (Wood et al 1976 p.90). It denotes:

'...the way the teacher, or any more experienced other person, might support the child's learning in the ZPD so they can accomplish tasks they would not have been able to learn how to do alone... Scaffolding 'entailed the "tutor" using a variety of tactics that would "keep the child involved in task activity long enough for them to figure out how to do it themselves." (Wood 1998 p.99).' (Cox 2011 p.66).

With such support children can achieve more than might be expected according to Piaget's theory of development (ibid.). 'Scaffolding', however, can provide the kind of structured cues that, as Moll suggested, can, in reality, help to sustain conventional, one-way instructional practices, and, as Mercer warns, can simply be another form of 'help'. (Mercer 1995 p.74 cited in Cox 2011 p.150). In contrast, Mercer and his co-researchers argue that through exploratory talk, knowledge and understandings are negotiated 'inter-subjectively' through a process of 'inter-thinking'. (Cox 2011 p.104)

For these researchers this emphasis on collectivity and dialogue

'redresses the emphasis in some neo-Vygotskyan research on the transmission of skills and knowledge from adult to child. Some applications of the metaphor of scaffolding arguably neglect the child's own contribution to her development – conveying an image of a child's learning as being propped up by an omniscient adult who invariably directs and controls the interaction.' (Mercer and Littleton 2007 p.22 cited in Cox 2011 p.104). They suggest this is an oversimplification of teaching and learning interactions which involve both the child and the adult 'in processes of negotiation, disagreement, the exchange and sharing of information, judgement, decision-making and evaluation of one another's interactions (Hoogsteder et al 1998).'(ibid.).

Wood, himself, later finds 'scaffolding' a limited strategy, focusing as it does on tutor-child instruction. In naturalistic interactions, 'it is usually the child, rather than the adult, who initiates interactions and sets the shared agenda.' (Wood 1998 p.100 cited in Cox 2011 p.66). Rogoff's idea of 'guided participation' (Rogoff 1990) is more apt. (Cox 2011 p.66; p.150). Like Lave and Wenger's concept of 'legitimate peripheral participation', this gives more emphasis to participation in cultural activities and how that participation is tacitly arranged and structured. The process is one of others in the community guiding the child in the context of shared endeavours.

Adopting a metaphor, I suggest: 'the teacher enters into the child's own learning journey as a partner, a respectful companion of the child, and supportive in helping them to build their own pathways through the terrain. ...this is very different from an outdated behaviourist model of teaching, of training the child, for instance, to achieve a certain level of skilled performance. Vygotsky suggests that this latter sort of process does not develop what he defines as intelligence - the ability to solve problems independently. It disregards the crucial factor that "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them." (Vygotsky 1978 p.88).' (Cox 2011 p.69).

For Mercer and Littleton (ibid.), like Alexander (2008) teaching is dialogic; a process of 'collaborative and collective' talk (Mercer 2001), intended to encourage children's active participation, 'in which both teachers and pupils make substantial and significant contributions and through which children's thinking on a given idea or theme is helped to move forward.' (Mercer and Littleton 2007 p.41).' (Cox 2011 p.105). For Alexander '...if we want children to talk to learn – as well as learn to talk – then what they say probably matters more than what teachers say. So it is the qualities of extension and cumulation which transform classroom talk from the familiar closed question/answer/feedback routine into purposeful and productive dialogue where questions, answers and feedback progressively build into coherent and expanding chains of enquiry and understanding.' (Alexander 2008 p.26 cited in Cox p.105).

Our own research for Project 3, provided an example of such talk. The practices of one school council were clearly dialogic (Cox 2011 p.108). In a real life context of collective endeavour and purpose the children's perception of themselves as participants went beyond that of being a 'pupil'. In this example, I referred to Wells' and Arauz' analysis of classroom interaction: '...children are recognising through this "opportunity to participate in the cumulative construction of community problem solving...that their contributions are consequential for the decision that is jointly constructed over successive turns." (Wells and Arauz 2006 p.415).' (ibid.)

Again, however, even where models of teaching derive from socio-cultural understandings, I suggest there is room for misappropriation. For instance, 'Alexander advocates dialogic teaching as the 'most cognitively potent' (Alexander 2008 p.31) of a 'repertoire' of teaching talk (Alexander, Rose and Woodhead 1992).' (Cox 2011 p.106). His notion of repertoire includes traditional 'monologic' strategies too. I argue, however, on the learning-asparticipation analysis that: 'when children participate in dialogic talk they are learning to talk dialogically; they are learning in ways that are consistent with their activities as meaning makers and are learning that this is what learning is all about. When a teacher, on the other hand, teaches by rote and recitation, children will ... learn that *this*, perhaps unfamiliar activity, is what 'learning' is about.' (Cox 2011 ibid.).

As I argue, 'the availability of the repertoire in itself may be insufficient to ensure that dialogic methods become embedded in the classroom' (Cox 2011 p. 107). Again this points towards the need for a more radical shift in ways of theorising pedagogy, embracing socio-cultural understandings of learning: As with Galton's observations around organisational change; Moll's around interpersonal theories of cognitive development; Mercer's and Littleton's on scaffolding, and the conclusions we drew from Projects 3 and 4, strategies can be all too readily re-interpreted and assimilated within the traditional pedagogical paradigm and schooling culture.

When interactive strategies are understood in a socio-cultural framework, in terms of how they constitute children's learning, then, arguably, dialogic strategies are the more powerful means of embedding these alternative understandings and aims in the classroom. 'The kind of principles that are being developed through research into exploratory talk in classrooms, dialogic teaching, children as decision makers and other kinds of participatory approaches embody these kinds of socio-cultural insights and could help transform teachers' interaction with children in the classroom.' (Cox 2011 p.111). Clearly, the depth and range of children's meaning making is related to the affordances of the classroom for empowered participation in cognitively challenging interaction (Cox 2011 p.102).

The 'teaching curriculum'

In Chapter 7 of my book, I explore how the arguments I developed in earlier chapters can be related to the curriculum. Having shown that 'learning is integral to all social contexts in which children live their lives' (Cox 2011 p.131)...in this chapter 'I discuss how the school, as a specific social context is distinctive because of its curriculum and I consider what that means for children's learning. I explore the implications of the socio-cultural perspective for both what is taught and how it is taught, discussing how "subjects", when they are seen as enquiring practices and discourses, can extend learning beyond what is available to children in their everyday worlds. I make the case for children using the curriculum toolkit to realise negotiated and shared purposes in the context of the activities of their own lives, as children.... I discuss throughout how teachers can

contribute collaboratively to this, again showing that transforming children's learning calls for a different understanding of learning.'(ibid.).

The collaborative and collective talk that is dialogue constitutes some of the 'semiotic tools' that 'make possible the collaborative generation of meanings and knowledge' (Cox 2011 p.140). As I showed through Project 1, these are not restricted to verbal language. There are other sign systems too. 'People's actions, and their thinking, are mediated by a whole range of artefacts, gestures, sounds and images that are given meaning as semiotic systems within the culture.' (ibid). As Wells and Claxton explain 'it is particularly by learning to use the semiotic tools of the culture in discourse with others that humans appropriate the culture's dominant ways of thinking, reasoning and valuing.' (Wells and Claxton 2002, cited in Cox 2011 p.140). There are, then, multiple discourses. A specific cultural discourse might be characterised by 'the shared understanding of what makes sense within it; the language and concepts it employs, the kinds of questions and avenues of enquiry that it is concerned with; the ways of interpreting evidence and theorising it uses and its forms of reasoning.' (Cox 2011 ibid.) These discourses are 'culturally devised' (Bruner 1996, see Cox 2011 p.135) and have become part of the shared toolkit of the culture (Cox 2011 p.69; 150). 'Children enter a world that has been given meaning by others through these kinds of joint activity and, as I have argued, it is these activities that give rise to learning.' (Cox 2011 p.140.)

