



Celebrating



years of learning



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A century of learning

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Editorial

This is indeed a special issue of R.Ed. In tune with the centenary celebrations is a historical theme running throughout the issue. We are delighted that Baroness Estelle Morris is able to set the scene in her thoughtful foreword reminding of the need for continual critical reflection upon policy, theory and practice.

Professor Henrietta Dombey then takes us through a personal reflection on research from the last one hundred years that has 'changed our understanding of what learning to read is about.' Professor John Pratt concludes with his reflections and analysis on how successive policy has often failed to heed the lessons of the past. Flanked by these two reflections are several articles, some concerned with the here and now such as Melanie Norman's paper on the 'new' Key Stage 3 Geography curriculum. Other articles have an eye to the future; in particular Yasmin Ibrahim examines some of the challenges facing Higher Education in an age of digital media.

Of course one cannot avoid history, past present or future but we hope you enjoy reading this issue.

David Stephens, Carol Robinson & Keith Turvey

Celebrating the School of Education Centenary

A number of events have been scheduled to celebrate the School's centenary year including an alumni reunion, a children's poetry anthology with Michael Rosen, and a centenary conference.

Also, Research Fellow, Suzanne Hyde has been carrying out a project investigating the School of Education's history. If you are a former student or member of staff involved with teacher education at Brighton Municipal Training College, Brighton College of Education, Brighton Polytechnic or at University of Brighton, Suzanne would like to hear from you to contribute your memories towards the research project. She is particularly interested in film footage. Please contact Suzanne at s.hyde@brighton.ac.uk or 01273 641961.

Celebrating 100 years of learning



I am delighted to welcome you to this issue of R.Ed which celebrates the School of Education centenary year.

As the School moves into its hundredth year it has evolved from its roots in providing initial teacher education, to a profile that spans provision for the education of Early Years and Foundation Stage practitioners, to youth work and professional doctorates in education.

The School of Education has recently moved into the Checkland building, offering an up to date space in which to innovate as we look to the future. Over the years the School has also forged a range of successful partnerships with schools, youth organisations, partner colleges and Local Authorities. Further afield the School has strong international links. These partnerships

provide important contexts for much of our research in learning and teaching.

As this special issue of R.Ed illustrates, the School of Education and Education Research Centre are leading players in education research. The articles in this edition of R.Ed reflect the ways in which we are sharing expertise with wider professional communities, critically examining new issues whilst analysing the questions that continue to cause debate.

Finally, I am grateful to Baroness Estelle Morris, who has kindly drawn from her breadth of experience across education to contribute to this special issue.

Julian Crampton
Vice Chancellor,
University of Brighton

If our ambitions for children and young people are to be realised we have to understand what really makes a difference in the search for higher standards.

Too often we've seen policy makers and practitioners pursuing one new idea after another, often not pausing to adequately evaluate what has been achieved.

Whilst not for a minute underestimating the importance of new buildings and wider opportunities or policies on admissions or training, we ought not to forget that what will make the real difference is the quality of teaching both in the school workforce and in the early years, and the skill of youth and community workers in the field.

The decisions each professional makes, whether it is about teaching methods, the use of technology, the choice of resources or how to communicate with children, will determine how well they do. The rest of us should be focused on supporting them so they can make wise decisions in these important areas.

One essential part of this process is to allow people to learn from each other; not in a haphazard and anecdotal way but by bringing together research and practice; encouraging professionals to evaluate and critically reflect on what they do and tell others about it.

Making this happen is not always easy. It needs time and skill and there must be ways of bringing together the thoughts and experiences of people working in different parts of the country. Yet this commitment to critical reflective practice, to the best of professional development, is a right and an obligation for every professional.

This edition of R.Ed brings together contributions from teachers, students, academics, youth and community workers who have done exactly that. As such it is an invaluable contribution to professional

development for all those who work with children and young people.

Baroness Estelle Morris



Our changing understanding of what learning to read is about



Professor Henrietta Dombey

Professor Emeritus in Literacy in Primary Education, University of Brighton

Introduction

The teaching of reading is a hotly contested area, that seems to excite the emotions of those involved in it to a remarkable degree, leading to impassioned claims and counter claims about the most effective approaches. It has spawned a vast quantity of research, as Google will attest.

What follows is a personal account of research that I consider has shaped much productive thinking and practice in the teaching of reading in English-speaking countries over the last hundred years or so. However, this research has not always informed the actions of those in government. My treatment is thematic, rather than simply chronological: I set out brief accounts of the work of key researchers under thematic headings indicating salient features of their findings.

Reading is not a 'bottom-up' process

Over 30 years ago, when I was quite new to teacher education, I came across a short paper that revolutionised my thinking about reading. It was by the American psychologist, James McKeen Cattell, and was written a good 70 years before I read it, well before the founding of Brighton College of Education (Cattell, 1886). In an elegant experiment, Cattell showed that reading is not a simple 'bottom-up' process. He gave his adult subjects an equally short amount of time to recognise print in three conditions – individual letters listed in random order, individual words also listed in random order, and words set out in a meaningful sentence. He found that, in the short period of time they were given, his subjects identified almost as many words as they did individual letters and many more still when the words were put together in a meaningful sentence.

In a rather amateurish way I used to replicate this experiment with incoming teacher education students. The results always bore out Cattell's findings. Like Cattell's subjects, when they read whole sentences, the student teachers recognised many more words than they did when they were presented with words in arbitrary order. They were not operating in a bottom-up fashion, first identifying letters, then putting them together to form words and then putting the words together to form sentences.

In the intervening years we have learned much more about visual perception. But Cattell's findings are confirmed: images do not

register on the retina as they do on a photographic plate. Since the pioneering work of the German physicist, Hermann Hermann Von Helmholtz, it has been clear that seeing takes place principally in the brain (Von Helmholtz, 1867). This view has been refined, but not substantially changed in the intervening years. We see what we know (Gregory, 1966 and 1997). The brain plays an active part in constructing expectations and detecting units in the incoming data, so that a child with an interest in cars can detect the make and model of a car turning the corner without a laborious analysis, while a competent reader can 'see' and remember a whole sentence in the same time as she takes to see a few randomly ordered words or letters.

Recent brain research does not unequivocally support a bottom-up view of reading.

Over recent decades, functional magnetic resonance imaging and positron emission tomography have enabled neuro-scientists to investigate the workings of the brain as never before. In the US in particular, vast sums of money have been spent on studies of the reading brain. But these technical advances have not always been used in ways that illumine our understanding of the processes involved in reading.

A number of studies (e.g. Shaywitz et al., 1996) have claimed to show reading as a bottom-up process, in which the brain first identifies the visual input as a sequence of letters, then matches these to the phonemes they represent. These studies have been used to justify intensive phonics programmes as 'brain-based learning'. Yet they do not examine the brains of subjects reading connected text: instead they expose them to successive displays of individual words, or even nonsense words. Such studies are inevitably self-confirming. In presenting the target words to their subjects without any sort of context, the design eliminates the possibility of the reader drawing on semantic or syntactic cues, or indeed operating in any other way than bottom-up.

Of course, this uni-directional conception of reading conflicts with the work on visual perception cited above. It has also recently been called into question by studies of 'brain traffic' (Destexhe, 2000; Sherman and Guillery, 2006). Studies of the traffic between the cortex and the thalamus have revealed that messages proceeding from the thalamus (which, in the classical view acts as a transit station for sensory data from visual, aural and touch receptors) upwards to the cortex (where higher mental activity takes place) are outnumbered ten to one by messages in the opposite direction (Destexhe, 2000; Sherman and Guillery, 2006). So the higher mental processes appear to be informing those lower in the hierarchy. Destexhe claims that the cortical connections may predict the sensory information, so that expectations complement limited incoming sense-data.

These findings help us understand why, like Cattell's subjects, we all find it easier to read words in connected text than when they are presented in arbitrary sequences.

Reading builds on children's experience of spoken language

Two decades after Cattell's seminal paper appeared, Edmund Burke Huey, another American psychologist, published a book that still reverberates among literacy educators. The *Psychology and Pedagogy of Reading* (1908) presents reading as a process of comprehension and recognises how it builds on a child's command of spoken language.

"The child comes to his first reader with his habits of spoken language fairly well formed, and these habits grow more deeply set with every year. His meanings inhere in this spoken language and belong but secondarily to the printed symbols. To read is, in effect, to translate writing into speech." (Huey, 1908, p. 122-123)

This important observation has been much neglected as researchers, policy-makers and administrators have treated reading as principally a matter of interpreting visual symbols. A notable exception to this trend in England was the Bullock Report (Bullock et al., 1975). Under the chairmanship of Sir Alan Bullock, the Committee of Enquiry charged with this investigation broadened the governmental remit it was given concerning the teaching of reading, to encompass all English teaching, giving considerable emphasis to the development of spoken language. While this unusually well written report inspired many educators in and out of the classroom to view reading as an essentially linguistic activity, it had comparatively little effect on official conceptions of the teaching of reading.

However research has continued to bear out this view. In this tradition, the University of Brighton project 'Young children's knowledge of different discourses at Key Stage 1' showed the complexity of language elicited in young children's role play, and its clear relation to some of the harder lessons of the primary reading curriculum (Dombey and Martin, 2000)

Children's home experiences contribute significantly to the effectiveness of literacy teaching

Huey also places great value on the role of the family to draw children in to the written word. He writes:

"Where children have good homes, reading will thus be learned independently of school..." (Huey, 1908, p. 311)

Sadly for our grandparents, the notion that parents could make a useful contribution to their child's progress in reading is another idea that lay fallow for many years. But in 1980, Jenny Hewison and Barbara Tizard published a report of an investigation in Haringey that showed that:

"...children encouraged to read to their parents, and to talk with their parents about their reading, had markedly higher reading gains than children who did not have this opportunity." (p. 211)

To a lesser degree, this held true, even where the parents could not speak English, and also, remarkably, even where they could not read. This finding has had a huge and continuing effect on educational thinking in England, from policy-makers to classroom teachers, and explains the 'book bags' that have regularly accompanied children home in the last 25 years.

Reading aloud to children plays an important part in helping them learn to read

Again we have Huey to thank for first remarking on this. Over a century ago he wrote:

"... at home there is scarcely a more commendable and useful practice than that of reading much of good things aloud to the children." (Huey, 1908, p. 334)

Here I have to declare a particular interest, as pre-school experience of hearing stories read aloud was the subject of my PhD thesis, which, after ten years' gestation, emerged in 1986. My focus was on the difference between written and spoken language, and involved close analysis of the language heard by the children during story-time in a nursery class and the language they used to re-tell stories that had been read to them (Dombey, 1993). During this time, I (and perhaps some others) persuaded Gordon Wells, the noted researcher into children's language development, to include children's experience of being read aloud to in his Bristol-based study. After first rejecting the idea that there might be anything noteworthy in listening to stories, Wells found that of all children's pre-school language experiences, this was the one with the strongest correlation to reading proficiency at seven (Wells, 1981).

This finding has since been replicated in studies all over the world. It has also found governmental favour, leading to such successful initiatives as Sure Start and Book Start, which aim to help parents, particularly those in poor urban areas, to develop the confidence and skills to share books with their young children. And it is an educational initiative in which all the participants have been encouraged to experience pleasure. This is another success story for literacy research.

Decades of distraction: the battle between phonics and whole word approaches

With their clear identification of centrally important issues, Cattell and Huey should have shaped literacy education throughout the English-speaking world. But in the matter of school instruction, those in charge of school systems preferred rather different views of reading and learning to read. These were influenced by the psychology of Burrhus Frederic Skinner, who saw all teaching as the conditioning of behaviour, writing in 1974:

"...The point of education can be stated in behavioral terms: a teacher arranges contingencies under which the student acquires behavior which will be useful to him under other contingencies later on..." (Skinner, 1974, p. 202)

Viewed from the 'behaviorist' perspective, learning results from the repeated and controlled stimulation from the environment that comes to elicit a predictable response from the individual. This repeated pairing of stimulus and response, linked with the application of carefully chosen rewards and punishments, leads to the habituation of the reading act. For example, the child presented with the symbols C-A-T immediately produces the desired word, cat, seemingly without cognitive involvement. Complex tasks are broken down into their components, which are taught without reference to the complex whole, so that reading lessons can proceed with no reference to a text that the child might want to read. The child's intentions play no part. Indeed the concepts of understanding and purpose are absent from this view of education.

In a slightly muted form, the behaviorist conception of teaching framed the official view, leading to instruction that broke all complex tasks down into 'simpler' parts and taught these, outside the context of their purposeful use. So emphasis was placed on systematic

school instruction through carefully controlled primers or reading schemes. These primers were based either on synthetic phonics – tackling written words by building them up through matching letters to spoken sounds – or on the whole word approach. But although the unit of analysis was different, both broke larger wholes down into their component parts, drilled the learner in these, and instructed her in how to put them together again, through texts of unrelieved banality.

A vast amount of research in the first seventy years of the last century was devoted to proving the superiority of each of these two approaches, with Chall's survey and others coming down in favour of phonics over the whole word approach (1967). But each has inherent problems. The whole word approach gives the child no means of working out new words for herself, as it operates through teaching them to recognise words in isolation, for example through 'flash cards'. But for teaching children to read in English, the problem with phonics in general and synthetic phonics in particular is that many common words such as 'child', 'was' and 'one' are not amenable to analysis of one letter or grapheme (the group of letters that represents a single phoneme) at a time.

Supported by some researchers, synthetic phonics is now in the ascendant with many government agencies in anglophone countries, despite its lack of fit with English orthography. Recently, in the teeth of much expert evidence to the contrary (e.g. UKLA, 2005) the government-commissioned Rose Review of best practice in the teaching of early reading (Rose, 2006), recommended that instruction in synthetic phonics should provide the main route into reading for all young children in England.

But like the whole word approach, the various phonics schemes advanced officially neglect the findings of Cattell and Huey – that words are most easily perceived in context and that reading is a process in which language plays a central role.

Reading is a psycholinguistic and sociolinguistic activity

However, in the 1960s these two ideas were picked up and developed by Ken and Yetta Goodman. Their rich vein of work, which continues to this day, is based principally on very close observation of readers, both young children and proficient adults. Ken Goodman's early work showed that children learning to read in the primary grades could read words in context that had defeated them when they were presented in a list (Goodman, 1963).

Finding that even the most advanced readers made errors when reading aloud, Goodman chose to study these 'miscues', claiming that they opened 'a window on the reading process', revealing by their graphic, semantic or syntactic similarity to the target, the nature of the 'cuing systems' readers use to identify words. His wife, Yetta, joined him in this work and together they found that both novices and expert readers are guided by their expectations, both of the content of the text and about the syntactic structures through which it is expressed. When we encounter a new piece of text, our perception of the words is shaped by our tacit grammatical knowledge and our expectations of what it might be about. The more we know about the topic, the less visual information we need to identify the words on the page. This led Ken Goodman to call reading 'a psycholinguistic guessing game' (Goodman, 1967).

This term, and the research that supports it, have been much attacked by both researchers and governmental bodies, as unscientific. It has affronted the very many investigators who have chosen to study reading in the laboratory by exposing readers to isolated words or non-words in a bid to show the primacy of phonics. By contrast, the Goodmans gather their data overwhelmingly in



Jolly Phonics, by Jen Hancock (Flickr)

the naturalistic conditions of home, school or community, through children's encounters with connected meaningful texts.

Initially influenced by Chomsky (1957) to see reading as tentative information processing, the Goodman view of literacy learning developed to take account of work in socio-linguistics. Chomsky has been replaced in Goodman's work by the English sociolinguist Halliday, whose major work *Language as Social Semiotic* (Halliday, 1978) treats language not as a self-contained system, but as the product of the context in which it arises, especially the interaction between the participants.

The Goodmans' work has also been informed by studies of dialect. Since 1971, with a variety of co-researchers, the Goodmans have studied the reading of speakers of different dialects of American English and also the reading in English of those whose first language ranges from Navaho to Arabic. These studies clearly demonstrate how the reader's language shapes what they make from the text (e.g. Goodman and Goodman, 1978).

Although not officially credited, the Goodmans' work influenced the early conception of the National Curriculum (DfEE, 1988), in which children were to be encouraged to use semantic and syntactic cues to identify words, as well as the information provided by the letters. However the phonic backlash was furious, prompting the removal of anything other than synthetic phonics from the list of legitimate tactics for word identification. As noted above, this stance was recently hardened in the Rose Review (Rose, 2006).

Skilled reading operates as a "simultaneous, multilevel, interactive" process.

The introduction in the 1970s of a new generation of computers, capable of carrying out a number of operations simultaneously, while using information from the various operations to inform ongoing activities, prompted the US psychologist David Rumelhart to think of reading in a new way – neither as bottom-up, nor as top-down, but as both at once (Rumelhart, 1976). Rumelhart sees that we have 'top-down' hypotheses – ideas about phrases, words and letters generated by our overall expectations – and also 'bottom-up' hypotheses – ideas about words, phrases and sentences generated from the letters we have perceived. Where they agree, our reading can be smooth. Where they conflict, we need to look back, with extra attention, checking both the accuracy of our word identification and the sense we have made of the text so far. Rumelhart's work makes

it clear that we have to enable our student teachers to teach children to operate at the level of overall expectations of a text while also attending to the letters on the page.

Categorising sounds and learning to read – in English

Of course the English writing system is alphabetic and children need to get to grips with it if they are to learn to read independently. Sound symbol relations matter and have to be learned. If children are to become independent learners, a grasp of the phonological basis of our writing system is essential. But are children aware of the speech sounds that make up spoken words and do these all operate at the level of the individual phoneme?

My husband, a physicist, drew my attention to a ground-breaking paper by Lynette Bradley and Peter Bryant, soon after it appeared in *Nature*, not part of my regular reading diet. It had for some time been recognised that young children are not aware of speech as being separable into its constituent phonemes (the smallest units of speech sound that make a difference to word meaning). Phonological awareness does not come naturally, but has to be learned. Bradley and Bryant showed, in a long-term intervention study with over 300 English children, that instruction in sound categorisation produced long-lasting effects on children's reading performance, particularly when coupled with instruction in letter knowledge.

In a later study, Bryant showed that complete phonological awareness at the level of the phoneme is not an essential pre-condition to learning to read. Instead, it continues to develop as children begin to learn to read (Bryant, 1993). Children are disposed to learn to identify whole words that hold some meaning for them before they learn to identify phonemes. But as they learn to recognise more written words, children can be helped to attend more closely to their component letters, especially those at the beginning. With support, in a context of reading interesting texts, children can become increasingly aware that spoken words are composed of sequences of sound, that relate to letters.

In the course of the initial study, Bradley and Bryant became aware of the salience of rhyme. Children found it much easier to recognise rhyme than to spot individual phonemes. And those who were good at seeing rhymes were more successful at learning to read. Developing awareness of all the component phonemes of a word is more abstract and difficult for children than recognising the units of onset (the part of a one syllable word before the vowel) and rime (the part from the vowel onward). So children can think of 'cat' as c/at, before they are aware of all three phonemes.