'In giving meaning to their experiences, as part of their learning [children] encounter the different specific modes of enquiry that human beings have developed; different ways of interpreting the world and knowing it through symbolic or semiotic systems that have already been invented. These are the practices that constitute the cultures that children are born into. Active participation across the range of different communities of enquiry and discourses that are used and valued in the culture provides children with access to the wide range of the resources and tools for making meaning and generating knowledge that is available; in participating, they enter into worlds of meaning of which they might otherwise be unaware. Through the curriculum, schools and teachers can offer children activities that complement children's own worlds – the epistemic activities of enquiry and reasoning beyond

children's everyday lives, through which meanings can be made and knowledge constructed.' (ibid.)

Dialogic teaching, then, implies more than certain kinds of classroom interaction. It entails engagement in these discourses. It makes sense that the classroom setting should afford opportunities for participation in a range of authentic and valued activities so that the self-motivated meaning-maker finds new, empowering contexts for learning - in other words, to work with the grain of what is theoretically understood, from a socio-cultural perspective, about how children learn. Children can legitimately join in with more experienced participants, such as their teachers in school, in new communities of practice (for further discussion, see, for example Cox 2011 pp 146-149) of science, mathematics and history, for example, and not only these familiar curriculum 'subjects' or 'disciplines' but potentially any others from amongst the multifarious valued and meaningful practices that are integral to life within a culture. (Cox 2011 pp 152-154). Schools, potentially at least, afford opportunities for participation in 'qualitatively new collaborative activities' (Moll 1990 p.13 cited in Cox 2011 p.102) opening up culturally valued discourses and practices that otherwise may be unavailable to the child, building on what they may already be doing in the home and other social contexts (Cox 2011 pp.144-146).

These provide what Lave and Wenger refer to as the 'teaching curriculum' in contrast to the 'learning curriculum' (Cox 2011 p.135); what Vygotsky sees as 'scientific' concepts in contrast with 'everyday' concepts and what Mercer refers to as 'educational discourse' guiding children into 'educated discourse' (see Cox 2011 p.134). 'Children, then, can be taken by their teachers into avenues of enquiry that lead them beyond their present worlds. (Dewey 1938).' (Cox 2011 p.148).

A key point to emphasise here is that, as newcomers alongside others, children act, for example, *as* scientists, historians, artists, readers, writers, ornithologists, environmentalist, film-makers and (as in Projects 3 and 4) as citizens. I show how, from a socio-cultural perspective, for children to be learning *science*, for example, 'that learning must be situated in a context where they are *doing* science and acting as scientists' (ibid. pp.143-144), immersed in the social

practice 'in its full complexity, with all its opportunities for learning: of understanding the ways that problems are identified, thought about, addressed and solved in context.' (ibid. p.144). To learn how the scientific community carries out its activities, this would mean joining in with activities such as investigating, experimenting, observing and so on. Such activities embody purposes that are authentic to scientific practice (ibid.p.146); they 'reflect the genuine purposes and practices of scientists, artists and historians.' (ibid.). As I explain: 'As children take their place alongside more experienced practitioners in a community of enquiry, they learn what the aims of it are and give their own meanings to what they are doing, through the guidance of the teacher.' (Cox 2011 p.146).

In short, the focus then shifts from learning to 'do school' and be a pupil to learning to do, and be, what the members of these communities 'do' and 'are'. This is rather different from participation in the activities of a classroom community where transmission based teaching *about* these 'subjects' is the predominant practice (ibid. p.143). In Cox (2000) I discuss how this has been achieved in practice by a teacher in her work with children on critical enquiry in art, where children were being art historians (Project 2) and I researched these ideas in practice through Projects 3 and 4, where we investigated how children might participate in democratic classroom contexts and how they might 'be' *citizens*. In the following section I will discuss this further. I provide other practical examples in Cox (2011), for instance, the work of other researchers such as Eberbach and Crowely (2009) cited in Cox (2011 p.148-149); Houssart (1999) cited in Cox (2011 p.139) and Rowland (1984; 1987).

I argue that if the activities are to be meaningful to the child, it is implicit that purposes are shared and there are inevitably challenges for negotiating the boundaries between the world of the home and the school (ibid. p.145-146; p.123). Knowing that '...children come to school as learners with their own purposes, who have already been participants in other, everyday social contexts,'(ibid. p. 65) the responsive teacher takes account of and responds to the child's existing and developing activities and purposes 'to what they want to do and what practical problems they need to address.' (ibid. 147). Children do not

come to school 'uneducated', only 'unschooled'. Their everyday concerns are often playful: their self-chosen activities and developing interests 'do not necessarily conform to adult practices or adult expectations, but are exploratory and, by their nature, unpredictable.'(ibid. p.65). I suggest that school practices might be better adapted to build on the non-institutional, non-formal learning outside school, (ibid. p.129), addressing the potential mis-match between values and practices between homes and school and adults and children (ibid. p.145).

7 Achieving change in democratic participation and agency in classrooms

I have attempted to show that 'how children participate as a member of the school community, and the communicative practices that characterise it, are central to the learning that occurs.' (Cox 2011 p.114). To summarise: 'The forms of participation and the patterns of interaction in the school are conventionally structured, it seems, in ways which, as well as devaluing the agency of the child in their learning, also model relationships that are unequal in terms of power. The child is learning within a community that represents a rather undemocratic way of life. Their teacher represents the authority to whom they must defer. In this sense, children's participation and voice in the community of the school have significance not only in relation to how their minds develop, but also in terms of how children learn to be participants. Children learn by participating what it is to participate. How their overt participation, or agency, is facilitated or limited in particular ways, is one element of what they learn in the communities of practice of their classroom and school. How they learn to be a citizen in a democratic society will thus be influenced to some degree, by the ways in which and the extent to which their agency is encouraged in those communities.'(Cox 2011 p.116).

In setting out to bring about changes in how children participated and exercised agency in classrooms, in Projects 3 and 4 we were building on the new focus on citizenship education (DfEE 1998) and the growing interest in setting up school councils. As we noted: 'At one level, citizenship education focuses on teaching content, at another level it engages students in transformative action. School councils may be introduced as a practical means of introducing children to the concepts and skills associated with democracy, regardless of whether or not their members have any power to effect change in their lives as students. Alternatively, the main intention can be to enhance student voice in decision-making.' (Cox and Robinson-Pant 2006 p.515).

It was clear that: 'Student voice' in schools can be shaped by the existing cultures of classrooms and the wider institutional structures and policy discourses of the

educational system. It can be appropriated by teachers working within the conventional power structures – where it is assumed that the teacher has greater power and control. This was apparent in the findings from our projects, no less than it had been in foregoing research. Such research had been guided by widely ranging intentions 'from the idea that participation is a right (Alderson 2000) to learning models of parliamentary democracy in practical ways (DfEE 1998), to the belief that pupil participation will enhance curriculum effectiveness (Rudduck et al 1996)' (ibid. p.515). There are widely differing outcomes too. Hart (1997) identified a ladder of participation, with the highest rung being 'child-initiated shared decisions with adults' and the lowest 'assigned but informed' (ibid. p.41). 'Holdsworth (2001, in Rudduck 2003) has distinguished between students as minimal citizens, where participation is deferred and as maximal citizens, where there is full or deep participation.' (Cox and Robinson-Pant 2006 p.517).

The issue arises as to whether schools as institutions are concerned to promote children's current levels of agency now, or whether aims are more instrumental, for later. (Rudduck, 2003, p.31). Rudduck (ibid.) points out that both the pupil voice movement and the citizenship lobby 'put forward the argument that through gaining a voice, students will be better prepared for the future, rather than emphasising the here and now of the school.' (Cox and Robinson-Pant 2006 p.517). (See also Fielding and Rudduck 2006). The assumed parameters that limit the scope of children's voice had also been identified by Fielding (2001), who argued that its value was framed by the need for school accountability, providing a further 'data source' rather than a 'significant voice'. (Cox and Robinson-Pant 2006 p.517).

In our own project we aimed to challenge these skills-based, functional views of children's democratic participation and develop children's agency in school in practical ways by 'focusing in depth on the processes involved in giving children a voice.' (ibid. p.517). We adopted an innovative approach. It was evident that earlier research had 'overlooked the importance of exploring communicative practices specific to school councils and the implications for children's participation.' (See Cox and Robinson-Pant 2003 p.51-52 for a discussion of existing research at the time we conducted our project.) 'There has been notably little in-depth qualitative research into the process of involving children in school councils...' (ibid. p.52). In summary, '...the research on school councils to date had largely focused on their

objectives and impact in relation to citizenship education, from both a teacher and pupil perspective. Research has shown that an increasing number of both primary and secondary schools have established school councils and has documented the kinds of structures as well as decisions taken within these. However, there had been little attention paid to the processes that take place during school council meetings and in particular, the level of participation between different groups of children.' (ibid.). Our own research agenda was different: 'By analysing the literacy and oral practices involved in the school council activities that we observed and by exploring alternatives, we hope to open up new ways of thinking about the empowerment of children.' (Cox and Robinson-Pant 2006 p.517).

In the first phase of the project, where we observed existing practices, we found that conventional 'adult' meeting practices were used in the school council meetings and that the associated literacy based and oral practices 'shaped interaction' and 'often reinforced hierarchical relationships.' (Cox and Robinson-Pant 2006 p.519). These not only reinforced teacher-child relationships but also established new hierarchies amongst peers:

'Whilst the conventional committee structures give children an insight into democratic citizenship (in an adult world), they create certain barriers to children's ownership of the processes in the here and now. They can endorse the existing power relations between children and teachers and sustain and create inequalities between children.' (ibid. p.530).

In the second phase of the project, our intention was to initiate changes in communicative practices by introducing visual ways of communicating and planning in decision-making within and beyond the school council. These drew on and developed a range of strategies known as 'Participatory Rural Appraisal' (PRA) that are widely used in development contexts in countries in the South. The strategies themselves and the ways they were used and developed in our project are discussed in Cox and Robinson-Pant (2003). Teachers, in their discussions around the first phase of the project had identified the 'tension between teaching children how to

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⁵ PRA is described as 'a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions' (Chambers, 1994 P. 1437, cited in Cox and Robinson-Pant 2006 p. 521).

participate as citizens in democratic structures in the future and introducing them to ways of making decisions democratically here and now.' (Cox and Robinson-Pant 2006 p.521). We believed that the introduction of the visual methods might provide ways of reconciling some of these contradictions.

As a result of the project, we observed a variety of changes in the children's participation: the teacher-researchers became more aware of their own role in facilitating the meetings and the possibilities for more open-ended discussion and dialogue. It raised awareness of the power-relations, both in terms of interactions between participants and also those implicit in the kinds of issues considered within the school council. With regard to the latter, the limits on what could be discussed and decided supported the findings of other researchers such as Wyse 2001; Lee 2004; Dobie 1998; Wyse and Hawtin 2000 and, published since we completed our research, Whitty and Wisby (2007), cited in Cox (2011 p.122), and highlighted the 'danger of tokenism' (Christie 1998 cited in Cox et al 2006 p.52). The tacit limits on what was acceptable became more visible to both adults and children and the visual strategies widened the range of children who participated in generating agenda items. Within the meetings themselves, the new practices – drawing, for example - helped with inclusion. Younger and less literate children could participate more fully, although (in contrast to the findings of Macbeath et al 2001) we found that the value of drawing was not limited to these children. It helped others too. (Cox and Robinson-Pant, 2005b). For example, in providing a physical object a drawing could ensure an item could be prioritised or could be used by individuals to make their point. Other strategies too, described in Cox and Robinson-Pant (2003) proved to be powerful in increasing levels of participation.

In summary the visual strategies served a range of purposes:

'They enabled the children to engage in discussion and decision-making more independently of the teacher. They helped to open up new possibilities for school council discussion, to increase communication and thus participation across the school population as a whole, and to make decision-making itself more participatory and democratic. As a result they helped to expose and address issues of power between teachers and children themselves that had become apparent through the introduction of school councils.' (Cox and Robinson-Pant 2006 p.527).

We also became aware of the limitations of the strategies in promoting children's voice in decision-making, some related to the children's own approaches – for example, their tendency to create 'winners and losers' or to be influenced by their peers. From the adults' point of view, children's immature understanding of democratic processes could lead to the suppression of some children's rights by others and there were sound adult reasons against implementing some of the decisions children make (ibid p.529) as well as perceived 'institutional imperatives' (Frost 2007, p.442). There was the possibility that the imposition of one set of formal structures (literacy based) could merely be replaced by the imposition of visual methods, as well as the possibility that the strategies might be implemented mechanistically in ways that in reality inhibit participation. (ibid. p.527).

These sorts of problems, once again, might be attributable to the existing cultures of schools and classrooms. Potentially emancipatory and empowering strategies were open to re-interpretation within a context of the inherent power structures and the 'one-way', adult dominated patterns in relationships and in communication.

The teachers' perceptions of the constraints they were under were a recurring theme during the research process. Teachers had recognised that through the visual strategies children could be more in control (Cox and Robinson-Pant 2006 p.523) but 'the handing over of responsibility and power to the children was not straightforward.' (ibid. p.528). Constraints were often seen in terms of the pressing demands of priorities determined by the national agenda in a context of accountability and performativity (Cox 2011 Chapter 2). 'Teachers themselves were clearly constrained by the existing culture of teaching and learning which is characterised by central control (Ball, 1994; Tomlinson 1994; Richards 2000).' (ibid. p.528).

Arguably, within these 'top-down' cultures, 'invisible parameters' (Cox and Robinson-Pant 2003 p.32) were in place, by which both children and teachers felt constrained. 'The children tended to assume that their remit was restricted to extracurricular areas, such as playground issues. They also set their own boundaries in terms of what they felt they could or could not change... the teacher-researchers... were balancing the needs to meet externally-imposed requirements and their own

desire to give children more control over their learning and school environment.' (ibid.).

Nevertheless, as a result of the project, there was evidence that it had provided ways for children to challenge their tacit assumptions about their power and of what was 'off-limits' and for teachers to be able to question their expectations of children. Similar findings have been noted by other researchers of children's voice (for example, Bragg 2007 p.515 cited in Cox and Robinson-Pant 2008 p.461). As a project team, 'We realised that children can surprise us with their capabilities when we give them the opportunity.' (Cox et al 2003 p.32). As one teacher commented: 'Because they've not been "empowered" historically they're much too concerned with what we think...'(Barbara Elliott, meeting July 2003) (ibid. p.33).

We concluded that more is needed than learning through tokenistic involvement, role play or focusing on adult procedures. These kinds of activities imply learning 'about' citizenship as preparation for their future adulthood. We argued that: 'Learning *through* participation, on the other hand, requires that children are actively involved in processes of bringing about change, in the sense that they can make a difference in the here and now.' (Cox and Robinson- Pant 2006 p.528).

These conclusions are, clearly, consistent with the socio-cultural account of learning-as-participation: as participants in authentic democratic communities they learn to be a democratic citizen. In these contexts empowered children are enacting identities as democratic citizens in their current situations, rather than at some time in the future (ibid.). Conversely, '...where children's agency in their own learning and in their communities is unrecognised or only partially acknowledged, or where children's role in decision-making is limited to matters that have no significance in those areas that are traditionally under the sole control of adults, it is clear, from a socio-cultural perspective, that children's learning will be around those restricted forms of participation.' (Cox 2011 p.128).