Subsequent studies have shown that the onset/rime division has a particular value in English, as rimes tend to be more consistently spelled than individual phonemes, as shown in pairings such as 'wild'/'child' and 'sold'/'cold', since the pronunciation of the vowels is determined by the consonant letters that follow them. This could and should (rime again) be a valuable part of any phonics teaching in English, but has been shoved out of the way by the synthetic phonics band-wagon.

Children learn as well or better by analogy than they do by following explicitly stated rules

Usha Goswami, who has collaborated with Peter Bryant on research into rime as a key to teaching children to read in English (Goswami and Bryant, 1990), has also done important work on learning through analogy (Goswami, 1992). Over fifteen years ago, she showed that children as young as four are capable of reasoning effectively through the use of analogy. Indeed analogical reasoning seems to be more fruitful in teaching children to read than deduction from

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general principles or rule-following. While adults may learn from having principles or rules defined and explained, this tends to be less successful with young children than an appeal to their powers of analogy. A child who can recognise the word 'cold' can use analogy, together with her knowledge of simple onsets, to recognise words such as 'bold' and 'told'.

Again this is a finding that has not received official favour, perhaps because young children are expected to obey, not to reason. However a healthy respect for children's powers of reasoning is something we have striven to instil in our student teachers over recent decades.

Reading and writing are embedded in literacy practices

But reading and writing are more than just cognitive processes: they also have a social dimension. Shirley Brice Heath's study of the ways in which literacy operates in different communities had an immediate impact on literacy educators, as it widened our conception of what learning to be literate was about (Heath, 1983). It opened our eyes to the cultural discontinuity many children experience between home and school. Her book 'Ways with Words', the product of years of anthropological study of three communities in the Carolinas, demonstrates quite clearly that the middle class white small town community she terms 'Maintown' uses reading and writing very differently from their white blue-collar neighbours in 'Roadville', and even more differently from the Black community in 'Trackton'.

In the earliest school grades, the literacy they all encounter makes easy connections with the practices of both 'Maintown' and 'Roadville', after which the 'Maintown' children, with their experiences of books read for information and pleasure, are at a clear advantage. Meanwhile the 'Trackton' children encounter little that draws on their experience of poetic word-play, using written language as a basis for improvisation in church or as the object of collaborative meaning-making. Teaching children to read and write is not a culture-free technological matter, but a cultural process that carries with it strong social messages about which kinds of literacy practices are to be valued and which ignored.

Learning to read and write can also be a social activity

The work of the Russian psychologist Lev Seminovitch Vygotsky has had its influence on many areas of the school curriculum (Vygotsky, 1962, 1978), particularly in his conception of all learning as a social rather than an individual process. In the UK, heavily influenced by Vygotsky, Neil Mercer has shown convincingly that Key Stage 2 children achieve more working collaboratively in small groups than they do working individually, and that the advances made persist in

subsequent individual work (Mercer, 2000). Combined with the idea of reading as a relatively open process of meaning-making, such findings have engendered much productive work on group reading activities, where children share their observations and insights about a text.

A few years ago, my colleagues in the School of Education, Carole King and Muriel Robinson, demonstrated in local schools the richness and complexity of children's interpretations of text when they are enabled to explore them collaboratively in small groups, rather than under the direction of their teachers (Robinson and King, 1995). Such 'literature circles' are marked by the members' freedom to negotiate topics and make observations about any aspect of a text or its reading, rather than the teacher domination of group work in the Primary National Strategy's 'guided reading'. A book co-authored by Carole King and another colleague, Jane Briggs, has proved extremely effective in spreading this practice and has recently been translated into Lithuanian (King and Briggs, 2005).

My own research has been principally concerned with the interaction between teachers, children and text in a whole class situation (e.g. Dombey, 2003). Rather than dominating the class in terms of topic choice and arbitration of correct answers, the highly effective teachers of literacy that I have studied allow children to make substantial interventions and encourage them to make judgements and explore their implications with their classmates through textured discussion.

Close familiarity with rich literary texts empowers children as readers, writers and thinkers

I have had the good fortune to work with highly productive colleagues in research and practice in the field of literacy education, both at the University of Brighton and also at the Centre for Literacy in Primary Education. This is an outstanding teachers' centre in London, which has played a key role in supporting the development of productive classroom practice based on research evidence, rather than governmental diktat. Unusually for a teachers' centre, CLPE has initiated and carried out a number of research projects. One project in particular, *The Reader in the Writer*, has proved enormously influential (Barrs and Cork, 2001). The project involved teachers and children working together to bring powerful literary texts alive in the classroom, through intensely engaging activities including reading aloud for the teachers, and role play and writing in role for the children. The authors conclude:

"[The] evidence suggested strongly that children's reading was developing alongside their writing and that their progress in writing was informing their progress in reading." (Barrs and Cork, 2001, p. 214)

Certainly the children made dramatic advances in their writing, producing at the end of the year texts that were markedly more arresting, more developed, more varied and complex in syntax and more poetic. In their project Myra Barrs and Valerie Cork were strongly influenced by the work of another Brighton colleague, Carol Fox. Her study of the story-telling of three five-year-olds, recorded in their homes, significantly expanded ideas about the kinds of literary discourse young children are capable of mastering, when they are brought up on a rich diet of narrative literature (Fox, 1993). The structural features, syntax, tropes and the vocabulary employed by these young children amply justifies the full apparatus of literary theory used in their analysis, in marked contrast to the thin tales emerging from laboratory studies of young children. Another colleague, Sandra Williams, is currently working in the related area of helping children make meaning from literary texts (Williams, 2008).

Concluding words

These are just a few of the strands of research into literacy education that have influenced my own research and teaching and that of my colleagues at Brighton, and will continue to do so. Over the past century there has been much other important work. A partial list would include such matters as children's styles of literacy learning, the value of engagement in the literacy classroom, children's ideas of what literacy is about and what it has to offer them, how boys approach the task of learning to read and write, the power of a commitment to the written word to instil a thoughtful approach to the world and its inhabitants, and of course, the large and vastly important topic of digital literacy.

All this research must inform what we teach our student teachers. It demonstrates the need to avoid unquestioning orthodoxy and to take proper account of work in this vast and varied field if we are to improve the learning of children in school. As I hope I have also shown, the University of Brighton and its predecessor institutions have played their part in this endeavour, exploring important issues in literacy education and working to apply findings to enrich children's school experiences.

But this should not be just a staff matter. As well as helping them to engage with research, to approach research findings with a properly critical eye and then, where warranted, to apply their lessons in the classroom, we need to continue to support our student teachers in carrying out manageable projects themselves.

Henrietta Dombey is Professor Emeritus in Literacy in Primary Education at the University of Brighton

References

- Barrs, M. and Cork, V. (2001) *The Reader in the Writer: The links between the study of literature and writing development at Key Stage 2*. London: Centre for Language in Primary Education.
- Bullock, A. (1975) *A Language for Life*. London: Her Majesty's Stationery Office.
- Bradley, L. and Bryant, P. (1983) 'Categorising sounds and learning to read: a causal connection'. *Nature*, 301 p. 419 – 421.
- Bryant, P. (1993) 'Phonological aspects of learning to read.' in R. Beard (Ed.) *Teaching Literacy, Balancing Perspectives*. London: Hodder and Stoughton connection.
- Cattell, J. (1886) 'The time it takes to see and name objects'. *Mind* 1,1 p. 63 – 65.
- Chall, J. (1967) *Learning to Read: The great debate*. New York: McGraw-Hill.
- Chomsky, N. (1957) *Syntactic Structures*. The Hague: Mouton.
- Destexhe, A. (2000) 'Modeling corticothalamic feedback and the gating of the thalamus by the cerebral cortex'. *Journal of Physiology*, Vol. 94, p. 394 – 410.
- DfEE (1988) *National Curriculum*, London: DfEE.
- Dombey, H. (1993) 'And they went, they lived there after.' Making written language accessible in the nursery class to children whose cultures don't embrace it. *Changing English*, Vol 1,1 p. 141 – 153.
- Dombey, H. (2003) 'Moving forward together'. In Bearne, E., Dombey, H., and Grainger, T., *Classroom Interactions in Literacy*. Maidenhead: Open University Press.

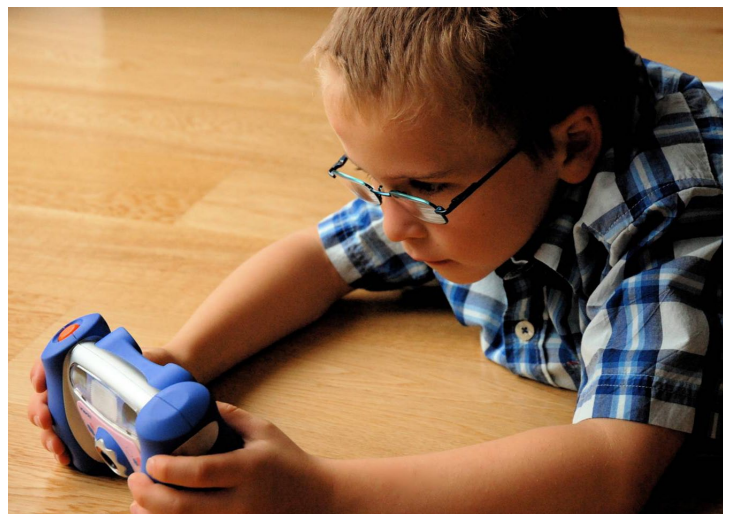
- Dombey, H. and Martin, W. (2000) 'Talking their Way into Text: Language and play in the home corner.' Occasional Paper, University of Brighton Education Research Centre.
- Fox, C. (1993) *At the Very Edge of the Forest: The influence of literature on storytelling by children*. London: Cassell.
- Goodman, K.S. (1963) 'A communicative theory of the reading curriculum.' *Elementary English*. Vol 40, No 3, p. 290 – 298.
- Goodman (1967) 'Reading: a psycholinguistic guessing game'. *Journal of the Reading Specialist*, Vol 6, No 4, p. 126-135.
- Goodman, K.S. and Goodman, Y. (1978) *Reading of American Children whose Language is a Stable Rural Dialect of English or a Language Other than English*. Washington DC: National Institute of Education.
- Goswami, U. (1992) *Analogical Reasoning in Children*. Hove: Lawrence Erlbaum Associates.
- Goswami, U and Bryant, P (1990) *Phonological Skills and Learning to Read*. Norwood, New Jersey: Lawrence Erlbaum.
- Gregory, R.L. (1966) *Eye and Brain: The Psychology of Seeing*. London: Weidenfeld and Nicolson. Fifth Edition (1997) Oxford University Press and (1998) Princeton University Press.
- Halliday, M.A.K. (1978) *Language as Social Semiotic*. London: Edward Arnold.
- Heath, S.B. (1983) *Ways with Words: Language, life and work in communities and classrooms*. Cambridge: Cambridge University Press.
- Hewison, J. and Tizard, J. (1980) 'Parental involvement and reading attainment'. *British Journal of Educational Psychology*. 50, p. 209 – 15.
- Huey, E.B. (1908) *The Psychology and Pedagogy of Reading*. New York: Macmillan.
- King, C. and Briggs, J. (2005) *Literature Circles: Better talking, more ideas*. Royston: United Kingdom Literacy Association.
- Mercer, N (2000) *Words and Minds: How we use language to think together*. London: Routledge.
- Robinson, M. and King, C. (1995) 'Creating communities of readers'. *English in Education*. Vol 29, No. 2, p. 46-54.
- Rose, J. (2006) *Independent Review of the Teaching of Early Reading*. London: Department for Education and Skills.
- Rumelhart, D (1976) 'Toward an interactive model of reading' in S Dornic (Ed.), *Attention and Performance*. Vol. 6 New York: Academic Press.
- Shaywitz, S., Shaywitz, B., Pugh, K., Skudlarski, P., Fulbright, R.K., Constable, R.T., Bronen, R.A. Fletcher, J.M., Liberman, A.M., Shankweiler, D.P., Katz, L., Lacadie, C., Marchione, K.E. and Gore, J.C. (1996) The neurobiology of developmental dyslexia as viewed through the lens of functional magnetic resonance imaging technology. In G.R. Lyon and J.M. Rumsey (Eds.) *Neuroimaging: A window to the neurological foundations of learning and behavior in children*. Baltimore: Paul H. Brookes.
- Sherman, S.M. and Guillery, R.W. (2006) *Exploring the Thalamus and its Role in Cortical Function*. 2nd Ed. Cambridge MA: MIT Press.
- Skinner, B. F. (1974) *About Behaviourism*, New York: Alfred A. Knopf.
- UKLA (2005) *Submission to the Review of Best Practice in the Teaching of Early Reading*. Royston: United Kingdom Literacy Association.
- Von Helmholtz, H.H. (1867). *Handbuch der Physiologischen Optik (Handbook of Physiological Optics)* Leipzig: Leopold Voss. Published in parts from 1856 to 1866, then published in toto in 1867 as Volume Nine of the *Allgemeinen Encyclopädie der Physik*, ed. Gustav Karsten.
- Vygotsky, L.S. (1962) *Thought and Language*. Cambridge MA: MIT Press.
- Vygotsky, L.S. (1978) *Mind in Society*. Cambridge MA: Harvard University Press.
- Williams, S. J. (2008) 'It's all coming together: an encounter between implied reader and actual reader in the Australian rainforest' in *Literacy*, Vol. 42, No. 3 p. 156-161
- Wells, C.G. (1981) 'Some antecedents of early educational attainment'. *British Journal of Educational Psychology* Vol 2, No. 2 p. 180 – 200.

‘It would have been useful to know about that piece of software!’

This is a common response from student teachers when evaluating our provision for ICT in the School of Education, at the University of Brighton. The reply from tutors is usually to point out that it is a bit like saying to English tutors, ‘it would have been good if we could have read that book before we went on teaching practice.’

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Due to the range and fast-changing pace of new technologies, combined with the complexities of making effective use of these within diverse pedagogical contexts, the ICT team have based their provision for Primary and Early Years Foundation Stage student teachers upon a model that aims to develop a critical and sustainable approach to technology in education. It is a vision in which student teachers are encouraged to develop the confidence to explore and make effective and critical use of changing technologies throughout their careers. The concerns of student teachers to develop their competence with specific ICT software and hardware are understandable. However a recent research project provided us with further evidence of the importance of underpinning our ICT provision with a much broader and potentially far-reaching vision of the development of teachers’ ICT capability; that is a view grounded in the notion of teachers taking critical responsibility for their own professional development in relation to technology. The problem then is how do we address these competing needs, on the one hand for relevant ICT skills for education practitioners with the longer term goal of enabling them to effectively adapt any new technological advances within complex professional contexts?



Exploring Early Years digital camera.

Throughout 2008-2009 a small start-up research grant from the Teacher Training and Development Agency UK (TDA) facilitated research into the quality and nature of the Early Years and Foundation Stage (EYFS) student teachers’ experiences with ICT both within the University and in professional practice. The overall aim was to inform module development with regards to the role of ICT within EYFS practitioners’ professional learning and practice. In order to address this aim the following key research questions were identified of which this paper focuses on the first, namely:

- What are student teachers’ experiences of using ICT as a pedagogical tool across the range of EYFS settings?
- How can the university-based training be further developed to support EYFS students’ professional development with ICT?

There is a well established corpus of research on ‘good practice’ with ICT in early childhood highlighting the opportunities for young children to develop a range of capabilities from social skills, collaboration and communication to creativity and positive dispositions towards learning (Yelland, 2005; Siraj-Blatchford & Siraj-Blatchford 2004 & 2006; Plowman & Stephen, 2005 & 2007). However, what is less clear is how the university and professional practice-based experiences student teachers encounter during their course enable them to develop their professional practice in line with such suggested notions of ‘good practice’.

Professional learning – a complex mix

We argue here that professional learning is complex because of the diverse nature of the professional contexts within which student

teachers are required to apply their knowledge and understanding of ICT and the different needs their children present. Consequently it is argued that university-based provision needs to adopt an approach that goes beyond technicist views or what Pachler refers to as approaches 'predicated on a view of teachers as technicians and deliverers,' (2007, p. 249). Professional knowledge and understanding is argued to be far more complex than the straightforward application of a range of competencies to a particular professional context. For example, Eraut (1994) suggests the 'segmentation and packaging of knowledge for credit-based systems seems inappropriate preparation for professional work which involves using several different types of knowledge in an integrated way' (p. 10). Similarly others suggest that knowledge is often transformed in practice. That is, it can be found to be lacking, or in need of reconfiguring (Eraut, 1994; Schön, 1987; Loveless, 2007).

Theories relating to the application of ICT within pedagogical contexts illustrate this complexity further. For example, Shulman captures the complexities of such professional knowledge in his classic theoretical model of pedagogical content knowledge (1986), which highlights the importance of what he terms teachers' 'strategic understanding' and professional judgement when faced with the contradictory or conflicting issues authentic cases of professional practice often present. However, Mishra and Koehler (2006) have recently developed Shulman's earlier model of pedagogical content knowledge to incorporate the integration of technological tools. They suggest:

"Quality teaching requires developing a nuanced understanding of the complex relationships between technology, content and pedagogy and utilizing this understanding to develop appropriate, context-specific strategies and representations." (p. 14)

Barton and Haydn (2006) similarly warn against approaches that overload student teachers with skills-based approaches focusing merely upon the development of competencies within ICT applications. They also suggest that engaging student teachers in collaborative activities with ICT offers them a 'high challenge, low threat learning environment' as attitudes and anxieties towards technology can be significant factors (p. 265). These conclusions were drawn from a survey of student teachers' attitudes to their training and school-based experiences. In order to address the inadequacies of purely skills-based approaches to ICT capability, Angeli advocates a case-based method. In such an approach student teachers study other teachers' use of ICT in teaching and learning through rich descriptions of cases (2004). However, in such an approach it could be argued that it is impossible to capture all of the nuances within a description of a case of ICT practice in the Early Years however rich the description. As Chen suggests, in the Early Years setting 'teachers adapt computer use to accommodate children's varying levels of skills, differing personal interests and optimal social groupings' (2006, p. 181). From such a perspective it is difficult to see how a purely case-based approach could represent such fine-grained nuances within a case.

Despite the merits or limitations of different university-based approaches to developing student teachers' professional knowledge and understanding of the use of ICT in the Early Years, the implications of a complex view of professional knowledge are that personal ICT capability is merely one of a range of factors student teachers will need to engage with in order to develop their professional practice with ICT. Plowman and Stephens' theory of 'guided interaction' relating to the effective use of technology in EYFS settings accentuates this issue further for they observed that within professional contexts it was 'enacted adaptively as a result of practitioners' own interpretation of events' (2007, p. 2). From such a perspective it is clear that what is needed is a broader view

This approach would raise questions about how current and future technologies might be used flexibly and creatively to represent subject knowledge differently according to different learners' needs.

of professional knowledge. Thus we argue that what is required are approaches that locate the development of student teachers' personal competencies with technologies within a wider professional discourse of appropriate pedagogy for the Early Years. This approach would raise questions about how current and future technologies might be used flexibly and creatively to represent subject knowledge differently according to different learners' needs. It would also prompt student teachers to reflect upon their own attitudes and perceptions about teaching and learning with ICT in the Early Years. This broader framework of professional knowledge and practice it is argued then, is predicated not merely upon competencies but upon an openness to professional development and a willingness to adapt to the challenges encountered through professional practice; a process that locates the individual student teacher at the centre of their own professional development with ICT tools. So how did we go about capturing the student teachers' perceptions and attitudes about their university and school-based experiences?