In the follow-on research project, 'Children Decide: participation, power and purpose in primary classrooms' (Project 4), we were concerned as a research team to address issues arising from Project 3, in particular the findings that issues of learning and teaching were not discussed in school councils. In Project 4 'our intention was to provide more scope for bringing decisions around teaching and learning into the

research agenda with the idea that this might help children to shape their classroom realities.' (Cox and Robinson-Pant 2008 p.466). Our aim was also for the children themselves, through action research, to explore the extent of their participation in decision-making with a view to increasing their participation and to implement actual changes. The project built on previous research into children's voice and decision-making, citizenship education in the primary curriculum and students as researchers. 'For instance, the "Consulting Pupils about Teaching and Learning" ESRC funded project at the University of Cambridge had been influential in the area of student voice, based on collaborative research with school teachers and children. The focus on consultation and on methods for encouraging student feedback (Macbeath et al 2003) foregrounds student participation in decisions around teaching and learning. The Children Decide project intended to go further, by encouraging children to work in collaboration with teachers in finding ways of actively changing decision-making within classrooms.' (Cox et al 2006 p.13).

'Central to our approach was the recognition that children's participation could be problematic (Sinclair 2004; Shier 2001)'. (ibid.). We noted that Fielding (2004) had 'drawn attention to the likelihood of knowledge generated from children's research being appropriated or re-interpreted by adults when put into the public domain and applied in practice.' (ibid.). Our 'intention was to explore how far children could act as researchers in their own right...' and to 'address critically the extent to which children could be in control of the research process.' (Cox and Robinson-Pant 2008 p.457). By adopting an action research approach, where children would be researching their own classrooms and decision-making, 'we felt that there would be more opportunities for children to be in greater control of what went on in their classrooms.' (Cox et al 2006 p.13).

Our contribution to research in this field, then, added not only to the work on children's voice, but also to other work on children as researchers. Other researchers in this field, notably Kellett (2005) had worked differently. Unlike Kellett, who worked with gifted and talented children after school at The Open University Children's Research Centre (CRC), we worked with children in their classrooms and schools and with whole classes rather than selected groups. We acknowledged that, in some ways, we had limited the children's control: unlike other researchers, (such as Kellett and also Springate and Lindridge 2010) we had determined the focus of

the children's research. Our project, however, was innovative in that its focus, on decision-making, in itself 'was intended to give children greater control over their lives in school and provide the opportunity to effect change.' (Cox and Robinson-Pant 2010 p.144).

Other research projects involving children in research 'had not generally intended to initiate action and change.' (Cox and Robinson-Pant 2008 p.457). We saw the project 'as quite different from research carried out by children which generates theory but does not necessarily affect practice.' (Cox et al 2006 p.13.) Furthermore, '[t]he aim of this project was to see children as generating data and analysis for themselves, rather than only being a source of information for adult researchers or teachers seeking to improve their practice.' (ibid.).

We were already aware, from Project 3 findings, that in the school context 'the balance of power was heavily skewed towards adults and children are least able to exercise participatory rights' (Robinson and Kellett 2004, cited in Cox and Robinson-Pant 2008 p.458) and that there are ethical issues around children being 'captive subjects' (ibid.). However, 'by focusing on decision-making in relation to real change in the classroom, we hoped to address these concerns more directly...' (Cox and Robinson-Pant 2008 p.458). We did, however, recognise that 'children's rights in the research context as well as the classroom would inevitably be "mediated through adults" (Jones 2004 p.113).' (ibid.).

Again, the children used participatory methods to carry out their research:

'Although the CRC provided research training for children, the methods appeared to be modelled on conventional 'adult' approaches to research. This raised questions for us about the extent to which children had ownership over the whole process. We were also struck by the extent to which the research on student voice relied on pupil questionnaires as the main source of data (Macbeath et al 2001). Kirby (2001) also comments on the dominance of adult research practices (such as questionnaires and traditional interview methods) in student-led research. By drawing on our previous CfBt funded project and by developing more visual and child-centred approaches to communication and participation, we intended to explore ways in which we could include research methods and outputs more appropriate to children.' (Cox et al 2006 p.14).

The project design guided the children through an initial orientation stage of developing 'shared understanding of the concepts and processes of decision-making through adult initiated classroom activities' (Cox et al 2006 p.18), introducing them to 'research methods, particularly visual' (ibid.) and to working collaboratively in groups. This was followed by the practical phase of the research for the children to find out about what decisions were already being made in the school/classroom, how and by whom, which led to a stage of data collection to decide what changes to introduce. The next stage was the implementation of those changes and evaluation of them as a basis for further action. The children shared their findings across the schools, participating in a children's conference based at one of the schools. Teacher workshops were held regularly throughout to discuss what was happening in the different schools and for the adult researchers to act as critical friends to each other. As university-based researchers we spent time in the schools, alongside teachers and children, engaging in the research activities. Details of the research aims, design and process can be found in Cox et al (2006) pp 19-26.

We concluded that 'the "Children Decide" project went some way towards giving children space to reflect on their situations and to begin to see ways of sharing decision-making with their teachers and initiating change.' (Cox and Robinson-Pant 2008 p.465). We noted that '[a]s a result of the research activities, teachers developed more insight into children's values, priorities and practices, as well as children learning about teachers' points of view. Some of the activities opened up opportunities for children and teachers to have different kinds of conversations than they would normally have had in the classrooms.' (ibid. p.462). As the project progressed the teachers realised that the project had 'powerful potential for transforming their own practice by challenging their assumptions' (ibid. p.464). For instance teachers became aware of their own ownership of school decision-making:

"...we found we were more willing to explain the reasons for the decisions that we routinely made. Children began to ask 'why?' for explanation...As teachers we found we were involving children more in the decisions we made and talking about things together. As a consequence we found that children were more able to identify, understand and empathise with the reasoning behind our decisions.' (Cox et al 2006 p. 48).

Though we shared a commitment as adult researchers 'to promoting genuine participation, communication and decision-making by children in the classroom' (Cox and Robinson-Pant 2008 p.460), we found that the struggle around giving children responsibility for decision-making and research was an on-going issue that became a focus for discussion in the teacher workshops at the university. There were emotional responses such as fear of the consequences if children had control. The teachers held shared assumptions about the nature of childhood, and children's needs for protection, as well as a clear sense of their responsibilities as professionals with 'educational, legal and moral commitments and duties of care' (ibid. p.461); there were competing priorities (children's and adults') as to how time should be spent and, again, the overarching constraints of institutional and central policy level demands.

We looked at the way in which 'these power relations created particular constraints on children acting as action researchers' (Cox and Robinson-Pant 2010 p.144) analysing them in terms of risks (discussed in Cox and Robinson-Pant 2010). We argued that there were two dimensions of risk when the children acted as researchers implementing change. On the one hand there were the issues around teachers' perceptions of children – for instance, their perceptions of their need to be protected from responsibility and failure (ibid. p.146). On the other hand, there were risks associated with the implicit parameters in educational contexts and cultures - accounting for the fact that at the beginning of the project, children rarely made decisions about their learning and felt that this was their teacher's responsibility (Cox et al 2006 p.49) and the fact that teachers' priorities included being successful in meeting targets for SATs⁶ results, for example (Cox and Robinson-Pant 2010 p. 148.).

These projects went some way, then, towards enacting democratic principles in implementing change in the practices of the schools. There was some movement in creating more democratic spaces for children's participation and agency. There were some changes towards creating authentic contexts and purposes so that children were participating as and learning to be democratic citizens. Through carrying out these practical projects the research team learned how the construction of new identities

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⁶ SATs Standard Assessment Tests

was always shaped by the dominant school culture at both local and policy levels. Its linear performative purposes and its undemocratic practices created a powerful countervailing agenda. The teachers' desire to enact educational and democratic values with the children in their classrooms and to engage in these kinds of educational and ethical discourses in the workplace was constrained by the counteracting social practices of the schools as institutions within the 'educational system'.

8 Means and Ends; Schooling and Education

As this is important to my work, I will clarify further how I have addressed the conceptual relationship between means and ends and how this underpins the emerging tension between schooling and education. Different ways of configuring this relationship between means and ends (see, for example, Chapters 2 and 3 in Cox 2011) are significant in the different ways in which learning is theorised, as they are in the different ways in which the meanings of both 'knowledge' and 'education' are constructed.

First, the indivisibility of classroom life and learning, implicit in theorising learningas-participation can be translated into what amounts to a conflation of means and ends. I have discussed the 'one-way', transmission model of teaching, in which learning is seen in terms of specific outcomes or 'objectives' to be achieved – or 'mastered'- and teaching is seen as the means whereby these outcomes are brought about (the prevailing 'linear' model. Cox 2011 p.41). One implication of this dominant view of teaching is that on the part of the teacher, the curriculum planner or the policy maker concerned with the specification and achievement of these ends, the means employed to achieve them have a technical, instrumental function: they are 'means-to-an-end'. There is inevitably a value base to decisions about what children should learn. (Cox 2011 Chapter 7). On the linear model, where means are distinct from ends, this means that educational or ethical justification of the means themselves is not necessary to the achievement of the end. Indeed, effectiveness and efficiency may be the over-riding criteria in evaluating teachers' actions in bringing about the desired outcome. (This kind of thinking reflects Schon's technical rationality – Schon 1983, cited in Cox 2011 p.53). This may not be a problem from the perspective of behaviourist learning theory perhaps (See Cox 2011 Chapter 1), but from the socio-cultural view of learning I have presented, where the 'learning outcomes' of any situation are integral to the nature of that situation, it is not possible to define the ends in isolation from the means (see the discussion earlier wherein learning is characterised as activity, or, as Lave and Wenger 1991 express it, activity constitutes learning). The values implicit in the desired 'ends' are in effect

those that are enacted by the means: as I argue (Cox 2011), if any criterion of desirability is to be applied to the ends then this necessarily applies to the means.

Second, this is where the divide between 'schooling' and 'education' becomes more apparent. The instrumental means-end model may be characterised as 'schooling' in that the values that inform it are those of the institution of the school and its particular patterns of activity. Moreover, the priority of the school – in the dominant institutional and political climate - is the achievement of the prescribed end-points or targets (see, for example, Cox 2011 pp 3-4). The means for attaining these (the system of schooling) are concomitantly the primary concern and are evaluated instrumentally in terms of 'what works'. The focus on learning outcomes and 'targets', to which I am referring here, is integral to the political framework of accountability that predominates in the English education system, a neo-liberal agenda and culture of performativity. (For example Ball 2001; 2004; Elliott 2001. See Cox 2011 Chapter 2).

Educational values, on the other hand (from a socio-cultural perspective) focus on the child as learner: the ways they participate in communities of practice; how they engage with the tools and resources of the culture, as well as the cultural values inherent in the activities in which they participate (including those of a 'teaching curriculum'). The child is valued differently, as well as their learning; there are implications for how children are seen as 'persons' (see Cox 2011 Chapter p 32-34; p.128 for example). As I point out, this does not equate to the possibly romanticised paradigm of child-centredness of the 'Plowden era', (CACE 1967 cited in Cox 2011 p.11; p.30; p.152), in which the lone child was seen to learn by experience and discovery. I discuss the limitations of these notions in Cox (2011 p.11). To re-iterate, the socio-cultural analysis of learner-centred pedagogy comes from a different understanding of the child: as a participant in social practices; a member of specific communities of practice.

Underlying these educational arguments is the epistemological significance of the generative role of those valued cultural practices. I return here to the point that knowledge can be viewed as generated within culturally and historically situated social practices:

'On this kind of account, knowledge is not a product in the commodity sense (see Chapter 2)...' (Cox 2011 p.65). It is not 'owned' by the already initiated and then 'acquired' by the learner, but is collectively made or created by the members of the social group. Such views challenge traditional views such as those related to a rationalist epistemology; views that provided a transcendental justification for distinctive, universal and timeless forms of knowledge. These analyses were characteristic of educational philosophers of the 1970s: '...Paul Hirst...practising the Liberal Humanist educational philosophy of the London School in the 1970s, presented an epistemological account related to the aims of liberal education. He argued that there was a limited number of distinctive 'forms of knowledge', identified through an analysis of the nature of knowledge itself. (Hirst 1973). These were presented as necessary forms, through which humans categorise and organise their thought, each employing distinctive concepts and processes for establishing the truth of their propositions.' (Cox 2011 p.133). As such they were conceived as the 'essential components of human rationality' (ibid. p.134) through which knowledge and understanding could be acquired.

The socio-cultural view presented an epistemological and educational alternative. As Hirst himself later acknowledged (see Cox 2011 p.136), his was an inadequate account. Retracting his earlier arguments, he conceded that: 'We must shift from seeing education as primarily concerned with knowledge to seeing it as primarily concerned with social practices.' (Hirst 1993 p.184). As I explained: 'These social practices, through which human beings make sense of their experience, are the ways of understanding and knowing that have been shaped and developed over time. The processes are collaborative: the practices are shaped through discourse and through the process of people getting things done together – as Bruner argued, "domains of knowledge are made, not found"... For both Bruner and Vygotsky...[t]hey have become part of the shared toolkit of the culture.' (Cox 2011 p.135 and see above p. 37). This means that particular sorts of practice that may be familiar as forms of enquiry or disciplines within a school curriculum, are not, in themselves re-ified as knowledge *categories*. They are situated discourses, historically and culturally: 'what, for example, makes a person a scientist is not a unique way of thinking (as a traditional approach implies) but the person's participation in a scientific community (recognised as such by other members of the community and by people outside the

community (Latour 1987)' (Matusov and Hayes 2002 p.242 cited in Cox 2011 p. 139).

As 'social forms of life' (Cox p 25-26) they may be valued as resources in those contexts, as distinctive 'ways of knowing' or 'modes of enquiry' and, as such, may be significant practices within a 'teaching curriculum.' (See Cox 2011 Chapter 7). They are nevertheless open to transformation both in terms of their construction and identification as distinctive and valued forms of thought and also in terms of the construction of boundaries between them (see Cox 2011 pp 134-137; pp 150-152). 'New ways of making meaning can be generated, as new practices, or as adaptations or extensions of those already in use, or as paradigm shifts.' (Cox 2011 p.136).

As I go on to point out: 'The cultural origins of these ways of making meaning have sometimes been seen, by educationalists as well as cultural theorists, in terms of "narratives" ...'(ibid.). These are constructed by human beings, shaping the way life is lived within a culture, how sense is made of experiences and how worlds are constructed. Bruner (1986; 1996) has argued that "...we live most of our lives according to the rules and devices of narrative." (Bruner 1996 p.149). This presents a view of knowledge that has taken what Bruner refers to as an "interpretive turn": "the focus of attention shifts from an exclusive concern with "nature-out-there" to a concern with the *search* for nature – how we construct our model of nature." (Bruner 1996 p.126).

These perspectives on how knowledge is both generated and learned, in shifting the emphasis on to the construction and reconstruction of both ends and means again call into question a straightforward linear or instrumental pedagogical model that prioritises 'ends' – as goals to be mastered or given 'objectives' to be achieved.

It is interesting that from a philosophical perspective, the inter-connectedness of means and ends was noted by Peters (1973) in his identification of the need for 'principles of procedure' in teaching. Peters was not arguing from a socio-cultural perspective; his thinking was grounded in the traditional sort of epistemology referred to above. In fact in the early 1970s he positioned himself (personal communication) in opposition to the school of thought that was advocating the social construction of knowledge (Berger and Luckman 1966; Young 1971. See Cox 2011 pp 10-11). On the other hand, both Hirst and Peters *did* argue that knowledge is not

inert, but always contestable; 'truth' is pursued through processes of rational enquiry entailing investigation, evidence gathering, interpretation and analysis (Cox 2011 p. 134; Hirst 1973; Hirst and Peters 1970). Educationally, while this position implies that teaching cannot adequately be conceived as the straightforward transmission of collections of inert factual information, it does not, however, allow for the generative and co-constructive possibilities of socio-cultural accounts. Nevertheless, Peters' focus on the importance of 'social forms of life' has some resonance with socio-cultural views of how knowledge is constructed. He demonstrates this in his earlier work in the area of philosophical psychology on motivation (Peters 1958) and later in his work in educational philosophy (for example, Peters 1973). In Cox (2011) I highlight Peters' account of the fusion of the content of education (what children learn) with its processes:

'Peters...argued many years ago that the means by which people have become educated do in fact contribute to the content of their education... the way that teachers work with children (treating them with respect, for instance) can constitute what children learn. Children will also learn – in the context of the ways in which knowledge itself is developed as well as how it is taught – the principles of procedure that are pre-supposed in activities such as science and history, for example.