Methodology

We adopted a mixed methods approach. From a quantitative perspective, a questionnaire was given to the whole cohort of EYFS undergraduate student teachers as well as the cohort on a primary undergraduate route (N = 124). The intention was to compare the attitudes and experiences of these two cohorts, covering both their experience of the university-based ICT provision and their school-based experiences with ICT. The questionnaire design was based upon Barton and Haydn's work (2006) and did invite some qualitative responses. Questionnaire responses (N = 120) were coded and analysed using the social science software package SPSS. In order to gather more fine-grained qualitative data a self-selecting focus group of four student teachers from the EYFS course were given two digital cameras each to take into their placement settings and a digital voice recorder. The digital cameras were designed for use in EYFS settings. The rationale for giving the student teachers the digital cameras was that they would have ownership of the technology and being a relatively small and flexible technology it would be easier to trace how the technology was integrated into the student teachers' pedagogical practice. In other words, the idea was that the cameras would act as a kind of keystone from which a number of interrelated factors influencing the student teachers' pedagogical practice with the technology could be observed. Qualitative data was collected from the focus group via audio diaries kept during their final placement and sent to us by e-mail. The students were prompted to reflect on how they had incorporated the use of the digital cameras in their practice. A research officer based in the Education Research Centre also carried out a final focus group interview. The students did not know the research officer. This was felt to be appropriate as they were, at times, being asked to comment on the ICT provision they had received during their course.

A full report on the analysis of all of the data is beyond the scope of this article. The quantitative comparison of the two cohorts' attitudes and experiences did not generally reveal any statistically significant variances; P values on any variances within the means between the two cohorts were generally greater than 0.05 apart from in one domain. This will be reported more fully in a report currently in preparation. This article focuses on the qualitative data, of which we will present an overview here.

Perceptions, attitudes and values – qualitative responses

The qualitative data highlighted the problematic interface between university-based provision and school-based experiences in applying ICT in professional practice. What emerged from the qualitative data was the richness and complexity of students' experiences in using ICT in their professional practice. Such complexity and richness is particularly difficult to make provision for in university-based courses but it is argued here that such nuances need to be reflected in university-based provision for ICT.

The complexity and richness of the students' school-based experiences was manifest in a number of themes within the data. A key theme related to the issue of what software and hardware the student teachers were exposed to in their university-based provision compared to the range encountered in professional settings. This had different facets in that on the one hand it was recognised by the students that there was a significant range of continually developing hardware and software they were likely to encounter in settings, and on the other hand it was impossible for them to be given hands-on experience of all of these prior to their school-based experiences. However another facet to this issue was a distinction they made between the use of ICT for their own professional purposes – creating presentations, keeping records, planning – and the integration of ICT for the direct benefit of children's learning. During the focus group interview the students clearly expressed the attitude that university-based provision should not focus on 'basic' skills in, for example, Microsoft Office applications that could be used to support them in their general professional role, as illustrated by this response from the focus group interview:

"I know some people don't even have the basics in ICT. But I don't think that that necessarily should be what we learn on the course; you know, things like PowerPoint... because it's not actually to do with our Early Years training... I think that people should have that basic training before they come to the university."

On another level this was encouraging as it also indicated an acceptance of responsibility for their own professional development when faced with the need to acquire basic ICT skills. Indeed such responsibility for their own professional development with ICT was a recurring theme throughout the focus group interview in relation to their school-based experiences. The student teachers frequently referred to the need to make time during school placements to engage in play to explore ICT resources which were similar to those they had experienced in university but not quite the same or to simply investigate completely new resources. Their responses illustrated clearly that the application of ICT to practice was rarely straightforward but always nuanced by the particularities of the context and the need to balance professional development issues in ICT with the competing demands upon the student teachers' time as indicated in this comment:

"I'd say you've got different resources on each of the different Interactive Whiteboards... But then again, you wouldn't find that out until you get there. So you just work with what you have. If you've got



time to play around with it and to really get to grips with it, then some of the resources are brilliant."

That is, on-the-job learning was a key professional skill that was identified throughout the focus group interview as an important factor in making appropriate use of the technological resources available within the setting. Furthermore they identified key dispositions that they believed were important in order to facilitate the development of their own professional practice with ICT. Adaptability and collaboration were referred to in their responses. One student teacher commented that with varying levels of understanding with regards to ICT amongst colleagues, 'help[ing] each other is a part of working as a team.' This respondent also commented that she was now 'much more adaptable' compared with her earlier experiences in school at the beginning of the course. It is a fair assumption to make that such adaptability and recognition of the importance of collaboration is more the product of the nuanced experiences of both successfully and unsuccessfully applying ICT in professional practice over time. However, this could also have significant implications for the kinds of ICT-based experiences students engage with in university. Arguably the more experience they have in collaborative work with ICT at university the more they will be able to work collaboratively with ICT in their professional context. From a similar perspective, it was also interesting to note that the richness of the professional context gave the student teachers the opportunity to reflect on the importance of harbouring positive yet critical attitudes and dispositions to professional development with ICT.

The student teachers were critical of what they perceived to be pressures to incorporate ICT into teaching and learning for its own sake. For example one commented that:

"ICT does make teaching and learning easier... [but] being forced to use ICT does not make teaching and learning easier, in the sense that because there's such a drive on using ICT in different areas of learning cross-curricular, and that sort of thing, there's a definite pressure which is actually quite unnecessary."

Such 'pressure' was perceived to come from university and school-based mentors as well as policies such as the E-Strategy (DfES, 2005) with its drive to embed e-learning throughout the curriculum. Similarly additional pressure appeared to come from the increased technological provision they had witnessed over the duration of their four-year course. However, it was encouraging that they retained a critical view of ICT integration and were able to discuss examples of where they had used technology in their teaching and it had not

been the most effective tool to use. Similarly, alongside the use of technological tools to support children's learning some of the student teachers expressed the importance of not using these to replace other beneficial methods to support children's learning in the Early Years. For example:

"Yes, but even with money, you've got lovely resources on the Interactive Whiteboard to do different money calculations and that sort of thing, but sometimes I actually think it's nice for them to have the plastic money, and get their hands into it and be more kinaesthetic."

Whilst the students retained a critical view of the use of ICT in their professional practice, this was also balanced by recognition of the importance of being open to new developments. Indeed one student teacher who had benefited from participating in a school-based interactive whiteboard training session noted the potentially negative impact of a lack of openness to new technologies on professional development, commenting:

"I went to some Interactive Whiteboard basic training that was done in the school, and some of the teachers had decided that they weren't going to be able to do it before they even got there. And I think it's also about the attitude behind the introduction of new resources."

It was clear from the focus group interview that student teachers' experiences of integrating ICT into their pedagogical practice and their professional development with ICT was nuanced by a range of factors ranging from the reliability and quality of the resources at their disposal, their own and others' attitudes towards the role and appropriateness of ICT to the children's learning and the effective management of diverse professional responsibilities to create appropriate opportunities to adapt and learn on-the-job where necessary. Such adaptability was also evident within the audio diaries that the student teachers recorded whilst on practice.

Wisdom in practice

Over the course of the eight week school-based practice the student teachers developed a range of strategies for incorporating the use of the digital cameras they had been given into their pedagogical practice and the children's learning. Access to such flexible and mobile technology, over which they had ownership, had obviously played a role in the range of strategies that emerged. Whilst all of the four student teachers found they were able to incorporate the use of the cameras into the various topic-based work they were doing, they went about this in different ways putting emphasis on different aspects of the work and activities. In the initial stages some of them modelled the use of the cameras to the children whilst others simply made the cameras available to the children as a resource during free choice for them to explore. In order to facilitate this one of the student teachers put the cameras and leads in a small box under her chair but let the children borrow it whenever they wanted to take photographs of each other carrying out different activities. In response to the initial high demand for the camera this teacher decided to limit the number of photographs the children could take at one time. Another student teacher modelled some of the extra features on the cameras for the children such as adding effects and video capture as they were quite familiar with digital cameras. Yet another student teacher asked the children to imagine and explain what they wanted to take a photograph of before being given the camera. What the audio diaries reveal is that such decisions were based upon the student teachers' evaluations of the children's initial responses demonstrating their developing professional judgement and wisdom about how to integrate the technology within the specific context and what they had gleaned about the children with whom they were working. For example, one of them recognised that several of the children were very familiar with using the cameras due to their experiences from

home so she asked these children to act as demonstrators for others who needed help.

Similarly, as the student teachers adapted further to the integration of the cameras into their professional practice other differences emerged. One of them exploited the interoperability of the cameras combining them with the interactive whiteboard in order to use the children's photographs as discussion points to develop their speaking and listening skills as well as their confidence in using the interactive whiteboard. For example, she commented:

"It also built on the children's social skills and they were encouraged to share and work together when taking pictures. It built on the children's speaking and listening skills and some of the children showed others how the camera worked. I would often transfer the pictures onto the interactive whiteboards. We shared these as a class and the children really enjoyed looking at themselves and the pictures that they had taken."

However, despite having the facility to use an interactive whiteboard another student teacher thought that the camera work became a more real and rewarding experience when the children were involved in printing out the photographs and using them to create a physical display.

In this way the audio diaries reflected a range of different approaches emerging as the student teachers developed and adapted their professional practice according to the nuances of their context and their children. Whilst all of the student teachers facilitated both planned and independent use of the cameras with the children clear variations emerged in how this actually looked in practice due to the different ways in which the student teachers adapted and responded to their differing contexts combined with their own development in terms of the pedagogical approaches they felt comfortable with. What then can be learnt from these student teachers' experiences of incorporating ICT into their pedagogical practice in the Early Years and what conclusions can be drawn about how to adapt the experiences they are given within university to prepare them more effectively for the challenges they face in practice?

Conclusion

This research project has offered a glimpse of the complexities of student teachers' professional learning with technological tools in pedagogical contexts. It is clear that the link between university-based provision and professional practice incorporating technological tools is not straightforward; mixing as it does a range of factors from the experiences and confidence of the student teachers to the needs of the individual children and their contexts. It is inevitable that due to the fast-changing pace of new technologies, some student teachers will experience anxiety regarding their own ICT skills and this was certainly reflected in the qualitative responses on the questionnaires from both the primary and the EYFS cohorts. However, regardless of the level of competence a student teacher might exhibit, a willingness and confidence to engage in on-the-job learning seems key to adapting to the complexities of the professional context. All of the teachers in the focus group accepted a high level of responsibility for their own professional development with ICT, being prepared to experiment with and explore technological tools. Whilst some methodological caution should be exercised in generalising from the responses of this limited focus group, it would suggest that in the design of university-based ICT provision we would do well to create the kinds of opportunities that mirror the experiences student teachers have in school. These experiences appear to be characterised by exploration, adaptation, collaboration and taking responsibility for one's own professional development with ICT. It was particularly encouraging to hear the student teachers reflecting critically on the appropriate

use of technology to support learning and teaching, and it was also encouraging to see the ways in which they responded first and foremost to their children in developing their own nuanced strategies for incorporating the technologies into their practice. Our challenge now within the university-based ICT provision is to design and create further opportunities that challenge student teachers to take 'control over the process' of innovating with technology (Laurillard, 2008, p. 144). The capacity to explore, adapt, collaborate and reflect critically upon new technologies appears to be far more vital to the effective integration of ICT into professional practice than knowing about 'that piece of software'!

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References

Angeli, C. (2004), 'The Effects of Case-Based Learning on Early Childhood Pre-Service Teachers: Beliefs About The Pedagogical Uses Of ICT' *Journal Of Educational Media*, Vol. 29, No. 2, p. 139-151.

Barton, R. & Haydn, T. (2006) 'Trainee Teachers' Views On What Helps Them To Use Information and communications technology effectively in their subject teaching' *Journal of Computer Assisted Learning*, Vol. 22, p. 257 – 272.

Chen, J. & Chag, C. (2006) 'Using computers in early childhood classrooms; teachers' attitudes, skills and practices' *Journal of Early Childhood Research*. Vol. 4, No. 2, p. 169 – 188.

DfES (2005) *Harnessing Technology: Transforming Learning and Children's Services*. London: Department for Education and Skills.

Eraut, M. (1994) *Developing Professional Knowledge And Competence*, London: Routledge Falmer.

Laurillard, D. (2008) 'The Teacher As Action Researcher: Using Technology To Capture Pedagogic Form'. *Studies In Higher Education*, 33, 139 – 154.

Loveless, A. (2007) 'Preparing To Teach With ICT: Subject Knowledge, Didaktik And Improvisation,' *Curriculum Journal*, Vol.18, No.4, p. 509 – 522.

Mishra, P. & Koehler, M. J.(2006) 'Technological Pedagogical Content Knowledge: A New Framework For Teacher Knowledge'. *Teacher's College Record*, Vol 108 No 6, p. 1017 – 1054.

Pachler, N. 2007. 'Teacher Development: A Question(Ing) Of Professionalism'. In: Pickering, J., Daly, C. & Pachler, N. (Eds.) *New Designs For Teachers' Professional Learning*. London: Institute Of Education.

Plowman, L. & Stephen, C. (2005) 'Children, Play And Computers In Pre-School Education,' *British Journal Of Educational Technology* Vol 36, No. 2, p. 145 – 157.

Plowman, L. & Stephen, C. (2007) 'Guided Interaction In Pre-School Settings' Teaching And Learning Research Programme (TLRP) No. 15.

Schön, D. A. (1987). *Educating The Reflective Practitioner*, San Francisco: Wiley & Sons.

Shulman, L. S. (1987). 'Knowledge And Teaching: Foundations Of The New Reform.' *Harvard Educational Review*, 57, 1 – 22.

Siraj-Blatchford, J. (Ed.) (2004) *Developing New Technologies For Young Children*, Stoke-On-Trent: Trentham.

Siraj-Blatchford, J & Siraj-Blatchford, I. (2006) *A Guide To Developing The ICT Curriculum For Early Childhood Education*, Stoke-On-Trent: Trentham.

Yelland, N. (Ed.) (2005) *Critical Issues In Early Childhood Education*, Maidenhead: Open University Press.

Should I stay or should I go?



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Introduction

This research project involved interviews with ex-students who completed a continuing professional development qualification (Dip HE Youth & Community) five years ago (in 2002) at the University of Brighton.

The aims of the study were:

- to discover the impact that the course had on their lives, both personally and professionally;
- to make appropriate changes to the course in the light of these findings.

I hoped that the findings would be of interest to a range of tutors, course leaders, employers and other professionals involved in work-based learning who have to manage the tension between government policy and professional identity and autonomy. I looked at the issues that arise from continually shifting goal posts and the need to respond to change. I wanted to consider the extent to which these ex-students still consider themselves 'fit for purpose,' in terms of meeting the needs of their professional roles, five years on. The key question was 'how do we best prepare our students for facing continual change?'

Methods and contexts

I conducted nine individual semi-structured interviews which were recorded and then transcribed. A content analysis was then carried out, and key quotations were used to illustrate the voices of the students.

The course from which the participants were drawn was first validated in 1999 as the Dip HE Youth & Community, latterly the Foundation Degree Youth Work. This remains today an employer led programme, delivered in partnership with local authority youth services, with great emphasis on professional practice and development.

The course is validated externally by the National Youth Agency (NYA) and successful

students are deemed to be 'professionally qualified' as youth workers according to the Joint Negotiating Committee (JNC) framework for youth and community workers. Local authorities and many voluntary and independent sector employers use the JNC 'benchmark' for employing staff at a certain level of responsibility. Hence graduates of this course can expect greater employment opportunities and access to enhanced pay and conditions of service through holding this qualification. Applicants are normally expected to meet a range of entrance requirements including having appropriate prior experience and qualifications.

Shifting policy contexts

Since the course started in 1999 there have been a number of government policies and initiatives which have influenced the roles of youth workers. I was increasingly aware that in this fast changing landscape, it was crucial to ensure that the course was able to equip people to do their jobs, not only now but in the future. The Every Child Matters agenda (DfES, 2003) and the subsequent 2004 Children's Act resulted in a move away from generic, centre-based youth work provision – universal service – to specifically targeted work with individual, vulnerable young people. The Bridging the Gap paper (SEU, 1999), current at the start of these students' course, led to the introduction of the Connexions Service. Further policy developments have led to the Integrated Youth Support Services with the formation of Children's and Young People's Services (Children's Trusts) which has resulted in a move away from a clearly defined Youth Service.

There is now much more focus on inter-professional working and multi-agency teams. There are also fewer services offering the opportunity for voluntary engagement by young people in youth service provision, as services are required to demonstrate that accredited outcomes have been achieved by young people. Youth Support provision is now much more government led and youth support workers are increasingly accountable in terms of government targets and agendas.

Student Voices

Of the first cohort of 18 students starting in 1999, 13 completed and I was able to

interview nine of them for this research project. They were a diverse group, most with previous youth work experience, but few following a traditional academic route into higher education. I analysed the data from the perspectives of four categories concerned with the reasons they applied to do the course in the first place (initial motivation), their learning journey whilst on the course, the impact the course had on them, and some exploration of where they were five years after the completion of the course. I'll discuss the first three of these categories concerning their perceptions of the course, before going on to discuss how the policy and context changes have affected these youth workers.

In discussing their initial motivation to join the course, many of the participants experienced recognition by their employers, and encouragement to gain a professional qualification. For example, one commented:

"I was actually asked if I wanted to do the course by a senior manager, and that was really great for me; I felt somebody had sought me out – that somebody thought I was good enough to do this."

Similarly, others wanted to make a career of youth work, either as a change of existing role or as a progression from a part-time role. Some expressed a desire to be paid a professional rate for the job and others were motivated by a wish to do something for society.

"I remember thinking like I'm enjoying working with young people and if I want to make a career out of it or I want to do this as my job as opposed to an 'add on' to working in a book shop, what I need to do is get a professional qualification. And that was my main motivation, to essentially open more doors for me."

In terms of their learning journeys whilst enrolled on the course, for some the course meant learning about youth work as a relatively new worker, and for others who were already more experienced, it meant unpicking their practice and re-learning. Those who had returned to study after a long break had experienced greatly increased levels of confidence as a result of being successful on the course. All of the students



talked about having learnt to relate theory to practice, and many talked about the power of learning from each other in the group. Most of them spoke about now having the ability to reflect on and analyse their practice and to recognise and question their values and beliefs about youth work. In this sense, for some, the course had life-changing implications, as commented here:

“It was massively life-changing really, because I was so new to it. It wasn’t the studying as I’d just finished my degree, so that wasn’t a life change for me, but learning about youth work and the ideology of youth work. It was quite personally enriching really, because I learnt a lot about things that I probably didn’t really understand before.”

The immediate impact the course had on students varied. Some had gained new jobs in youth work as a result of the course, and all voiced the view that they felt much more professional. There was a recognition that not only had they gained themselves, but that their employers had gained from their increased ability to do the job well and operate as professionals.

Those students who were new to studying at higher education said that they realised that learning felt positive again and had resulted in them wanting to continue on to the honours degree. Their own studying seemed to have a ‘knock on’ effect for other staff they worked with, who then also sought CPD opportunities and career progression. Another key issue raised was the notion of now belonging to an identified community of practice as a professionally qualified youth worker. All spoke about how their practice had improved, and some mentioned that they

now had a more proactive approach to their work with young people, rather than reactive, as evidenced here:

“Professionally, I think my group work skills improved dramatically, my confidence in speaking to other professionals, going and doing presentations. I had an understanding of what I was talking about and what was really behind what I was talking about, and able to have a full understanding and explain that clearly. So I think for me, professionally it was my confidence, to believe in myself as well as the work I was doing.”

Five years on and beyond

Many of the students had progressed on to management posts within the Youth Service and felt themselves to have made the shift from part-time, unqualified youth workers to full-time professionally qualified, capable, high level workers. Others who were senior practitioners were now considering applying for management posts. For example, one commented that, “I’m happy where I am, I really enjoy the work I do, but I think yes, I could possibly be ready for a move into senior management level.”

They all recognised huge changes in youth work over the five years and some identified the need for continual training updates. Some talked about experiencing a conflict with government policy and their own values, and many mentioned the move from a universal service to targeted provision, raising the issue of feeling they were ‘swimming against the tide’. Similarly, some of them felt dissatisfied with the way the role had changed, feeling that it challenged their values and compromised their beliefs about their professional role. This was evident in the following responses:

“I am struggling with the balance between the way I perceive the government is taking youth work and the way I believe youth work should be, and I’m finding that’s a major conflict.”

“I feel youth work has changed – it’s now very target focused. It’s hard to be a generic centre based worker. I feel we’re swimming against the tide of the targeted provision. It has become quite difficult, delivering generic youth work.”

Others didn’t feel so negative about the changes but were more resigned to working within a system under constant review.

“I feel in youth work you don’t really need to change careers, because it changes it for you. You stay around and stay around and another policy will come along and they’ll give me another job in a couple of years time, I’m sure they’ll have a restructure and a rethink and I’ll be doing something else.”

Conclusions and implications for course development

I felt that the main issue to emerge from this project was about the ability – or willingness – to adapt to change. Five years on, youth work is now much more target driven and about accredited outcomes for young people. There are fewer opportunities for voluntary engagement and much more emphasis on providing targeted interventions. The focus is on working with vulnerable and socially excluded young people, as the more generic, universal youth work seems to have taken a back seat. These shifts are mainly due to changes in government policy. Since these students qualified we have seen Every Child Matters (DfES, 2003), Youth Matters (DfES, 2006), Aiming High for Young People (HM

Treasury, 2007), and the Youth Task Force (DCSF, 2008).

The course really helped students to develop and understand their own values, attitudes and beliefs about youth work. Some have found it hard to stay true to their values in the current climate. Many have had to adapt to the changes in order to stay in their jobs, whereas for others the changes have been too great and they have felt unable to change and so have chosen to go. Some of this latter group have not left altogether, but have side stepped; for example, from face to face work into a training role. Others have left the Youth Service to work in a different context with young people.

In terms of my own learning journey, it was encouraging to hear from everyone that we had done a good job – everyone gave positive feedback about the course. All cited increased confidence in themselves, both personally and professionally. It seems that the youth work world we prepared them for five years ago has seen vast changes and the notion of ‘accept and adapt’ or ‘reject and refuse’ – fight or flight – was clearly apparent in the responses from the participants of my research. This would imply a need to constantly review our programmes and conduct this type of longer term evaluation in order to gain a clearer picture of the sustainability and relevance of professional development programmes.

The challenge for me as a course leader for continuing professional development programmes is to work with our students to prepare them for continual change. In this fast-changing world, ensuring that we are best placed to equip people to do their jobs is vital.

We have recognised the need to develop the scope for working and learning with other professionals to embrace a multi agency and partnership approach to work with young people and young people’s services.

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References

Children Act (2004) London: HMSO.

Department for Children, Schools and Families (2008) *Youth Taskforce Action Plan* Nottingham: DCSF Publications.

Department for Education and Skills (2003) *Every Child Matters*. Nottingham: DfES Publications.

Department for Education and Skills (2006) *Youth Matters*. Nottingham: DfES Publications.

HM Treasury (2007) *Aiming High for Young People: A ten year strategy for positive activities*. London: HM Treasury / DCSF.

Social Exclusion Unit (1999) *Bridging the Gap: new opportunities for 16 – 18 year olds*. London HMSO.

YouTube and Student Presentations

It's Not Black and White

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Introduction

Media literacy in the digital age can mean different things in different social settings. In the wider society, media literacy can mean enabling citizens to have the skills to access, consume and manage information that can enhance their participation in civic society and decision making processes. Similarly, media literacy in the academy must be understood through the standards, values and ontological perspectives that the academy holds in approaching knowledge, knowledge formation and information, particularly with relevance to the internet. This paper argues that the starting point of media literacy in the academy is helping students understand that educational institutions are cultures in their own right. The ways in which the academy judges and treats knowledge need to be distinguished from students' engagement with the internet as a social tool embedded in their daily lives where it facilitates social relationships and networks. On the other hand, the academy needs to be aware of how the internet is re-configuring social relationships and cannot be in denial about the relationship the internet has in mediating reality and relationships.

Opening up the debate

Many educators would attest to the fact that the internet remains a contentious and controversial tool in the educational environment. In recent years there has been a trend for students to use YouTube and similar video portal sites to augment oral presentations. In a class which we teach jointly a colleague, overwhelmed by the number of online clips shown during seminar presentations, queried this, partly out of curiosity but mostly out of sheer anguish at the way YouTube had started to overwhelm and become a dominant presence in these presentations. The question was greeted by the students with a stunned silence as YouTube for them is unproblematic. To problematise it in an educational setting seemed to somehow evoke a digital divide between us (i.e. the educators) and them

(the technologically savvy young adults). After a long silence many vouched for the effectiveness of pictures and images in communicating an argument whilst others vocalised its significance for a younger generation where consuming YouTube, they argued, was very much entwined with their popular culture and imagination. Others pressed the point that YouTube facilitated a sort of 'show and tell' where they could bring the whole of the world into the classroom without leaving it. The cynicism that we as educators raised was quelled through the enthusiasm and resounding belief in these audio/video platforms. As we were teaching a class on media theory at level one it seemed only appropriate to open up these debates with the students and to enable them to be reflective about the sources and technological aides they employed in the classroom.

Integrating YouTube in the Academy

In the last semester YouTube has been a vital part of student presentations. We sat through various clips ranging from amateur home

videos to Hollywood classics, and often the voice of the presenter would interject to invite the audience to engage through the moving image and beyond the discursive paradigms. In some instances, images and sounds set a positive tone and created immediate social connections between shy and withdrawn level-ones who had previously been anxious about appearing awkward or inept in front of their peers. YouTube provided an instant distraction for the novice presenter, inviting the audience to fix their gaze on the moving images instead and to perhaps form a social connection through them. The social and cultural connections that YouTube mooted were instantly recognisable but their constant inclusion and their educational relevance still needs further investigation and reflection. Some educators might seek to reverse the 'Youtubification' of presentations, forcing students to present orally and to cultivate the art of rhetoric and listening. Soundbites and visuals may diminish the ability to assess topics critically and to form arguments through verbal reasoning, and equally they may hinder students from developing their oral presentation skills. Additionally visual aids



are meant to assist the communication of topics but not to overwhelm by re-mediating everything through soundbites and images. The skills of articulation, debate and critical engagement through oral presentation and communication, some may argue, may be lost forever with YouTube now setting the tone in communicating ideas. Whilst these are important considerations, the questions should not be about banning the use of videos obtained from the internet but how the medium can be used in different subject fields and educational contexts. A more nuanced and integrated approach is required from the academy. The academy on its part needs to understand how social networking sites and other internet applications such as search engines are not divorced from students' day-to-day engagements. This paper argues that media literacy for educational institutions involves being both aware of students' use of the internet but equally educating students about the values the academy holds with relevance to knowledge creation and dissemination, and where the internet as both a social and educational tool should be placed within that ontological premise. To dichotomise the internet as a tool that should be disembedded from everyday life would be to impose a synthetic barrier without reconciling the cultural differences existing between the younger generation and the academy. Whilst the internet presents new challenges for educators, these challenges are a necessary and vital part of keeping the academy in the forefront of tackling the issues presented by technological advances which have changed the way we search, archive, validate and disseminate knowledge.

Banning the internet or aspects of it may create a dissonance between the theories and assumptions we hold in the field and the approaches we take as educators. In the field of media and communications, for example, it could contradict some of the theoretical and ontological assumptions we make about audiences, their agency and about the salient debates on media literacy. Firstly, in the field of media studies we often unpack theories about the 'active audience' where audience reception theories have accorded far more intelligence to the audience as an individual and a collective. This assumes audiences have agency and can be discerning. On the other hand, we talk about audience vulnerabilities and risks and need to make audiences and consumers aware of these dialectics through awareness and skills in negotiating old and new media. Equally we discuss the media phenomena of 'dumbing down' and 'tabloidization', making students aware of how the emphases on pictures and human interest stories have led to an erosion of serious debate. This 'dumbing down' is

not a process confined to newspapers or manifested through the proliferation of reality television, but can equally be visible and present in other spaces of social and political life where the public spheres shrink and the obsession with celebrities, the trivial and the inane reconfigure our sense of ethics and engagement. Precisely because we delve into these issues, YouTube cannot be cast out of our pedagogical orientations, not just in the field of media studies but in other fields where knowledge is being constructed, stored and archived in digital environments, along with moving images and soundbites. We need to have a more evolved approach to new media technologies in contemplating how they can be incorporated into the ways we teach and learn.

Absolutes vs nuances

As with the debates about YouTube those concerning the internet cannot be about absolutes. They need to be more nuanced than that. With much of our social, political and economic life reconfigured by the internet, the educational environment cannot lie above or beyond it, nor can it seek to trivialise student engagements with it. In banning the internet or YouTube we deny students an essential part of themselves; the ways in which they construct their identities, maintain social ties and networks and stay connected to the world around them. The internet is an integral part of student existence, consciousness and social imagination. From this perspective, moving and still images and the technologies that allow us to download and upload them are part of the screen cultures that have emerged in the past few decades. Our ability to retrieve and post images with the click of a mouse and to store them in our personal digital archives and mobile technologies, and to share them through mobile telephony or email, blogs and social networking sites, forms an integral part of modern life.

The valorization of image is not just a consequence of the internet but an ongoing cognitive bias in our human civilization made manifest through time and history with paintings, art, symbols and technological innovations such as television where image has placated and re-negotiated our sense of reality, rationality and aesthetics. Undeniably, the challenges posed by these new technologies to our societies in general, and in student communities in particular, are multi-faceted and complex. Universities and educational institutions cannot afford to pretend that the internet, or even YouTube for that matter, should remain safely out of their domain.

Universities need to be in the forefront of understanding these phenomena. Educators

cannot simply seek to deny their existence, and it is precisely through our engagements that we can mediate the ways we use the internet productively in teaching and learning environments. Plagiarism is often constructed as a phenomenon made more rampant by the internet and often the whole of the internet is maligned as 'dumbing down' education and leading to the 'cult of amateurs' (Keen 2007). This argument undoubtedly smacks of technological determinism and instead of critiquing the World Wide Web for creating a cut-and-paste generation, the true challenge for educators lies in facilitating students to engage with the internet critically where their ability to select and discern credible information should constitute a rudimentary part of media literacy in educational institutions. The internet does not just flatten the dichotomy between expertise and non-expertise, it reclassifies and inserts its own typologies in organizing information and knowledge mediated by commercial motive and enterprise.

The vulnerable and the media literate

For the educator, the answers do not lie in obfuscating the internet but in coming to terms with it head on. Our ability to mediate the internet as an educational resource and a tool for teaching and learning requires us to question our definitions of media literacy. With the advent of the internet a whole plethora of literature has emerged on the concept of media literacy. The internet has been crafted as a complex beast in terms of what it reveals, what it conceals, and how it circulates data, and can empower as well as make us increasingly vulnerable. Not having the skills to navigate technology and content is recognised as a form of vulnerability which can create a qualitative divide between citizens in the wired world. The issue of media literacy and vulnerability is intimately intertwined with citizenship and consumption, and academic institutions cannot seek to be divorced from these vital issues where the lack of media literacy (including the ability to discern between the different values different spaces hold) can lead to digital divides and social exclusion.

Media literacy in terms of the educational environment requires a further dimension of discerning what constitutes credible knowledge or information on the internet. It has to veer beyond the ability to acquire skills that support our needs as a consumer, audience or citizen in the digital environment. In the educational setting it has to illuminate how academic environments and institutions construct and validate knowledge and our ontological and epistemological positions in enabling different fields and disciplines to

develop over time and space, both historically and culturally.

Media literacy in an educational setting should incorporate the critique of the web as a repository of knowledge and a platform of knowledge formation where new communities of practice emerge. This means highlighting the manner in which educational institutions, academia in general, and different fields or disciplines, classify and define expert knowledge. The academy's approach to knowledge and its distinction of what is expert or credible knowledge should provide an ontological platform to approach the web. This awareness constitutes an important component of the concept of media literacy which we should impart in our universities. Just as we initiate students into understanding how our physical and virtual libraries are organised and the myriad of academic sources which are available in them, we equally need to run internet literacy courses tailored to approach the web as not just another educational resource but one where there are attendant difficulties of integrating it with the educational environment from a qualitative sense. Whilst educators may differ in their approaches in terms of pedagogy, a critical examination of the internet is vital. This would enable students to both question and justify the web sources from which images and text are cited in their oral and verbal presentations. The need to justify their selection of video clips in seminars often gives an insight into how students engage with their presentation topics. Every so often, when the technology fails to broadcast their YouTube video, students tell their peers what prompted them to bring a specific site or image to the attention of others. This is a starting point in encouraging students to be discerning in their engagement with relevant literature.

Media literacy in the digital age must address the philosophy of knowledge formation in the academy and in our individual fields. It must also be reflexive about the biases and the elite discourses that emerge in our cultures of practice, taking academic life as a civilization in its own right. This means that media literacy must encompass critical engagements with the ontological and theoretical premise which the academy imbibes as 'knowledge', and equally with the standards educators impose. Our software programmes for plagiarism, our virtual delivery platforms, the range of technological tools which we employ to communicate with students en masse, near or far, locate us firmly as part of a community of practice that cannot seek to deny the integration of new media technologies in our everyday lives and our educational infrastructure. With more and more print journals going online and

with the availability of open source journals and academic literature, the internet will remain a platform to retrieve and engage with information and knowledge. The occurrence of a vast amount of data on the internet and its sheer expanse cannot be the basis to throw the baby out with the bath water.

In conclusion

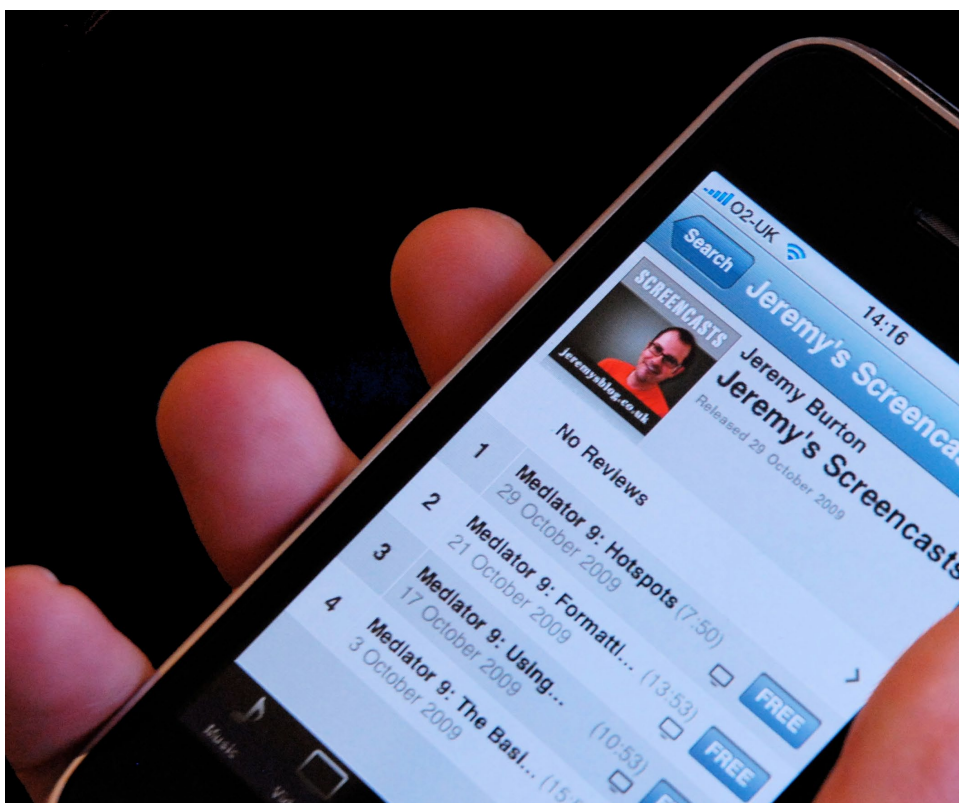
The student in the digital age is confronted with more opportunities but also more dangers because of the internet. The vast array of resources, whether physical or virtual, requires her to be more savvy and discerning in the selection of sources and the ways in which she engages with digital content. Equally, she has to be informed and aware of the biases, values and standards that the academy holds in assessing knowledge and information. The whole debate goes back to Christine Hine's (2000) argument about the double articulation of the internet where it is shaped by our cultural contexts of use on the one hand, whilst the internet is equally capable of producing culture in its own right, on the other. Whilst students create new forms of culture on their internet, using it as a social and cultural tool, in the educational setting they have to be mindful of mediating it through the values of the cultural context that the academy imposes. Media literacy must be about understanding the internet as a multi-headed hydra where a myriad of cultures, networks and practices can co-exist and discerning

how different cultural contexts, including academic institutions, can impose different values on the knowledge and information that can be found on the internet. Understanding the values we impose to evaluate information will constitute a key component of media literacy.

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References

- Hine, C. (2000) *Virtual Ethnography*. London: Sage.
- Keen, A. (2007) *The Cult of the Amateur: How Today's Internet is Killing Our Culture*. New York: Doubleday.