"...Insofar, therefore, as a person is educated scientifically, he [sic] will have to absorb these principles of procedure by means of which the content of scientific thought has been accumulated and is criticised and developed. He must take this sort of social situation into his own mind. Indeed, the mind of the individual is largely structured by the principles of procedure of such public situations in which he participates." (Peters 1973. p.25)' (Cox 2011 p.48).

Peters' emphasis on 'principles of procedure' was later taken up by Stenhouse (1975) and Blenkin and Kelly (1981). For Stenhouse 'principles of procedure' are critical to the development of learning and teaching; he, too, shifts the focus from 'ends' to 'means' – from 'products' or outcomes to 'processes'. He takes issue with the linear approach directly, challenging teaching that is driven by objectives, particularly *behavioural* objectives (see Cox 2011 p.42) when he says: 'Education as

induction into knowledge is successful to the extent that it makes the behavioural outcomes of the students unpredictable.' (ibid. p.82 cited in Cox 2011 p.43)

In developing the socio-cultural framework, I discuss the objectives driven model (Cox 2011 pp.40-41) and, my 'objections to objectives' in depth in the chapters where I discuss means and ends (Chapter 2), curriculum (Chapter 7) and assessment (Chapter 8). As I have argued, within a learning-as-participation, socio-cultural paradigm, a linear, 'transmission' or 'one-way' model of teaching affords participation and therefore learning in particular kinds of communicative or interactive pedagogical practices, that, arguably, limit children to activities that might be 'authentic' only to the world of 'school'. Clearly, these arguments apply to a linear, objectives-driven approach both to planning the curriculum or assessing learning. Established, linear practices, however, are so fully integrated into what teachers do in their classrooms that I have analysed this in some detail in these chapters and considered ways these practices might be challenged. I show, for example, how the prescription to plan and assess by objectives creates dilemmas for teachers. For instance, teachers who enact theories of learning-as-participation may unwittingly be 'failing': a 'contingently responsive' teacher, engaging with the child's authentic, purposeful and meaningful activity is very likely to diverge from pre-specified objectives:

'It seems that the teacher...who follows the orthodoxy of planning to objectives, but is at the same time aware of the evidence of children's conceptions, interpretations and learning, is caught in a dilemma. Do they persevere with their original plan and delude themselves and others with assumptions that the children are learning what they (the teacher) had intended, when in reality they are not, or do they act in accordance with their insights into the children's actual learning? The latter course of action seems to both do justice to children's learning and to undermine the case for objectives-driven planning.' (Cox 2011 p.169).

These are the kind of practical problems and dilemmas that teachers face in the reality of their working lives, in ways that are evident in the context of my own work both as a researcher and as a teacher educator. I discuss and theorise these issues in Cox (2011) Chapter 7. Similarly, turning to the area of assessment (Cox 2011 Chapter 8), a 'mastery' agenda is implicit where the performative, objectives-driven

model of teaching is implemented. As the research carried out by Black and his team revealed (Black, Harrison, Lee, Marshall, Wiliam, 2003), this model has predominated even where the principles of 'Assessment for Learning' have been applied, which I shall discuss below.

It may be useful to recall here that these arguments against an instrumental, functional relationship between means and ends in education focus on how the process of learning is 'configured in relation to the extrinsic goal or objective.' (Cox 2011 p.57). I make the point that this does not imply that there is no functionality in learning itself. As is clear in the discussion of children's learning in Cox (2000); Cox (2005) and Cox (2011) the notion of intention is central to it. As I go on to explain: 'This is not to say... that there is no functionality intrinsic to the activities of learning themselves. On the contrary, the perspective on children's learning that I am advocating takes seriously the *child's* intentions and purposes – the child's own goals and how they actively pursue them. Again, this was highlighted by Bruner, whose work (building on that of Piaget) developed a focus on 'the role of function' (Bruner 1977b p.xiii) in learning.' Bruner was, in fact, critical of Piaget in this respect (ibid.). For Bruner, it was a specific shortcoming of Piaget's ideas that '[t]here was no place for use and intention, only for an analysis of the products of mind taken in the abstract.' (Bruner 1986 p.147). Piaget's emphasis was on the structure of children's mental development, whereas Bruner, 'was concerned to ground learning in use and intention, which is also to acknowledge that it occurs in specific contexts: that it is shaped by what children intentionally do in the particular situations in which they find themselves.' (Cox 2011 p.57).

Children's agency: children's participation in the generation of cultural practices and knowledge

The challenges to the functional, instrumental relationship between means and ends help to foreground children's *agency* as legitimate participants in the activity systems of cultures. Children's intentional activities 'are shaped by patterns of activity and the social and linguistic practices of the social groups and communities in which children are growing up. (See also Chapter 1).' (Cox 2011 p.57). At the same time, as participants, by implication, children are contributors to the generation of cultural tools, artefacts and resources (see Cox 2011 p.150-

152 for example). As Wertsch claims: "When action is given analytic priority, human beings are viewed as coming into contact with, and creating, their surroundings as well as themselves through the actions in which they engage." (Wertsch 1991 p.8 cited in Cox 2011 p.61). Rogoff (1990) claims: 'Individuals transform culture as they appropriate its practices, carrying them forward to the next generation in altered form to fit the needs of their particular form and circumstances.' (Rogoff 1990 p.198). As I explain,

"...meanings are constructed jointly, through interaction between individuals and their worlds; through dialogue between children and other people in the social situations in which they live. It is this that allows for the realisation of what Bruner talks about as "possible worlds" (Bruner 1986). His is a bold claim: he envisages a new breed of developmental theory:

"...it's central technical concern will be how to create in the young an appreciation of the fact that many worlds are possible, that meaning and reality are created and not discovered, that negotiation is the art of constructing new meanings by which individuals can regulate their relations with each other....

The power to recreate reality, to reinvent culture, we will come to recognize, is where a theory of development must begin its discussion of mind". (Bruner 1986 p.149).' (Cox 2011 p.62).

It is possible then, from this point of view, to see children as co-constructors of cultural knowledge, in both procedural and propositional senses; to see them as shaping ways of creating knowledge as well as contributing to the knowledge generated. Participation in the generative practices of artists, and also, for example, scientists or historians, suggests that children, in learning to *be* artists, scientists or historians are, alongside other practitioners, shaping and transforming those practices and discourses. Children's active meaning making 'creates new possibilities for interpreting the world within the communities to which they belong and in this way, as participants in those communities children themselves contribute to the shaping of the culture and its practices.' (Cox 2011 p.61).

In considering philosophical and theoretical arguments around cultural constructions of 'realities' in Cox (2011) (see, for example, pp 61 – 64; pp150-152) and Cox (2000) I draw on, or refer to, for example, Bruner (1977b;1986; 1996), Scheffler (1997 cited in Holma 2009), Kuhn (1996), Goodman (1976; 1978), Burgin (1986) Barthes (1975; 1997), Derrida (1990), and Eagleton (1983) as well as Vygotsky (1978; 1987). I challenge philosophical realism, although I do not adopt a position of completely relativistic 'philosophical constructivism'. While there may be multiple systems for describing reality and making sense of it, this need not imply that there is no real world apart from the constructions of human minds. (Cox 2011 p.64). I considered some of these arguments in relation, specifically, to contemporary art practice, which is arguably a space where these ideas have been widely explored. In Cox (2000), related to Project 2, I considered how modernist approaches to readings of art have been displaced by a new understanding of the meaning making of the artist or the art critic - where it is seen as shaped by its situatedness historically and culturally. I argued that from the point of view of contemporary art theory there is no presumed significance, *intrinsic* to the form of any work of art. 'When art is seen as a representational practice, bounded by particular parameters, there is no place for the idea that art contains "eternal truths free of class and time and the conviction that art is somehow 'above' society or out of its reach" (Rees and Borzello 1986)' (Cox 2000 p 56). As I argue, '[h]ow works of art are defined, produced and interpreted will depend on complex socio-cultural factors.' (ibid.).