Learning goes mobile! Lecturer Jeremy Burton's blog available online or through a smartphone to support students with ICT.

Differentiation in the context of teaching secondary mathematics

Briony Turner

This paper explores some of the issues of inclusion, differentiation and diversity as they relate to teaching practice. It first discusses what is meant by the term 'differentiation', particularly in the context of current educational strategies in the UK, and some of the common perceptions that relate to this.

Through reference to experience gained in teaching mixed ability year 7 classes in two different schools, the multifaceted nature of effective differentiation and the broad range of influences on learning that must be considered will be highlighted. It will be seen that effective differentiation requires far more than simply catering for variation in ability or attainment within a particular classroom.

Consideration of the full extent of diversity within the mixed ability classroom will clearly be seen to have significantly broader relevance and relate to good teaching practice in general, including the effective teaching of classes that are set by ability.

What is differentiation?

As noted by Visser (1993), the practices of setting and streaming and the provision of separate schools for students of particular abilities or needs have previously been incorporated into definitions of 'differentiation'. This is no longer acceptable, with differentiation very much seen as being relevant to all students, and encompassing consideration of far more than just 'ability'. Much of this change in perception in the UK relates in part to recent policy directives in terms of the Personalised Learning agenda, to which it is strongly linked, and the focus of the Every Child Matters initiative, which emphasises that every student should be presented with the opportunity to achieve and meet their own individual potential.

So what is differentiation? Stradling and Saunders (1991) report that while an atmosphere now exists in which there is high agreement on the existence of diversity in the classroom, there is less clarity and consistency of opinion on how to respond to it. Dickinson and Wright (1993, p. 1) provide a definition

of differentiation as 'a planned process of intervention in the classroom to maximise potential based on individual needs.' It is important to note here both the notion of differentiation as being something that requires planning, and of it being a process, not a single event. The question of what exactly it involves, however, is less clear.

It is perhaps useful to consider differentiation in terms of what it is not. According to Tomlinson (2001, p. 4), 'Many teachers incorrectly assume that differentiating instruction means giving some students more work to do, and others less.' In other words, differentiation is not about keeping everyone 'busy' but rather, about keeping everyone appropriately challenged and engaged. Similarly, differentiation should not be seen as 'how you deal with special needs' (Visser, 1993, p. 37). A well differentiated learning experience will of course deliver this, but will also do much more.

In achieving effective differentiation, a teacher has an enormous range of contributory factors to consider that will impact the diversity of their classroom. These include:

- Prior attainment and understanding (often lazily termed 'ability')
- Genuine ability and potential
- Recognised special educational needs
- Influences of learning English as an additional language
- Social inclusion issues such as home situation and other personal problems
- Motivation and attitude to learning, including self-perceptions of ability
- Previous enjoyment and experience of the subject
- Cultural influences
- Learning style preferences

The list above is clearly not exhaustive and is meant only to provide an indication of the broad range of factors likely to influence students' engagement and success with their learning. It should be clear that, 'Talk of differences in levels of attainment must not be an excuse for implying that the only significant variation between learners is in a single dimension of 'ability' (Weston, 1992, p. 6).

Tomlinson (2001, p. 1) states that differentiation 'means 'shaking up' what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn.' We thus begin to appreciate that variation is required not only in the difficulty and/or expected outcome of some tasks, but in the style of teaching and learning that takes place.

Stanley (2006, p. 17) rather succinctly notes that, 'Learning is a complex process and it is very easy to make it hard for some all of the time.' In this lies recognition of the existence of different learning styles, of expected variation in these across a class, and of the ensuing need for this to be met with a variety of teaching styles and resources. Stanley further notes that much literature concerning learning styles suffers from a tendency to omit the word 'preferences' from the discussion and I have certainly observed the labelling of students as Visual, Aural or Kinaesthetic learners for example, and the encouragement of similar self-identification. This of course ignores both the existence of numerous other models of learning styles and characteristics and the acknowledgement that a preference need not be exclusive or all-encompassing.

On this subject, Coffield et al. (2004, p. 118) caution that "A thriving commercial industry has also been built to offer advice to teachers, tutors and managers on learning styles, and much of it consists of inflated claims and sweeping conclusions which go beyond the current knowledge base and the specific recommendations of particular theorists." Proper acknowledgement of the need for variety in pedagogy and instructional techniques however, represents one important step towards developing effective differentiation in instruction. As Tomlinson (2001, p. 5) notes, 'Differentiated classrooms operate on the premise that learning experiences are most effective when they are engaging, relevant, and interesting' and that 'students will not always find the same avenues to learning equally engaging, relevant, and interesting.'

Perceptions of 'difference'

Many discussions of differentiation note the importance of a perspective that expects rather than simply recognises diversity in the classroom. Goulding (2004) is among those who suggest that differences should be expected as the norm rather than viewed as a problem that requires correcting, and that this attitude is likely to benefit all students through a more naturally inclusive approach to

differentiation. Tomlinson (2003, p. 124) refers to Paine in stating that 'when teachers see differences as deficits in students, rather than as classroom characteristics, this may lead teachers to relinquish responsibility for the academic success of each learner.'

I certainly believe that a perspective in which diversity is expected reduces the likelihood that teachers will fall into the common trap of 'teaching to the middle' and viewing those who are not satisfied by this approach as problems to be dealt with away from the norm of the class.

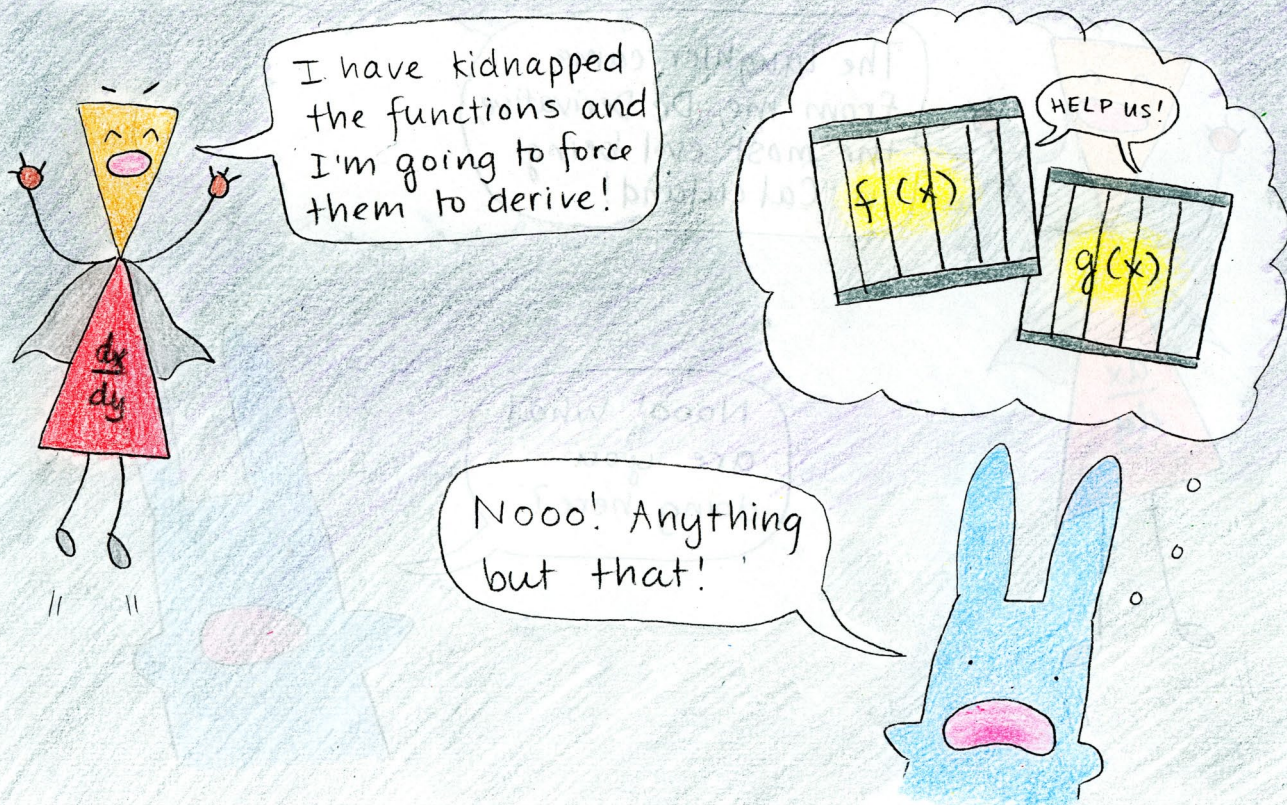
This perspective should of course extend to classes themselves, with recognition that, being made up of a range of individuals, it is unlikely that two different classes will be best served by being taught exactly the same material in exactly the same manner. I have, in my experience, already found some benefit in the reuse of resources prepared for different classes, but have not considered simply reusing a complete lesson.

Indeed, I have observed a tendency for those teachers who I regard as effective to pay the most attention to adapting and modifying resources for the particular classes that they are about to teach.

Additional considerations from a mathematics perspective

Consideration of the topic of differentiation will quickly uncover much discussion on the relative importance of the differences that are likely to impact on teaching and learning across a class of students. Much of this work makes a concerted effort to highlight the need to meet a diversity of learning styles and to pay less attention to divisions based on ability and attainment. Typical of such opinions, reflected generally in this essay, is that of McNamara and Moreton (1997, p. 5), who state that 'The Model for Differentiation is a model based on collaboration between children with different styles and strengths and not on a hierarchy of abilities.'

Dr. Derivative had kidnapped the functions and locked them in cages in his lair.



Picture: Robyn Lee, Flickr

In the subject specific context of mathematics, further consideration of this point is required. It is particularly relevant as this mode of thinking is a very significant factor in the promotion of mixed ability teaching and that the alternative, setting, by its nature places much greater emphasis on variations in ability (or, more likely, the subtly different concept of attainment).

Goulding (2005, p. 54) notes that, 'mathematics teachers use ability, more than teachers of other subjects, as a major organising principle for their teaching.' This is not a new phenomenon. Davies (1977, p. 20) reported a full twenty years earlier that, 'A very significant proportion of schools that organise on mixed-ability lines... exempt or partially exempt, mathematics and modern languages.'

Dunne and Dyson (2007, p. xi) have observed that, 'Numeracy / mathematics was the subject area most commonly taught in attainment sets ... The nature of the subject was reported to demand attainment grouping...' Ireson and Hallam (2001, p. 106) further reinforce the notion that there is something peculiar about the nature of mathematics (and MFL) in this context by stating that, 'In both primary and secondary schools in this country there is a view that mathematics is the least suitable subject for mixed ability teaching, closely followed, in secondary schools, by modern foreign languages.' Of perhaps greater significance is their conclusion that, 'setting influences attainment in mathematics but not in other subjects. It benefits those entering school with higher attainment, whereas mixed ability grouping benefits those who entered with lower attainment in mathematics.' (Ireson and Hallam, 2001, p. 17).

We are thus faced with a scenario where mixed ability teaching of mathematics is not only rare, but often considered to be detrimental to the teaching of the subject, particularly for higher achievers. It is apparent that this notion of setting on ability being required for the teaching of mathematics arises primarily because of the perceived hierarchical nature of the subject. This view is entirely logical and consistent if the subject is reduced to only the superficial content of its curriculum – the standard problems in number, algebra and so on – rather than incorporating a more complete view of the subject that emphasises general skills of problem solving, mathematical thinking, reasoning and enquiry. This same perspective is responsible for the consensus of opinion that defines mathematics and modern foreign languages as the subjects most appropriate for curriculum acceleration and early entry in the case of highly able students. In my opinion, acceleration of this form is generally only of detriment to the students involved, with little achieved other than tackling a set of less challenging problems earlier than they otherwise would have, while missing the opportunity to understand and explore work in greater depth or breadth.

The hierarchical nature of the content of the mathematics curriculum is however, an inescapable and important consideration in the teaching of the

subject. To a certain extent, learning may indeed be considered to be cumulative and sequential, with significant gaps in knowledge tending to have an adverse effect on subsequent development. The notion of a linear progression of skills is of particular relevance when considering proposed advantages of setting, such as the idea that it may be advantageous in a scenario where not all students will be appropriately served by being taught the same content (Convery and Coyle, 1993).

I would point in illustration of this fact to the difference in course content between high and low achievers by the time they reach GCSE level. The content required for those sitting the Higher Tier examinations is so far extended beyond that required for the Foundation Tier that a teacher would find it almost impossible to successfully teach to a class working across this range of ability if a consistently didactic approach was adopted. It would be wholly inappropriate, for example, to spend large parts of the year attempting to teach students struggling to obtain a C grade about the finer points of trigonometric graph transformations.

The head of department at my first school would, free of considerations such as GCSE grades and a curriculum model that highlights the main characteristics of mathematics that dissuade from mixed ability teaching, prefer an arrangement that was a mixture between truly mixed and set ability groupings. More specifically, it would involve two parallel top sets, one bottom support set and the remainder mixed in the middle. I feel that such an arrangement may come closer to striking a reasonable balance between facilitating the easier progression of students of varied ability through the content of the subject, while promoting an environment of diversity and collaboration and enabling a greater range of students to develop their abilities through exposure to a range of resources and teaching styles. This is not to say however, that mathematics necessarily requires at least some form of setting.

Whether or not one accepts that the teaching of mathematics benefits from setting, the crucial point is that such a process addresses only the aspect of attainment in the content of the subject and, to a certain extent, the impact of prior knowledge. While even this will still vary over any set, there remains much more to consider in terms of differentiation. When we do set for maths ability it is likely, reflecting the primary reasons behind a decision to do so, that

Whether or not one accepts that the teaching of mathematics benefits from setting, the crucial point is that such a process addresses only the aspect of attainment in the content of the subject and, to a certain extent, the impact of prior knowledge.

decisions are made by some measure of attainment. Not only will other factors of diversity such as EAL and inclusion issues not necessarily be incorporated, these and/or other factors such as motivation, attitude and learning styles may mask the real level of ability anyway.

It is thus essential to maintain an expectation of the need for significantly differentiated instruction. On this point, I have clearly identified students in my current year 10 class in particular who are members of set 5 (out of 6) due to attitude and learning behaviours, not ability. I have also experienced receiving a new student into my year 8 (support set) class who, being new to the school, was so placed due to potential EAL issues and the fact that she had missed a significant amount of schooling in the past year. This did not however, reflect ability consistent with other members of the class.

A profile of the two year 7 classes

As previously noted, the practical discussion of differentiation in this essay is largely based on my experience of teaching mixed ability year 7 classes at two different schools. This section provides a background illustration of some of the characteristics of the students who made up those classes.

At my first school, most year 7 students were taught in mixed ability classes for an initial period of approximately one month before setting took place. An initial setting assessment was performed on day one of the new school year, which was used to identify a small group of students who were immediately separated into a support group. The remainder were then split into four broadly mixed ability classes, though two of these contained students for whom some additional instructional work on appropriate approaches to long multiplication and so on would appear to be of benefit, and two classes who appeared to have learnt good basic numerical methods. My class was one of the two which had broadly demonstrated a good knowledge of numerical methods.

At my second school, all year 7 students were taught in mixed ability classes for the full academic year. This was common across other subjects. A summary of some of the profile data for each of the classes is presented in Table 1 for comparison.

An additional consideration influencing the range of attainment in the class at my second school was the fact that several students were removed from a small number of their normal lessons each week for literacy intervention work. Poor timetabling however, meant that these students could attend only two out of their three mathematics lessons each week (students in some other classes did not actually miss mathematics lessons) .

Why were the classes not set?

At my first school, the decision to teach in mixed ability classes was a temporary one designed to enable more accurate setting of the students. By setting only after an initial period of mixed ability instruction, it was felt that judgements would be less skewed by the quality or coverage of previous teaching (for example, an able student not being able to approach a question on a particular topic simply because they had not seen it before), and would also allow staff to become more familiar with the students generally. I take this as a reasonable indication, with which I agree, that judgements on ability based purely on numbers are not worth a lot.

Certainly, in my teaching of this class, it was quickly apparent that while students had a consistent knowledge of basic numerical methods (this having already been identified), they varied widely in their ability to conceptualise or extend these skills. One student, for example, was highly competent in practising long division, having probably spent many hours learning the method in preparation for KS2 SATs, but struggled enormously to extend this to division involving negative numbers. Another had poor written work habits and was particularly slow to complete similar long division problems but had no trouble coping with negative numbers or extending this to algebraic generalisations.

The motivation for mixed ability teaching was quite different in my second school. In this case, the oft

	First School	Second School
Number of students in class	28	26
Gender	Girls only	Equal mix of boys and girls
KS2 mathematics level on entry to Year 7	Level 3 – Level 5	Level 2 – Level 5
Students with EAL background	17 (60%)	18 (70%)
Students at EAL Stage 1 or 2	1	2
Reading age on entry to Year 7	10 years 1 month – 15 years 6 months	7 years 1 month – 13 years 6 months
Students with recognised SEN status	3 (0 Statements)	13 (1 with a Statement)

Table 1: A summary of some of the profile data for each of the classes

reported concern regarding the creation of a self-perpetuating prophecy and cycle of de-motivation, with associated behavioural issues (Kyriacou and Goulding, 2005; Ireson and Hallam, 2001; Hart, 1992), was the main concern.

While higher years were set by ability, this was still done to a lesser extent than in my first school with, for example, year 11 students being split into one ‘top’ set, two ‘intermediate’ sets, one set just below these and then four ‘foundation’ sets. Again, the primary motivation given for this was to reduce behavioural issues in the lower sets. It was clear that, in the absence of behavioural concerns, the higher years would have been more rigorously set, and the year 7 classes would also have been set by ability. It was felt that in year 7, it was possible to ‘get away with’ not setting for a while and so delay the creation of the ‘horrible bottom sets’ that no one wanted to teach.

The concern over the effect of setting on student motivation is, I believe, a valid one. The greater the perceived benefit or kudos of belonging to a higher set, the greater the negative implications of being marked out as a member of a low set, and I have taught students in both KS3 and KS4 who are in no doubt that they are ‘stupid at maths’. Attempting to manage this situation takes significant time and effort, though I would note that this is not only a problem for classes that are set. Indeed, there is potential for this situation to be mirrored within a class, particularly one of widely varying ability. A focus on individual achievement and progress is essential if this situation

is to be avoided – which is of course, impossible to achieve without effective differentiation.

In comparing the two schools, it is significant that neither presented any real motivation to teach a mixed ability class for reasons other than avoiding some of the perceived pitfalls of setting by ability – in the first instance instituting a diagnostic period to achieve more accurate setting, and in the second, to avoid expected behavioural issues with low sets. Mixed ability teaching was not noticeably promoted as holding significant benefits per se in either school, perhaps partly due to the perception that it required a higher set of skills from the average teacher in order to do well. Effective differentiation is, after all, not an easy thing to achieve. Would setting have removed the need for differentiation?

As made clear in earlier sections of this paper, ability is just one variable among many that must be considered when assessing the diversity of any class. Setting on this basis would have reduced (though not removed) the impact of this variable and allowed a narrower range of content to be considered.

It is vital to a proper appreciation of the topic however, to recognise that this would in no way remove the need for differentiation. As clearly stated by Visser (1993, p. 19), ‘How pupils are grouped may lessen or widen the width of diversity along one particular dimension, such as the ability to compute in mathematics, but it will not do away with the diversity.’

It would still have been necessary to effectively address all other variables such as EAL, SEN, different learning preferences and so on, not to mention the fact that setting should reduce the range of ability across a class but will not remove it. The two boys in the year 7 class at my second school who found it almost impossible to sit still for an hour should have been expected to struggle in any lesson in which they were asked to do nothing but listen to instruction and complete book work in near silence. Similarly, I observed students with the ability to complete the required mathematics struggling over an irrelevant but unfamiliar word or two on written worksheets and others who had simply decided that maths was 'boring'.

While teaching this class, I certainly encouraged students to work at a level appropriate to them and did not require all students to complete exactly the same questions or to provide answers with the same degree of complexity. I also however, made a conscious attempt to incorporate the use of resources that would demonstrate the theory and involve students in different ways, using group, paired and individual work and making use of a variety of teaching and learning styles. I found that the class engaged positively with lessons that involved more varied tasks and demanded participation from students in a range of contexts. While not every activity that was carried out would have appealed to every individual member of the class, the important consideration was that no one was left isolated for too long.

Similarly, my year 7 class at my first school responded most positively to lessons in which each student had the opportunity to be both challenged (and succeed) and to engage with the topic in a manner that they felt comfortable with.

These considerations proved equally valid when later teaching this year 7 class in the period after it had been set. Techniques such as encouraging paired or group discussion before asking for contributions in a whole class scenario require those with a tendency to keep quiet to voice their opinions and provide a 'safety-net' of having discussed their understanding with at least one other person before being 'put on the spot', while allowing those who need to speak out to best make sense of it all an opportunity to do so. 'What if...?' and 'Can you prove it?' questions, if well designed, are capable of stretching even the most able students and provide significantly better value in terms of managing differential attainment than acceleration through a standard textbook. Ensuring that the class is exposed to multiple ways of taking in and developing their own understanding of the material allows each individual to develop more secure learning of the concepts involved, whether it be through visual representations, songs or mnemonics, practical tasks or the necessary participatory involvement in a game or similar challenge.

Setting may narrow the range of Vygotsky's 'zone of proximal development' in which students across

a given class should be working in order to be appropriately challenged and progress in their learning, but this alone is hardly effective differentiation. As discussed by Dickinson and Wright (1993), differentiation represents a more sophisticated response to the diversity that will exist in any group of students than setting alone can achieve.

Conclusions

Every class is diverse, and every class is different. These are simple facts that should be recognised by any teacher in order to begin the task of most effectively meeting the learning needs of their students. Hall (1992, p. 21) states clearly that 'We need to know about our pupils if we are going to do our best to help them to learn.'

This expected diversity is not restricted to ability or attainment and is thus just as relevant to a class set by ability as one that is designated as a mixed ability grouping. The Personalised Learning agenda and Every Child Matters initiative have promoted an understanding that all children have a right to educational experiences that assist them to meet their potential.

Differentiation is key to achieving this, but it is not an easy skill to accomplish. As Tomlinson (2003, p. 123) has noted, '... studies of classrooms in the United Kingdom where teachers were reported to be better than average with differentiation consistently found advanced learners occupied with practice of skills in which they were already competent and struggling learners working on tasks beyond their grasp.' The term does not mean simply identifying variation in perceived 'ability' and dishing up more or less work accordingly. Differentiation also means more than simply providing tasks or content at different levels. Adopting a range of teaching and learning strategies and styles and using a variety of resources and support that recognise diversity within the class as the norm rather than a problem, is the overriding aim. If achieved, effective differentiation has the potential to significantly improve outcomes for all students.

My experience in teaching mixed ability classes at two different schools has served to prompt a more detailed appreciation for the full range of diversity that may be expected in any given class. This experience has helped me to understand in greater depth how the considerations given to meeting the

needs of these students will benefit my teaching generally, for all of my classes.

After working as a Teaching Assistant, Briony decided to apply her Engineering background and B.Eng to secondary mathematics teaching. On the Graduate Teacher Programme she was supervised by Keith Parramore who recently retired his post as Principal Lecturer in the department of Computing Mathematical and Information Sciences, University of Brighton.

References:

- Coffield, F. et al. (2004) *Learning Styles and Pedagogy in Post16 Learning: A systematic and critical review*. London: Learning & Skills Research Centre.
- Convey, A. and Coyle, D. (1993). *Differentiation – taking the initiative*. London: Centre for Information on Language Teaching and Research.
- Davies, B. (1997). 'Meanings and motives in "going mixed ability" in Davies, B. and Cave, R. G. (Eds.). *Mixed-Ability Teaching in the Secondary School*. London: Ward Lock Educational.
- Dickinson, C. and Wright, J. (1993). *Differentiation: a Practical Handbook of Classroom Strategies*. National Council for Educational Technology.
- Dunne, M. and Dyson, A. (2007). *Effective Teaching and Learning for Pupils in Low Attaining Groups*. Department for Children, Schools and Families, Research Report DCSF-RR011.
- Goulding, M. (2004). *Learning to Teach Mathematics*, second edition. London: David Fulton Publishers.
- Goulding, M. (2005) 'Pupils learning Mathematics' in Johnson-Wilder et. Al. (Ed.) *Learning to Teach Mathematics in the Secondary School*, second edition, London: Routledge.
- Hall, E. F. (1992). 'Assessment for Differentiation'. *British Journal of Special Education*, Vol 19, No.1.
- Hart, S. (1992). 'Differentiation – Way Forward or Retreat?' *British Journal of Special Education*, Vol 19, No.1.
- Ireson, J. and Hallam, S. (2001). *Ability Grouping in Education*. London: Paul Chapman Publishing.

Kyriacou, C. and Goulding, M. (2005). 'A Systematic Review of Raising Pupil Motivation in KS4 Mathematics'. *In Proceedings of the British Society for Research into Learning Mathematics*.

McNamara, S. and Moreton, G. (1997). *Understanding Differentiation: A Teachers Guide*. London: David Fulton Publishers.

Stanley, N. (2006). *Learning Styles – What can they offer?* Centre for Secondary and Vocational Education, Liverpool John Moores University, UK.

Stradling, R. and Saunders, L. (1991). *Differentiation in Action: A whole School Approach for Raising Attainment*. London, HSMO.

Tomlinson, C. A. (2001). *How to Differentiate Instruction in Mixed-Ability Classrooms*. Alexandria, VA, USA: Association for Supervision & Curriculum Development.

Tomlinson, C. A. et al. (2003). 'Differentiating Instruction in Response to Student Readiness, Interest, and Learning Profile in Academically Diverse Classrooms: A Review of Literature'. *Journal for the Education of the Gifted*, Vol. 27 No. 2/3, p.119-45.

Visser, J. (1993). *Differentiation: Making it Work*. Stafford, UK: NASEN Publications.

Weston, P. (1992). 'A Decade for Differentiation'. *British Journal of Special Education*, Vol. 19, No.1.

What's new about the new KS3 geography curriculum?

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Introduction

This piece is distilled from my final EdD thesis which focused on interpretations of the revised Key Stage 3 (hereafter abbreviated to KS3) geography curriculum in four secondary schools. My research looked at the geography curriculum, the reforms to the curriculum that were planned from September 2008 onwards, and the implications for the geography curriculum that these reforms may have. This paper argues that the new curriculum which is seeking an interdisciplinary approach to the KS3 curriculum is not new; it was trialled in the humanities subjects in the 1950s, the 1960s and 1970s without a great deal of success.

In essence the reforms promote an interdisciplinary approach to teaching whilst also preserving subject integrity. A discrete subject approach to the curriculum is adopted in many schools while others prefer a more integrated curriculum, especially in the early years of the secondary school. The new curriculum could create a tension in schools in its attempt to support both separate subject and integrated teaching.

Geography and other Foundation Subjects have been marginalised in the KS3 curriculum for many years with the constant pressure from the Core Subjects, these being the ones which influence positions in league tables when SATs results are published. As Paul Brown, the environment correspondent for The Guardian notes:



"With the emphasis on core subjects, the one that is most help in getting to grips with the important issues of the day – geography – is being squeezed." (Brown, The Guardian, 20th November 2001)

Thus geography and other Foundation Subjects could find themselves even more peripheral in the new KS3 curriculum, being subsumed into skills based activities or other such 'learning to learn' approaches in the early years of secondary education where subject knowledge and understanding do not drive the activities undertaken by pupils.

Geography is an important school curriculum subject. No other subject deals with so many issues that have direct relevance to the lives of the pupils learning it. Climate change; food production; transport links; rural and urban environments; location of earthquakes and volcanic eruptions; flooding; the fashion industry; sports locations; music events and tours; leisure pursuits; tourist destinations; finding your way around – all of these are aspects of school geography and part of everyday life. David Bell, at the time HMI Chief Inspector of Schools, in *The Value and Importance of Geography* (Bell, 2005) mentions floods in Cornwall, hurricanes in the Caribbean, the devastation of the tsunami, war and conflict in the Middle East, water shortages, famine, migration, oil disputes, world trade, interdependence, globalisation and debt:

"If the aspiration of schools is to create students who are active and well rounded citizens there is no more relevant subject than geography." (Bell, 2005, p. 12)

There is a concern amongst the geography education community that the new KS3 curriculum will be a means by which schools interpret the new flexible curriculum as a freedom to do what they like and ignore the statutory status of the Foundation Subjects and the contribution they should make to the KS3 curriculum. This concern is supported by the increasing number of schools that adopt a 'primary model' in year 7 and those which collapse KS3 into two rather than three years; both curriculum models reduce the amount of curriculum time available for teaching the Foundation Subjects.

Methodology and Research Methods

The research strategy adopted for this project was within the qualitative paradigm and took the form of a case study. The case study looked at school geography in the 21st century through curriculum reform at KS3 within the context of selected schools, in which interviews were undertaken with both teachers and pupils. Supporting interviews were also conducted with personnel involved at a national level with curriculum reform, and a selection of teachers in the early stages of their teaching careers completed questionnaires.

I elected to work in four different schools with contrasting curricular structures. What I termed my baseline school had a traditional approach to discrete subject teaching with a 3-year KS3 curriculum. Two other schools operated a themed approach to KS3 across 3

years, and the fourth school had a themed 2-year KS3 curriculum with discrete subject teaching from year 9 onwards. In each of the schools I interviewed members of staff who are influential in the construction of the geography curriculum i.e. the person in charge of the subject department and the person in charge of the KS3 geography curriculum in particular. In two of the schools, which gave me the best comparison in terms of curriculum structure, I interviewed approximately 70 year 8 pupils. I also interviewed personnel involved with the curriculum changes at a national level and sought questionnaire responses from former PGCE students who had completed their NQT year.

This case study of a curriculum reform at KS3 which had not been implemented, followed the consultation period and the anticipations of those interviewed about the implications for the teaching of geography as a result of the changes, and how the interviewees were planning to respond to changes, or had already changed their curriculum, to better meet the needs of their pupils.

The New KS3 Curriculum

All subjects have the same structure within the new KS3 curriculum which QCA maintain gives greater coherence to the curriculum and allows for easier links to be made between subjects. The shift towards interdisciplinary working whilst maintaining individual subject integrity within the new curriculum is something which is difficult to achieve. The logo for the new curriculum, intertwining coloured subject strands, emphasises QCA's aim that there should be more obvious links between subjects. The logo for the National Curriculum of 2000 (DfEE, 1999 b) showed the same colours for each subject but each was represented by a separate square of colour with no square touching another square.

In the new KS3 curriculum, all subjects have an importance statement, which reinforce QCA's commitment to subjects. Key concepts are laid out for each subject, which list the main ideas that learners need to understand, and the key processes are the means by which the learners engage with the concepts. The curriculum is planned around the range and content for each subject, and curriculum opportunities should be embraced to enhance pupil engagement in learning. However, there is no guidance from QCA in terms of how they envisage schools might maintain subject integrity at the same time as promoting interdisciplinary working, which was the focus of my investigation

The new curriculum is a whole curriculum framework that sets out knowledge, understanding, skills, attitudes and attributes deemed essential by QCA for a curriculum to meet the needs of our society in the early part of the 21st century. The 'big picture of the curriculum' shows in diagrammatic form how all the aspects of the curriculum are meant to fit together to form a coherent whole. The curriculum encompasses a great deal more than subjects, which appear as a small aspect of the whole structure in 14 small coloured boxes three-quarters of the way down the page. The original National Curriculum encompassed a vision of a whole curriculum but was so overburdened with prescriptive subject content that the notion of the whole curriculum, incorporating dimensions, skills and themes, was generally overlooked by schools as these aspects were never part of the statutory requirements. The notion of a whole curriculum was still implicit in the National Curriculum revisions of 1995 and 1999, but the subject booklets did not include whole curriculum perspectives so the subject teacher did not see the subject within the context of a whole curriculum. The 'big picture' that accompanies the current National Curriculum revision is the first attempt since 1990 to show succinctly how the whole curriculum is envisaged and how it all links together.

Out with the old and in with the old?

One of the most striking outcomes of my research was the apparent similarity between what is being proposed in the 'new' KS3 geography curriculum and what was trialled, and dismissed, over 40 years ago. In the 1960s there was a mode of learning that was adopted in some secondary schools called Inter-Disciplinary Enquiry (IDE). What is being promoted through the current secondary curriculum in many respects resembles the inter-disciplinary work of the IDE project. Bull (1968) described IDE as a:

"... programme centred around topics or areas of enquiry capable of stimulating secondary pupils to personal involvement, creative thinking and individual curiosity. [...] [some schools] introduce it for the less able pupils of any age-group on the argument that the logical structure of traditional subjects is unpalatable to those not of academic tastes and fails to contain their boredom and resistance to learning." (Bull, 1968, p. 381)

He describes how IDE is supposed to eliminate subject barriers in the humanities subjects which at the time included history, geography, religious instruction and English literature in the pursuit of active enquiries into topics relevant to pupils' needs and interests (ibid). He goes on to describe a team-teaching method for conducting IDE, which bears a striking resemblance to what is currently on offer in two of the schools involved in the research. The format then, and as seen currently in two of the case study schools, is for classes to be team-taught in large groups when a new topic is introduced followed by discussions in smaller groups. Tasks for investigation are then given to individuals or small groups of pupils to work on. At the end of an enquiry all the data collected are assembled and presented in some way to the whole pupil group as an exhibition or similar format to which the parents were often invited (Bull, 1968). Two of the research schools have a curriculum similar to that described by Bull, including end of theme exhibitions, plays and presentations to parents and others. One has to question why the same ideas are being resurrected in 2008 when IDE was abandoned in the early 1970s as a consequence of negative evaluations of the project such as that produced by Bull (1968) for the Geographical Association. Bull comments:

"The specialist teacher is bound to have many misgivings about IDE: a method which in the hands of exceptionally skilled and devoted teachers has very much to commend it, but in other hands has the seeds of conspicuous failure." (ibid, p. 382)

Then, as now, the skill of the teacher is paramount and in the secondary school context, teachers with specialist subject knowledge are more capable of enthusing pupils if they are confident with the subject matter they are teaching (Rawling, 2001).

The approach to IDE focused heavily on aspects of the local environment since the pupil was the starting point enlarging to the immediate environment, the community, the locality, the region and so on. Bull (1968) comments that there is a danger of too much focus on the local environment for inter-disciplinary work to be successful and achieve its aims of meeting pupil needs as well as being relevant to pupils, since such work often repeats earlier school experiences:

"The pupil may be tempted to drag his feet if he is guided by a different set of teachers along the same streets in search of what common sense has already taught him." (ibid, p. 384)

In one of the interviews I conducted with a head of department, she commented that she was taken aback when she visited her school's main feeder primary where year 3 pupils were undertaking an exercise in the local area, which is virtually the same as some work she does

with lower ability year 10 pupils! Starting the geography curriculum from the child's locality in both the primary and the secondary school has advantages in terms of the local area being known and relevant to the child but duplication stifles progression and can create boredom (Norman, 2002). On the other hand, some of the pupils interviewed noted similarities between topics covered in their science lessons and topics studied in geography but they said it doesn't matter, it helps us understand. It's a different way of saying the same stuff (Norman, 2008 p. 90)

Bull (1968) came to the conclusion that pupils who followed the interdisciplinary curriculum for more than a year or two will not gain as much in terms of geographical experience as they would from traditional subject teaching. He also felt geography suffered under the banner of humanities as geography has significant links with the sciences.

An article written by Norman Graves (1968) at a similar time to Bull, states that the Royal Geographical Society (RGS) published a paper in 1950 entitled 'Geography and Social Studies in schools', defending geography as a discrete discipline to counteract what seemed at the time to be a take-over of the subject by social studies. Graves writes:

"... schools must be free to experiment with their curricula, with the consequence that, in the case of geography, not only may the factual content of courses change, but the concepts or principles taught will evolve and the curricular contexts in which such subject matter is taught may alter with time." (Graves, 1968, p. 390)

Having had the prescription of the 1991 GNC, it seems that we have come full circle appreciating that schools should have the ability to experiment with their curricula. However, Graves had a concern that there was insufficient evidence to support the notion that learning is enhanced through an integrated approach to subject study and this concern is still with us today. As he says:

"The only point at issue is whether geographical education will have been better furthered by IDE or by teaching 'pure' geography. This is a question that no one can answer in general terms, since so much depends upon the conditions in the schools concerned. Depending on the team operating the IDE scheme, the nature of the enquiries proposed, the facilities available, the schemes may be a success or a failure. Similarly the traditional class teaching method, as is well known, may succeed or fail according to who is teaching." (Graves, 1968, pp. 392 – 3).

All four of the schools consulted for this research project felt that they were already covering what is statutory in the new national curriculum either through their themed topic work or through discrete subject teaching. None felt that major revisions were needed to meet the demands of the new curriculum, which again begs the question how 'new' is the new curriculum given that none of the research schools felt any major changes would be necessary. However, I was not convinced that statutory requirements were being met in two of the schools. A TES report on 14th November 2008 had the headline 'Themed lessons get Ofsted thumbs down. Two schools hailed by QCA for innovative approaches fail to impress inspectors'. By coincidence, these were two of the schools where I had conducted my research.