Through the project, I demonstrated how children's engagement with art work can be analysed in ways that reflect the theoretical frameworks of the contemporary art world. I gathered empirical data of children learning to be art critics and developed the arguments and the interpretation of the evidence in terms of this conceptual frame. I argued that the plurality in the readings and meanings constructed by the children in their response to art works were consistent with the contemporary, sociocultural, post-modern conceptions of art criticism (Cox 2000). There is no presumed-to-be-correct reading, or, moreover *way* of reading an image that can be used to define a pre-specified end point of children's engagement with the works of artists. They can, however, engage dialogically with the historically and culturally located discourses in which art works are made and in which sense is made of them.

Drawing on Barthes' ideas around 'readerly' and 'writerly' texts (Barthes 1977) I argued that it seems that the children involved in the research had been given the means to 'go beyond what might be immediately apparent in terms of their immediate pre-conceptions. They responded to the "writerly" qualities of the Van Gogh...' (Cox 2000 p.61) and 'when they discussed Andy Warhol's screen print of a Campbell's soup can...[t]hey read the work as a copy of a soup can, but "realistic" similitude was not enough. "Hidden" meaning which they could construct for themselves was the apparent preference....They considered the validity of Warhol's print within their own frame of reference, but were questioning the boundaries of this at the same time.' (ibid.).

My discussion of the project (Cox 2000) showed how the situatedness of the children's co-constructed contribution in art was contextualised by, and reflected, the contemporary perspectives on the situatedness of art making and art criticism. Not only were the children constructing new meanings – they were learning how to learn in the discourses of art criticism which engage with pluralistic codes and systems. In showing how artists' practices are understood within these discourses of contemporary art and art theory I explored how children might participate in those discourses and find new directions for their learning. The children's actual participation in the discourse of art criticism and theory was already open-ended and children were engaging in dialogue and learning to interrogate the works along with their teacher. Through action research their teacher introduced more collaborative strategies so that her own readings were not privileged over others.

I have already referred to the way that through 'their own powers of meaning-making and invention' (Cox 2011 p.151) children use drawing for their own representational purposes and meaning-making. In 'playfully experimenting with the communicative practice of drawing the children were exploring a range of communicative possibilities.' (Cox 2005 p.124). Their activities demonstrated the possibilities for re-shaping the existing criteria. As already noted, the research presented clear challenges to the presumed neutrality of 'visual realism' as the over-riding criterion for defining drawing as a cultural practice.

If the criteria inherent in the knowledge-making practices and discourses are collaboratively constructed – as all this implies – then this clearly has implications for assessment practices in education. In my book, (Cox 2011 Chapter 8) I offered an analytical critique of some of the Assessment for Learning (AfL) strategies proposed by Black and his research team (Black et al 2003) and argued for an approach to assessment more grounded in socio-cultural theory (Cox 2011 pp 173-177). Through their review of a very wide range of published research evidence around assessment (Black and Wiliam 1998), Black and his team had found that the 'learning function of assessment' was overridden by its competitive purposes, (Black et al 2003 p.11 cited in Cox 2011 p.170). Clearly, assessment was broadly seen as performance-driven; its purposes extrinsic to the learning activities.

Black and his team later produced recommendations for Assessment for Learning strategies from their research with teachers, shifting the focus to improving learning. (Black et al 2003). I argued, however, that their own evidence suggested they do not go far enough (Cox 2011 p 176-177) and that this was because their ideas remained locked into the more conventional, linear model of learning and its 'mastery' model of assessment despite the stated intentions (Cox 2011 p 173):

'Although the "Assessment for Learning" project brought teachers to think differently about their teaching, it nevertheless seems to have remained embedded in a goal orientated approach. The AfL researchers saw positive changes in teachers' thinking: the teachers involved in the project did come to see their teaching as "a series of learning goals rather than a series of activities [tasks] to be completed." (Black et al 2003 p.91). This is a step away from curriculum coverage. Nevertheless, it retains the metaphors of mastery.' (Cox 2011 p.176)

I suggest, again, (I develop the argument in full in Chapter 8 of my book) that this is a consequence of the AfL strategies being introduced and interpreted within the target-driven cultures of the school and linear approaches to learning

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⁷ Such approaches have recently been explored, for instance, in James (2012).

and teaching. For example, I discuss the logical difficulties that are inherent in the recommended AfL practice of student self-assessment against 'criteria', which are pre-defined as goals to be achieved. These *function as objectives* and are given and, in a sense, owned by the teacher:

'It seems to me that from the linear perspective, if a learner is not yet able to meet the criteria that define successful achievement of the "goal", then it would be difficult for them to fully understand the criteria. Or, to put it the other way round, if a child has already grasped the criteria – then have they not already achieved the intended learning?' (ibid. p.171).

Black and his co-researchers recommend a range of strategies – descriptive rather than evaluative feedback, for example. I argue, however, that while these are implemented *within* the goal-orientated framework and remain embedded in the discourses of performance and the established person-to-person conception of learning, these strategies are subject to the same criticisms as those levelled at existing approaches. This raises questions about how far AfL actually challenges the existing practices. 'The AfL conception of the curriculum as a set of goals seems to conflict with its own aims of allowing the children to take control of their learning...' (Cox 2011 p.176).

Drawing on the work of Cobb and Bowers' (1999) and Tunstall and Gipps (1996) I argue, again, for alternatives to mastery and performance-led approaches. A more consistently participative approach – replacing the 'objectified discourse' of assessment for learning with the discourse of 'learning-as-participation' might help the AfL aims to be realised more fully. (Cox 2011 p. 173). These different discourses allow for the co-construction of criteria:

'...learning is seen as the process of children collaboratively *building* their understandings of the criteria for what counts with the participants in the particular community of practice, rather than *acquiring* them. Seeing learning from this perspective should help to deepen interpretations of the suggestion made by Black and his co-researchers (Black et al 2003 p.41) that children can contribute to the *development* of criteria. Not only are they building understandings of the criteria but they are also, as I have suggested in earlier

chapters, contributing to *building those criteria* – they are contributing to the communal practices (Cobb and Bowers 1999).' (Cox 2011 p.175).

I suggest that '...children must *see themselves* as participants in "communities of practice" with their more experienced teachers; their learning is a matter of collaborative activity; of getting things done with their teachers. To do justice to the theories of learning that Black and his colleagues invoke (Black et al 2003 p. 78); to ensure that assessment for learning does not "just add on a few techniques here and there", as they warn against (ibid. p.79); to ensure that teachers do not merely follow the letter of AfL strategies, but engage in the spirit of them: (Alexander 2010; Wyse and Torrance 2009) to ensure that AfL organises "the whole teaching and learning venture around learning," (Black et al 2003 p.79) then AfL arguably must be seen as part of the broader contexts of learning – in other words as integral to participation in social and cultural practices. It is these practices and the multifarious forms of interaction, feedback and meaning making that constitute them, which should be recognised as the contexts for the practices of "assessment for learning". (Cox 2011 p.174).

An interesting outcome of the project was that teachers of arts subjects found the strategies less challenging to their existing practices than teachers of more 'closed' subjects such as mathematics. Again, I would argue this is not a consequence of qualitative differences between these subjects and the ways they are taught, but rather a result of entrenched, goal-orientated understandings of learning as mastery and performance. If the alternative understandings are embraced, then authentic purposes that may often be associated with arts subjects are no less applicable to subjects such as mathematics. (Cox 2011 p.177).