The geography education community is currently saying the same as Bull 40 years ago:

"It is high time that subject specialists moved in the direction of developing their own subjects along centre of interest lines, and of exploring the frontier zones between their own subjects and kindred

disciplines. Above all, it is imperative for geography teachers to advance curriculum developments within their own subject, notably the use of decision-making games and the expression of geographical relationships in the form of models. What is wanted is not less subject teaching but better subject teaching." (Bull, 1968, p. 386)

All that has happened in the intervening 40 years has brought us back to the same objective in 2008, the necessity for better subject teaching. QCA is promoting a more interdisciplinary approach in the new KS3 curriculum but is not providing models of practice which schools might consider in meeting the demands of subject integrity alongside an integrated subject approach to teaching and learning. Not that I am suggesting adopting a model is the answer but models can be used effectively to develop something which best fits the individual school. In one of the case study schools they had sold their curriculum model at £7000 per individual year to several other schools. However, this was one of the schools identified in the Ofsted report mentioned earlier (TES, 14th November 2008) where their integrated approach to the curriculum was deemed to be less than satisfactory in terms of what the pupils learned. Another of the case study schools took several years to develop a curriculum which has both interdisciplinary work, as described above, alongside discrete subject teaching. This school welcomes visitors to see what has been developed and works in that school but they do not offer their model for sale. Their structure which offers both approaches to the KS3 curriculum was exemplary and very successful, but the size of the school was a significant factor in allowing them to create a tailored curriculum using a combination of discrete subject teaching and integrated teaching.

My research did not lead me to a clear conclusion; the case study schools showed both excellent and weak practice in terms of interdisciplinary work, and the school with the separate subject curriculum also showed excellent practice in terms of geography subject teaching. The skill of the teacher is paramount and in the secondary school it is essential to have subject experts planning the curriculum if not teaching the subject, although I would maintain that subject experts need to be engaged to teach the subject not just plan the curriculum. Would you be happy if an orthopaedic consultant treated you for a problem with your hearing?

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References

- Bell, D. (2005) 'The Value and Importance of Geography' in *Teaching Geography* Vol. 30. No 1. p. 12 – 13. Sheffield: Geographical Association.
- Blaxter, L., Hughes, C. & Tight, M. (1996) *How to Research*, Buckingham: Open University Press.
- Brown, P. (2001) 'The erosion of geography' *Guardian*, 20 November
- Bull, G.B.G. (1968) 'Inter-Disciplinary Enquiry: A Geography Teacher's Assessment' *Geography* Vol. 53 p. 381 – 386 Sheffield: Geographical Association.
- Burns, R.B. (2000) *Introduction to Research Methods*. London: Sage Publications Ltd.
- Cohen, L., Manion, L. & Morrison, K. (2000) *Research Methods in Education*. London: RoutledgeFalmer.
- DfEE (1999) *The National Curriculum: Handbook for secondary teachers in England*, London: DfEE & QCA.

Freebody, P. (2003) *Qualitative Research in Education*. London: Sage Publications Ltd.

Graves, N. (1968) 'Geography, Social Science and Inter-disciplinary Enquiry' *Geographical Journal*, Vol 134, No. 3, p. 390 – 394.

Hopkins, D. (2002) *A Teacher's Guide to Classroom Research*, Maidenhead: Open University Press.

Norman, M. (2008) *The Implications of Key Stage 3 Reforms for the Teaching of geography in Secondary Schools*. University of Brighton: Unpublished Final Thesis; Doctorate in Education Programme.

Norman, M (2002) *A small scale research project to identify pupils' perceptions of teaching and learning in geography at the end of key stage 3*. University of Brighton: Unpublished Assignment (part 2) Doctorate in Education Programme.

Rawling, E. (2001) *Changing the subject; the impact of national policy on school geography 1980 – 2000*, Sheffield: Geographical Association.

TES 14.11.2008 *Themed Lessons get Ofsted thumbs down*.

The Power and Persuasiveness of Stories

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“In a fractured age where cynicism is god, here is a possible heresy: we live by stories, we also live in them. One way or another we are living the stories planted in us early or along the way, or we are also living the stories we planted – knowingly or unknowingly – in ourselves.” (Okri, 1997, p. 46)

In 2006, as part of my work towards a Masters in Education I explored the development of the making and understanding of narrative in pre-school children. The children I was privileged to work with were aged two, three and four years. I explored whether drawing the children into the world of the picture book, through dramatic fantasy play, extended their ability both to understand and make narrative. For this article I will focus upon just two elements of my findings, the intertextuality in the children's stories – the way in which they linked and made specific reference in their stories to other texts they had experienced, and the physicality of the children whilst they told their narratives – how they used their bodies as part of the narrative process.

A little background...

All picture books I selected to use with the children were powerful texts. My definition of the term powerful texts is that they all have strong emotional content, subtext which demands a high level of thinking, reciprocity and contrast between text and picture, repetitive text and space for children to bring their own experiences and meanings to the text

The picture books selected were as follows: *Where The Wild Things Are* (Sendak, 1981), *Owl Babies* (Waddell, 1994), *On The Way Home* (Murphy, 1995) and *Flyaway Katie* (Dunbar, 2004). Initially I read the four selected picture books with all the children attending the nursery. I ensured multiple copies were available for the children to read with each other and borrow from the nursery as part of their loan scheme, so that the children were familiar with the text structure prior to the research taking place. This familiarity was necessary in order for the children to be able to explore and ask questions of themselves in relation to the plot and characters. Figure 1 illustrates the process followed during each session with the children.



Picture books – enjoyed by all ages.

We have long been able to identify children's learning from the texts that they read by scrutinizing their writing. The structure, style and vocabulary of authors shine from children's stories and poems where they have been immersed in quality whole texts (Meek, 1988; Barrs and Cork, 2001). However, the children I have worked with were not yet able to fully access the transcriptional elements of writing in order to show the extent to which the texts and fantasy play have affected them as learners. So I wrapped them in picture book story worlds, observed their fantasy play and listened carefully to their developing narrative competence through their oral stories.

Why do we tell stories and why are they important?

In order to set the scene for this research it is important to acknowledge the vitality of story in all our lives. We constantly make and tell stories: why we were late, how the mug was broken, what happened at the airport... and we search for our stories in the stories of others in order to share experience, validate our stories and those of others and to assimilate further information about life and relationships (Britton, 1980; Hardy, 1978). We do not, as adults, usually tell our stories aloud as we are going about our daily business, rather we internalise our narrative by telling stories in our heads. We then repeat them later to explain, justify, amuse or engage another's attention or empathy. These stories are imperative for us to sculpt what we think, feel and know – what we believe about our very existence (Wells, 1999; Engel, 1995).

Why explore picture books to stimulate play and narrative?

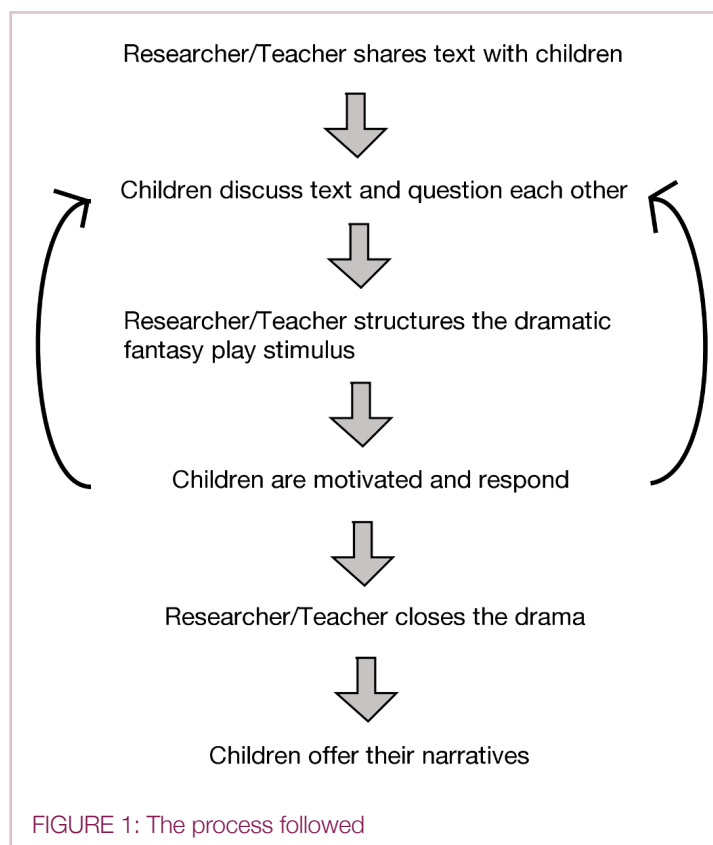
Picture books when explored and enjoyed bring together the best of the worlds of visual and narrative storytelling. They are a treasure trove for young children as they can connect their existing knowledge and growing understanding of their world and the world of the text through their presentation, where the illustrations and text both support, extend and contradict each other whilst offering secrets for the reader to expose and question (Doonan, 1993; Meek, 1988; Nikolajeva and Scott, 2001). Metaphorically speaking, to understand and discover the delights of a picture book it is necessary for the reader to sample the text and illustration concurrently, tasting the text and illustration both on the same spoon and in considered bites whilst allowing the flavours, not always sweet, to complement each other.

The idea of 'interanimation', the reciprocity between text and illustration, makes clear that picture books are not an easy choice for readers, for all who connect with them must allow themselves to be influenced by and engage with both the pictures and the text in order to access the meaning (Meek, 1992, p. 177). The challenge of picture books is that they are both a distinctive and exclusive form to which young children are drawn as open and eager explorers, searching both the text and illustration for meanings (Graham, 1990).

Within a picture book the images and text may be interwoven, complementary and juxtaposing, but they will all leave an imprint on the child that will be played with in their minds and will remain within their thoughts and will grow as they grow (Graham, 1990; Meek, 1988).

What use is drama and fantasy play as the next step to narrative?

Fantasy play and drama that stimulate the skills of creativity and imagination are imperative to a young child's development; they unite areas of learning (Baldwin and Fleming, 2003; Chukovsky, 1963; Duffy, 1998; Gussin-Paley, 2004). Children are born with creative capacities and the ability to imagine; children are experts in the



suspension of disbelief. Whether it is role swapping with siblings and parents, feeding an imaginary friend, dressing up or playing the part of a super person with wondrous powers, children have the capacity to imagine and pretend to some extent.

Drama and fantasy play allow children to focus on what picture book texts are all about enabling them to develop involved, thoughtful relationships with the text and images. Using picture books as a vehicle to stimulate fantasy play permits children to physically journey through the pages, sampling what it feels like to be a character whilst verbalising their thoughts and seeing what they might see. It offers children the right and opportunity to revel in the multi-layered nature of the texts and life itself.

So why use picture books and fantasy play together to stimulate narrative?

After revelling in the delights of the illustrated and written text of a picture book children can be given the opportunity to explore their understandings actively alongside others. They delve into the characters by questioning their motivation or investigating alternative actions and are given the freedom to build the settings and wander through them with ease, knowing that their fantasy can be stopped as quickly as it has been started. They are safe to devise, control and be led as their entire experience is based on story, listening and looking, then being. As Winston and Tandy note stories are what provide dramas with their substance: the story a drama tells is the key to what drama is about (Winston and Tandy, 1998, p. 19). The intricate and multi-faceted language dealings children engage in, whilst immersed in dramatic play is a prime situation for the development of their narrative ability (Moyles, 1989).

Fox writes we tend to remember what interests us (Fox, 1993, p. 69). When children actively and physically engage with a picture book through fantasy play, they remember their experiences and may be more likely to be able to understand the narrative within the text and the narrative they subsequently produce. Two of the dimensions on which I focussed were physicality and intertextuality.

Physicality

The children exhibited a physical engagement with their stories on numerous occasions; the children's physical interpretations of the picture books through dramatic fantasy play enlivened, extended and consolidated their understanding of the text whilst developing their own narratives. The following physical expression of Lola and Amelie echoes and exemplifies the effect of the fantasy play on the children.

Lola, aged three years 11 months stood to tell the group her story and as she made her narrative she endeavoured to involve us in her act of imagination through signifying herself as a living text. She held her arms wide and carefully moved them to indicate that she herself was the book and the pages were turning as she spoke. She had experienced the story from the picture book, listened to the adventures, examined and delighted in the illustrations and had then taken one step further to become part of the world within the text through drama. As she told her story she maintained the involvement and the physical interaction with narrative by being the book, a living story and a moving visual image. The following words are Lola's:

"The King and the princess were walking along on a sunny day * and they tripped me all the way over and that's how I got my bad knee.* They were horrid kings and princesses because I had the magic mirror and I told all my friends and they were horrified and shocked and scared and I told them don't worry...* They don't worry any more because I told them I fell off the swing and I would be better soon.* And I got a card to say get better soon but my knee isn't better yet. Look.**"

* = (turns page as if she were a book)

** = (opens both arms as if she were a greetings card)

This physicality supported the notion that the plane illustrations of a book can become more significant when drawn together through fantasy play (Graham, 1990).

Amelie (four years six months), also used physical movement to express the parts of the narrative she understood were most important and needed to be reinforced for the listener. Her movements were intentional and emphatic, inspiring a secondary level of narrative for the listener with the effect of divulging emotions that may not have been immediately apparent. She told us:

"The burglar was building a burglar house with a sign. The sign flashed and flashed (opens and closes hands as though flashing) – come in if you want me to steal you."

Amelie held her hands on her hips to signify her displeasure in falling over the burglar brick and made a dramatic tumble to the floor to show the severity of her fall. Her hands moved quickly and deliberately in an opening and closing fashion effectively to signify the sign flashing on and off outside the burglar house and as she ran in and out of the other children to show her rush home to the safety of her parents. All listeners were captivated by her actions and words:

"But (begins to run around the listening children) I didn't go in I ran all the way home to my Mummy and my Daddy and they gave me a kiss (hugs herself and smiles)."

Her facial expression, in tandem with the hug she gave her own body once back in the safety of her home, whilst being praised and comforted by her parents, signalled that the end of her story was near and a resolution to her narrative was close.

Amelie was able to express herself through the direction and action in her narrative. She engaged with her story and made decisions about when and how the audience was alerted to the most important

narrative features. It was her choice as to whether the action did or did not take place, which suggests a link between her narrative competence and the fantasy play she experienced.

Intertextuality

Although intertextuality was not evident in all the participant children's narratives, it was obvious in many of the stories. The narratives of Olivia (4 years, 1 month) contained evidence of intertextuality on every occasion. The first of Olivia's narratives was told after a fantasy play session stimulated by Owl Babies. She had been fully involved in the fantasy play and had been a leader in finding every cushion in the building to make a huge owl baby nest whilst engaging with the other baby owls in the nest. She was very eager to tell everyone her narrative after the fantasy play, yet initially, the narrative might suggest that she had not connected with the story. Olivia's words follow:

"Once upon a time there was a beautiful princess and a wicked queen came along and she locked her in a tower. Then a prince came along and he tried to get in to the tower but there was one window high from the ground and no door, no door at all. There was fiery water all around and there was a thin bridge with 100 boards across it across the flaming fiery water. Then the prince walked along and handed out his bow and arrow and tied a string across it, it was very long because he needed to rescue the princess. He climbed across the fiery water hanging off the string. They tried to get each other and they couldn't. The wicked queen came along and said 'oh you witted half-wit' and she locked the prince in the tower, because she thought the prince was a princess and they never got rescued. But one day the wicked queen got turned into a statue of stone and they were happily released and they got married and they lived happily ever after. And the owl babies, well, the owl babies saw it all because they were just by the tree where they were marrying and they kept the owl babies for pets but they let them fly around so it wasn't cruel because they were the owl babies friends and they were vegan."

The spontaneous course of this narrative echoes the belief that fantasy play can connect learning and offers children the opportunity to accomplish at a high level (Baldwin and Fleming, 2003; Chukovsky, 1963; Duffy, 1998; Gussin-Paley, 2004).

The intensity of the fantasy play layered with Olivia's engagement with the specific picture book texts and her wide-ranging experience of story has extended her proficiency in producing narrative. Her story is a synthesis of familiarity, imagination and understanding (Hendy and Toon, 2001; Meek, 1985).

Overview of the findings

Up to this point I have simply looked at the intertextuality and physicality in the narratives, what follows is a broad outline of the findings overall.

The small number of participant children all used narrative intrinsically in their everyday lives. It was a familiar instrument for them to develop as they used it freely and without hesitation in their discovery and play. Additionally, exposing this cohort of pre-school children to picture book texts, through sharing the stories with time and space to question and study illustrations, had a positive effect on their ability to understand narrative. This was clear through their many questions, discussions and statements.

The children's delight in examining the narrative through picture and listening to the written word made them impatient to return to the title page and rediscover the book. They discriminated between the words and the pictures at the same time as combining their joint meaning to make meanings of their own. Their questioning of each other as to the emotion and motivation of the characters within the texts and the

context of their individual and collective dilemma was far higher than the expectations I hold as teacher, researcher and parent. The picture book narratives, discovered both collegiately and on an individual level, inspired them to explore and develop their understanding of their life narratives closely and immediately.

The children's physical interpretation of the thoughts they had gathered and the meanings they made, communally and independently, confirmed that the coming together of fantasy play and text enlivens, extends and consolidates understanding of narrative.

Most importantly, the pre-school child's narrative after fantasy play was fuller and far more colourful for the listener and analyser than those sampled beforehand. This is drawn from direct comparison of narratives offered and from deeper analysis of the children's words. As the child's engagement with picture book narratives was intensified through fantasy play, positive and specific elements of their narratives became distinct.

And finally...

This piece of research suggests that it is a child's entitlement to learn through dramatic fantasy play and the power of learning through involvement and activity should be encouraged and celebrated rather than ignored or negated. The very young are able explorers of life through narrative, making poignant discoveries about themselves and the world in which they live.

The narratives of the participant children have not only been of great importance in my research and life, but also in their lives. They were proud of their narratives, wanting to hear them read repeatedly, treasuring the paper copies they were given and most importantly continuing their role playing and storytelling both in nursery sessions, in the garden at lunchtime, and at home with families. This enthusiasm and engagement must be captured and fostered. If we want adults who are creative and imaginative we must start in their earliest years. We are educating children for life and the attitudes that we want to promote at this stage will remain with them (Duffy, 1998: p.11).

Pre-school children tell stories as part of their being, the narratives they make and listen to mould who they are. In order to get to know children we must listen to their narratives and we must value and celebrate the words they utter. To develop their understanding and making of narrative pre-school children need the opportunity and time to explore high quality picture book texts. They must be offered the space for dramatic fantasy play to use their exploration both physically and imaginatively. In this way their narratives and our appreciation of them will grow, as Engel says:

"Once you have opened your ears to the power and persuasiveness of stories in the lives and language of young children, you see how remarkably compelling they are, both as phenomena to be explored in their own right and as a way of understanding how young minds comprehend and construct the world around them." (Engel, 1995, p. viii)

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References

Baldwin, P. And Fleming, K. (2003) *Teaching Literacy Through Drama Creative Approaches* London, Routledge: Falmer.

Barrs, M. And Cork, V. (2001) *The Reader In The Writer: The Links Between The Study Of Literature And Writing Development At Key Stage 2*, London: Centre For Language In Primary Education.