In summary, through their active participation in the culture's discourses and practices, children 'not only construct their own meanings, but also contribute to the continued collective shaping and re-shaping of these practices and of cultures. In other words, as they participate in such areas of human activity, through their reasoning they can create new interpretations and meanings, contributing to the construction and re-construction of knowledge making practices. As Bruner has argued (1986; 1996) this is a process not only of using cultural resources to construct

meaning within the culture but also of transforming the culture itself.' Cox (2011 p.152).

9 Conclusion

I hope to have provided sufficient pointers and critical analysis in this commentary for it to be clear that how children participate in the activities of the school community, and what activities they participate in, are central to their learning. I have attempted to show how issues of participation and agency are integral to my research and publications in two ways and how these inter-relate. I have argued that within a socio-cultural framework, children's learning can be construed *as* participation, so attention to the specific activities in which children participate, both within and beyond the domain of the school, is central to any analysis of their developing thinking. I have based this in understandings of children's active construction of meaning and the significance of language, and sign-making in all its forms, in social practices. I have shown how these theories inter-relate with democratic approaches to schooling that encourage children's agency on the grounds of principles for practice.

To summarise some of the central arguments of my work: '...what the child experiences as a member of a community is integral to their learning. What they learn – the meanings that they make and the ways they come to understand their experience - is inseparable from the ways they actively participate in their worlds and their encounters with the meaning making of others in those worlds. When the child enters the school, they are entering a new world, a new community with its own ways of doing things; its own codes and meanings and its own patterns for participation. This much seems very obvious on one level, but it should now be clear, in the context of the socio-cultural approach, that this is more than simply saying that the child goes to school with an autonomous identity as a learner and that school merely offers new experiences that will enable the child to develop. Rather, the child's actions and their interactions – their communicative actions - within the new community of the school are constitutive of that development. They are integral to what gives rise to individual cognition: to the way the child thinks; to their developing mind. They also contribute to the collective activities and thinking within that community, helping to make it what it is.' (Cox 2011 p.114)

Through action-oriented and action research (projects 3 and 4), through research into children's participation in communicative practices around drawing (project 1) action-orientated research into critical enquiry discourses (project 2), and through writing my book, I have tried to work towards pedagogical change. Through my engagement with socio-cultural ways of thinking in the analysis of data from my research projects and through my review of other researchers' and writers' work from socio-cultural perspectives, I have endeavoured to construct a framework for alternatives to current pedagogical activities and classroom cultures. In this commentary, I hoped to demonstrate how my research, as well as providing data for developing the framework and pedagogical principles for practice, has had a practical focus, in working collaboratively with teachers and children to change practices and enact different pedagogical principles.

The differently principled approach for which I have argued is, on one hand, born out of conviction, based in democratic values. I acknowledge that my own thinking is driven by an agenda for action, and is thus underpinned by values that, although informed by evidence and argument, are situated within particular discourses and social practices. These have shaped what I have observed and thought. To suggest otherwise would be inconsistent with the theoretical position I have explored. On the other hand my arguments also derive from analysis of theoretical ideas, again located in particular historical and cultural contexts.

My work has taken place in a context of pedagogical practices that are firmly embedded as long-standing historically enduring cultures in which both teachers and children, as well as others, construct their understandings of teaching and learning. These practices are currently framed and driven by the neo-liberal agenda of policy makers, within political and education systems.

From this point of view it seems clear that the achievement of change to pedagogical practices is fraught with difficulties, given the dominance of the existing paradigms. As I explained in Cox (2011) (and above), researchers have noted the resilience of these paradigms: of person-to-person theories of learning and cognitive development; of transmission models of teaching; of cultures in classrooms that prioritise schooling over education, adults over children, school over home and local community and teachers' purposes over those of children; of wider systems of

performativity that sustain these patterns. This has become evident to me through my analysis of others' work as well as my own research and I hope I have given sufficient indication of this in this commentary.

From the evidence arising from my research and from my reviews and analysis, it seems the dominance of this culture, of these values and practices, can result in the appropriation and re-interpretation of new theories and practices within conventional theorising and action. This creates tensions of different kinds. For example, as I have suggested earlier in this commentary, when new practices designed to improve classroom interaction and dialogue are introduced, the changes can remain superficial unless they are interpreted through understandings of learning and principles for pedagogical practice, appropriate to their aims. Within the existing person-to-person instructional paradigm, Vygotsky's account of cognitive development is readily re-interpreted to create models of teaching that do not do justice to his social theories of development. I have shown through my reviews of research and my own research how children experience agency in their everyday worlds in different ways from in classrooms and how this sets up tensions related to the power imbalance between home and school. I have argued that an 'objectives' driven approach to planning and teaching the curriculum creates dilemmas and tensions for teachers working responsively with children; I have shown how the 'teaching curriculum' dominates the 'learning curriculum' with the potential mismatch with children's quest for meaning along their own paths of enquiry; I have shown in my discussion of an AfL project how the recommended strategies can be appropriated to perpetuate the existing cultures; I have shown through my own research (Projects 3 and 4) how children's voice can be appropriated for adult purposes and how teachers experience tension between their principles and aims for children's agency and what they can achieve in practice with competing demands in the school and national policy context, as well as the tensions set up by the perceptions of risk within their current understandings of children and their professional role. (Cox and Robinson-Pant 2008; 2010). This research, along with other studies I review in Cox (2011), revealed how both teachers and children are acculturated within the domain of the school and assume patterns of action and identities as 'teachers' and 'pupils'.

Within the dominant culture, 'the actions of all members of the classroom community tend to be instrumental to achieving some other goal than high quality learning and teaching.' (Cox 2011 p.125). The discourses of the marketplace prevail: education is commodified and acquired for its exchange value. As Pollard (1996) noted, when knowledge is constructed as a commodity, parents are seen as 'consumers' of education (Cox 2011 p.126). Even where socio-cultural theories are embraced, market metaphors endure: Moll and Greenburg's concept of children's 'funds of knowledge' (1990), for example, used widely to refer to what children bring to the school situation, sustains the same ideas of commodity and quantification that can suggest a 'deficit' view of their knowledge, as Hughes and his team acknowledged. (Hughes et al 2005; Cox 2011 p.127). I have considered a different view of knowledge, where it is not a product 'owned by the already initiated, to be acquired by the learner' (Cox 2011 p.65), rather, participants in 'communities of practice' join in activities that 'construct and re-construct their worlds. For Lave and Wenger, "agent, activity and the world mutually constitute each other" (Lave and Wenger 1991 p.33).' (ibid.)

Where traditional cultural assumptions dominate - that teaching and learning is a one-way process – the belief that knowledge can be transferred through such methods from one person to another will persist. Resolution of all these misappropriations and tensions, I argue, requires not only the introduction of alternative strategies but a cultural change in understandings of learning – a paradigm shift perhaps (Kuhn 1996).

I have argued that cultures are shaped by communities. In Cox 2011 I make the case for a community of teachers engaged in practices of 'education' rather than 'schooling', in the context of new communities of practice and enquiry – a 'reflective community' (Cox 2011 p.184) of *educational* practitioners and wider communities of parents and other educators, researchers and theorists. I attempt to show that the socio-cultural perspective signals a different way in which learning and teaching can be configured, that can be transformative; 'that when teachers consider how their work is framed by the practices and culture of the school - and by the wider social practices of politicians and policy makers - a different way of *thinking*

about what they do might begin to emerge. Again, it also raises the possibility of thinking about what they might *do* differently.' (Cox 2011 p.94).

The approaches to pedagogical practices for which I have argued and which I have researched, challenge 'the assumed authority and power of the instructor, suggesting instead a more equal relationship between learner and teacher. [They imply] a classroom as a learning community: [they call] for a more democratic space, where children's active engagement is prioritised and where teachers actively help children determine the direction of their own activities'(ibid.) p. 65 The teacher's role can be re-configured as mediator in assisting learning in the context of purposeful, shared activities. It entails engaging children - as thinking people with their own intentions – with the resources of the culture, in the negotiation and realisation of their own learning pathways.

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