Britton, J. (1992) *Language And Learning*, 2nd Edition London, Penguin.

Chukovsky, K (1963) *From Two To Five* California: University Of California Press.

Doonan, J. (1993) *Looking At Pictures In Picture Books* Stroud, Thimble Press.

Duffy, B. (1998) *Supporting Creativity And Imagination In The Early Years* Buckingham: Open University Press.

Dunbar, P. (2004) *Flyaway Katie* London: Walker Books.

Engel, S. (1995) *The Stories Children Tell; Making Sense Of The Narratives Of Childhood* Oxford, W.H. Freeman And Company.

Fox, C. (1993) *At The Very Edge Of The Forest The Influence Of Literature On Storytelling In Children* London: Cassell.

Graham, J. (1990) *Pictures On The Page* Sheffield: The National Association For The Teaching Of English.

Gussin Paley, V. (2004) *A Child's Work* London: The University Of Chicago Press.

Hardy, B. (1968) 'Narrative As A Primary Act Of Mind' In Meek, M. Et Al Ed. (1978) *The Cool Web: The Pattern Of Children's Reading*, London: The Bodley Head.

Hendy, L. And Toon, L. (2001) *Supporting Drama And Imaginative Play In The Early Years*, Buckingham: Open University Press

Meek, M. (1985) *How Texts Teach What Readers Learn*, Stroud, Thimble Press.

Meek, M. (1992) *Language And Literacy In The Primary School*, London: Falmer Press.

Moyles, J. (1989) *Just Playing?: The Role And Status Of Play In Early Childhood Education*, Milton Keynes: Open University Press.

Murphy, J. (1995) *On The Way Home*, London: Macmillan.

Nicolajeva, M. And Scott, C. (2001) *How Picture Books Work*, Garland Publishing.

Okri, B. (1997) *A Way Of Being Free*, London: Pheonix.

Sendak, M. (1992) *Where The Wild Things Are*, London: Picture Lions.

Wadell, M. (1992) *Owl Babies*, London: Walker Books.

Wells, G. (1999) *The Meaning Makers; Children Learning Language And Using Language To Learn*, London: Hodder And Stoughton Educational.

Winston, J And Tandy, M. (1998) *Beginning Drama 4-11*, London: David Fulton.

Institutional memory in higher education



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The long history

If you've worked in higher education policy as long as I have, you get a

sense that you've seen a lot of current policies - or something very like them - before. For example, much of higher education policy is now directed towards meeting the needs of the economy in the global market. Yet, similar concerns have been expressed for nearly two hundred years. Table 1 lists a few examples.

Moreover, although the problems or policy drivers have remained similar, policy responses have tended to be cyclical. Every so often, for one reason or another (often adventitious), governments decide to act again on a concern that they had previously tackled and they often adopt a similar policy to those that have previously failed.

Hogwood and Peters (1985, p. 41) drew attention to the cyclic nature of policy and the idea of 'issue attention cycle'. I am reminded of the notion of 'punctuated equilibria' in evolution, propounded by the palaeontologist Stephen Jay Gould (Gould 2007). Instead of a process of gradual change over long time periods, he proposed that evolution of species most often takes place in successions of punctuated equilibria. Long periods of stasis, during which species may vary slightly but not significantly enough to evolve into new species, are punctuated by the (geologically) sudden appearance of new species.

Observers of British policy for higher education would recognise the phenomenon that Gould describes. Since the mid nineteenth century there have been visible cycles of policy making, with periods of relatively stability punctuated by flurries of new policy (though the new is often disconcertingly similar to the old). Table 2 summarises some of these policy responses to the kinds of concerns exhibited in Table 1.

The concern about Britain's economic position and technological competition in the nineteenth century (mentioned earlier) led, amongst other things, to the establishment of civic colleges for technological education in Manchester, Leeds, Birmingham etc. By the turn of the century these were becoming the 'redbrick' universities. After the second world war, similar concerns led to the foundation of colleges of advanced technology, which achieved university

1852

'As surely as darkness follows the setting of the sun, so surely will England recede as a manufacturing nation, unless her industrial population becomes more conversant with science than they are now' (Playfair 1852, in Roderick and Stephens p. 42)

1956

'The prizes will not go to the countries with the largest populations. Those with the best systems of education will win.we shall need many more scientists, engineers and technicians....' (White Paper, Technical Education, DES 1956)

1965

'there is an ever increasing need and demand for vocational professional and industrially-based courses...' (Crosland, 1965).

2006

'...our nation's skills are not world class' (Leitch, 2006:1).

'The average French worker produces more than 20 per cent more per hour than the average UK worker and that one fifth of the UK's productivity gap with France and Germany stems from the UK's relatively poor skills' (Leitch, 2006:7)

TABLE 1: Global competition

Late 1800s

Civic colleges, eg Leeds, Manchester, Sheffield

1950s

Colleges of advanced technology

1960s

Polytechnics

1990s

'New' universities

TABLE 2: Some policy responses to economic competition

status in the 1960s. Then came the polytechnics, which achieved university status in 1992. The policies of the 1980s and onwards still sought in many ways to sustain the policy aims of the 1850s, 1940s, 1950s and 1960s. The discourses of those periods are still present in policy documents. There is a strong sense of history repeating itself, and that lessons of the past are not being learned, or, if learned, forgotten.

Similarly, not long ago, the government introduced Foundation Degrees. These are programmes of about two years duration that can be end qualifications in their own right, or be topped up with about a further year's study to an honours degree. Some of us recalled a two year qualification invented in 1972, the Diploma of Higher Education, with many similar characteristics. Half a century before that the National Certificate scheme had created amongst

other things, two year, sub degree level qualifications - HNC and HND - in technical subjects.

Evidence from the past?

This very brief history indicates that policymakers seem not to draw on evidence available to them, particularly that from the past. There is, however, a tendency to use evidence of policy from other locations; currently the USA is very fashionable as a model in higher education. Yet my brief history suggests there are many instances of policy from the past which have close parallels with the policy issues of today, but which seem to have been ignored. Indeed, the neglect of the evidence of the past seems almost wilful. I offer two brief examples.

In a White Paper in 2002, the government made a statement that 'no effort was made' after 1945 'to develop better vocational and technical education to

meet the needs of a rapidly changing post-war society' (DfES, 2002: p. 7). The statement flies in the face of a series of reports, white papers and policy changes that have specifically addressed the need for higher vocational and technical education since the war, from the Percy Report (Ministry of Education, 1945) onwards, but also shows how little the government itself thinks of its own policy in this area.

Similarly, at a seminar at which I spoke on the topic, the senior civil servant concerned with Foundation Degrees explicitly rejected any comparison with the DipHE. The DipHE, despite an adventurous interpretation of it into independent study at North East London Polytechnic, faded away, beset by problems of its status in relation to 'proper' degrees. There are similar concerns about FDs. There is a similar sad history about the diminution of value of HNC and HND, once seen as comparable in standard to a pass degree, but now most generally seen as just about acceptable for a year's standing on a degree programme. There is no evidence that lessons of these histories have been built into the newer proposals.

The nature of policymaking

All this raises some interesting questions about the nature of policy making and the literature about it. Why is it that policy does not seem to be getting any better?

There is a substantial literature of this topic, which I mention only briefly here, for I want to focus only on the issue of use of evidence from the past. Ideal 'rational' models of policymaking (as described by for example Lindblom, 1959, 1979, and Simon 1945 et seq) posit that policy makers identify an issue or problem, explore (all) possible solutions then pick the best, which therefore, it is assumed, must solve the problem. But as we (and those authors) know, this is not what actually happens. Policymaking takes place in the context of tensions, limitations and constraints. As Lindblom (1959) pointed out, policy is 'polycentric'; there are always competing or conflicting interests to be resolved, or unavoidable constraints that preclude the ideal solution, leading Lindblom to make memorably clear in his categorisation of most policy making as 'muddling through'. Policymaking is iterative, and imperfect. Often the policy with least disagreement is the one that goes forward, or as Majone (1989) argues, those who are most successful in argument and persuasion win the day.

A more recent, more elaborate (though in my view less comprehensible) account of this complexity is found in Hajer and Wagenaar (2003). In their view, policy problems are but temporarily stabilised, making them into 'tractable projects for action', but maintaining - and creating - tensions which ultimately destabilise them. That is to say that the policy problems are not solved so much as managed, - or perhaps in the doleful history of British higher education - mismanaged, and will recur:

"... what counts in the end is, given the multitude of constraints that characterise most policy situations, usually not the definitive resolution of a conflict, but the discovery of a workable definition of the problem, or the temporary stabilisation of a situation that is unhinged or threatens to become so, or the emergence of personal insight that allows the actor to function more effectively in the situation at hand" (Hajer and Wagenaar, 2003, p. 23)

My own approach to policymaking is based on the work of Karl Popper (see Pratt 2003). As a Popperian, I see policy as an attempt, or series of attempts to solve problems:

P1 TS/TT → EE → P2

Where:

- P1 = initial problem
- TS/TT = tentative solution/theory
- P2 = new problem
- EE = error elimination

This view of policymaking has similarities with Lindblom's, for he not only described muddling through, but advocated this kind of gradualist approach to policymaking. By gradually improving policy by trial and error rather than by dramatic comprehensive change you avoid comprehensive errors.

But it should not come as a surprise that there are still unresolved problems in policy, though in theory the P2s etc should be less problematical than P1s that preceded them. However, a Popperian analysis of British higher education suggests that the repeated need to address broadly the same problems arises because the various TSs have not been well thought out. One of the reasons for this, I contend, is that the lessons of the past that are available have been neglected or ignored. This raises a question, I speculate, about what might be termed 'institutional memory'.

Institutional memory

Morgan (2007) has set out a number of metaphors for the way in which we understand organisations. Personally I see organisations as a combination of several of these, or perhaps in a world of quantum mechanics, they can at the same time be either one or the other. For me they are predominantly structures (we 'build' organisations), but they clearly 'behave' organically. Hogwood and Peters (1985) took the organic image further, using a medical metaphor. They described the problems and failures of policymaking in terms of 'pathology'. I think the metaphor is overextended, but nevertheless there are aspects of policymaking to which it is a useful way of understanding. Table 3 summarises the main categories of disorder that they describe.

It is in informational pathologies that Hogwood and Peters discuss memory failure. They do not describe where institutional memory resides, but it does so, I suggest, in three forms, both within and without policymaking organisations:

In documents

Records etc of policy making organisations about past policies and their outcomes
Research and other material without policymaking organisations

In people

Particularly civil servants (at national level, and their equivalents elsewhere) within policymaking organisations
Outside policymaking organisations, eg researchers, journalists, beneficiaries (or victims) of past policies

In 'rules'

Formal: for example about the procedures that are to be followed in developing policy
Informal: the culture and practices of organisations

- Congenital diseases e.g. conflicting objectives, inherited personnel, procedures, commitments, 'time bombs'
- Organisational pathologies e.g. 'polycentricity', lack of coordination, goal displacement, empire building
- Informational pathologies e.g. Information overload, learning disabilities, failure of memory
- Delusions and mental disorders e.g. Paranoia, ideas fixes, megalomania
- Obesity
- Pathologies of budgetting e.g. Entitlement, dependency, corruption

TABLE 3: Policy disorders



The new Checkland Building at the University of Brighton.

Hogwood and Peters (1985, p. 83 – 85) attribute memory failure to several causes:

- Key individuals leave
- Lack of records
- Form of records
- Retrievability of records
- Failure to recognise relevance
- Failure to remember that there is a memory
- Inability to relate past to present

The first they see as 'rare' (op cit, p. 83), when a single person or group heading an organisation leaves, taking their personal memories with them. I suggest that a version of this personal aspect of institutional memory may be more common than they think. The (fictional) manifestation of this source of institutional memory is the character Sir Humphrey in the television series 'Yes Minister'. He embodied the accumulated understanding of a professional civil service of the hazards of policymaking (though this was most often applied for the purpose of humour in the prevention of change). The post war episodes of policymaking have occurred at intervals of between 10 and 25 years. This is roughly the career span of a Sir Humphrey - a civil servant at a senior level - particularly within a single ministry. It is possible that we have a kind of generational loss of institutional memory. It is also possible, I suggest, that the current trend to managerialism in the civil service with its more rapid turnover of senior civil servants will increase the incidence of institutional memory loss.

The second form of memory failure according to Hogwood and Peters arises from the difficulty of designing and using policy records. Sometimes events are simply not recorded, or they may be recorded in inconvenient ways, without, for example, useful summaries or indexes. It seems to me that there is a further aspect of this problem here, not identified by Hogwood and Peters, which is that

records are usually kept for accounting purposes, rather than as 'evidence' that can be drawn on in future. The culture of record keeping is not enhanced by the tendency of the press and the public to seek to blame, rather than to learn. The recent proposal to reduce the time for which government records are kept secret was greeted by the Sunday Times (Liddle, 2009) for example with a ghoulish interest in the sources of advice to ministers – the headline was 'Come on, let's know who in the cabinet stood up to Blair' – not with a cheer that we can learn more quickly about the success or problems of policymaking.

Nevertheless, institutions are full of records, which constitute much of their institutional memory. Yet they are often overlooked. Hogwood and Peters surmise that this may be because of their third and most important reason, the lack of recognition that the past is relevant. 'It frequently does not occur to policy makers...that their predecessors had been there' (op cit, p. 84). They suggest too that the parallels between past events and new ones are not always recognised. It is curious that, in an age of globalisation in which the phenomenon of 'policy transfer' (Dolowitz, 2000) has been observed to have rapidly developed and foreign examples are frequently used as inspiration for policy, previous policy in the same country is neglected.

I would augment Hogwood and Peter's ideas with the obvious natural reluctance by policymakers (no different from the rest of us) to admit to mistakes. This is

likely to be more of a factor for the more permanent members of the civil service than their frequently changing political masters or mistresses, who were not involved in previous policies. I further surmise that institutional culture is (again naturally) to defend the service and the advice it has offered (as Yes Minister illustrated so well).

There is now also a more pervasive political culture, evidenced in the 'new public management' and the ideals of 'better policymaking' espoused by the government's advisors (Bullock et al 2001). The main elements of 'better policymaking' are:

- Forward looking
- Outward looking
- Innovative flexible and creative
- Evidence-based
- Inclusive
- Joined up
- Review
- Evaluation
- Learns lessons

This approach emphasises, amongst other things, 'forward looking' and 'outward looking' policy, focussing on future intentions, objectives and targets, though it does seek to be 'evidence based' and to 'learn lessons' (ibid). However, the 'lessons' in this document are about the problems of adopting forward or outward looking approaches, and the obstacles to 'modernising' policymaking. Lessons of history barely get a mention. Only one response to the survey of senior civil servants suggested 'more learning from failures' (op cit, 26).

Further, the aspiration for evidence-based policy has its inbuilt hazards. Wilensky (1967) warned (over 30 years before Bullock et al wrote) of the 'paradox of improved information':

"Insofar as the managers ask the wrong questions ... wrong decisions will be more efficiently arrived at, and poor judgement now buttressed by awesome statistics, will be made more effective... more weight will attach to data and systems analyses, whatever their quality" (Wilensky, 1967 in Hogwood and Peters ,1985).

There are further problems of:

- Clogging channels of communication
- Overload of policymakers
- Overload of implementers
- Cost

Too much information is a problem, and there is the eternal problem, manifest widely in higher education, of quantity driving out quality.

Lastly there is the familiar problem of what kind of evidence is sought. The discourse of contemporary policy documents, in a culture of 'spin', is on achievements and improvements. The 1991 White Paper started with a section so named (in its seventh paragraph). The first sentence of the 2003 White Paper (DfES, 2003) is 'British universities are a great success story'.

The respondent cited earlier (in Bullock et al) on the need to learn from failures went on: "a risk averse culture develops...failures are not accepted and learnt from...". Depressingly, a recent report from the National Audit Office (NAO, 2009) came to similar conclusions:

"Nearly 90 per cent of management boards do not discuss learning from their activities frequently, a third do not have a member of the board responsible for reporting on organisational learning, and only half of departments have 'contribution to organisational learning' within their competency framework for senior civil servants".

In this view not even success is learned from.

'Better policy making' does not encourage reflection on past failures or success, it does not even ask the right questions. We need to find ways to rehabilitate the evidence of the past.

Note

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References

Bullock, H, Mountford, J and Stanley, R (2001) *Better Policy-making*, London: Centre for Management and Policy Studies

Crosland, A (1965) Speech at Woolwich Polytechnic, 25 April, reproduced in Pratt, J and Burgess, T (1974) *Polytechnics: a Report*, London: Pitman, 203-07

Department for Education and Science (DES) (1956) *Technical Education*, London: HMSO

Department for Education and Skills (DfES) (2002) *14-19: Extending Opportunities, Raising Standards*, London: The Stationery Office

Dolowitz, D (2000) *Policy Transfer and British Social Policy*, Buckingham: Open University Press

White Paper (1991) *Higher Education: A New Framework*, London: HMSO

Gould, S J (2007) *Punctuated Equilibrium*, Cambridge MA and London: Harvard University Press

Hajer, M and Wagenaar, H (2003) *Deliberative Policy Analysis: Understanding Government in the Network Society*, Cambridge: Cambridge University Press

Hogwood, B W and Peters, B G (1985) *The Pathology of Public Policy*, Oxford: Clarendon

Leitch Report (2006) *Prosperity for All in the Global Economy - World Class Skills*, London: HMSO

Liddle, R (2009) 'Come on, let's know who in the cabinet stood up to Blair', Sunday Times, 1 February, 15

Lindblom, C E (1959) 'The science of muddling through', *Public Administration Review*, Vol. 19, 79-88

Lindblom, C E (1979) Still muddling, not yet through, *Public Administration Review*, Vol. 39, 517-26

Majone, G (1989) *Evidence, argument and persuasion in the policy process*, New Haven: New York University Press

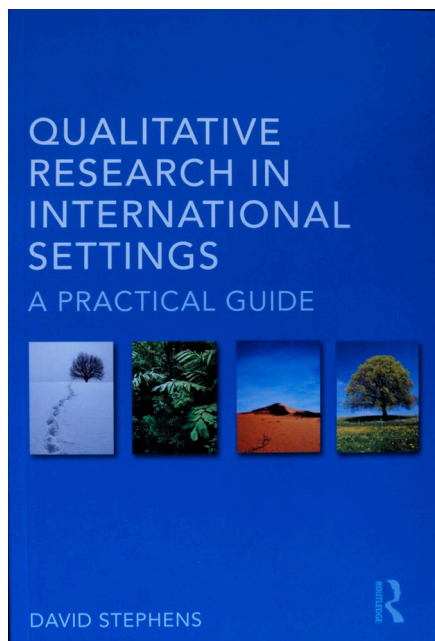
Ministry of Education (1945) *Higher Technological Education*, London: HMSO

Morgan, G (2007) *Images of Organization*, Thousands Oaks CA: Sage

Roderick, G W (1967) *The Emergence of a Scientific Society in England 1800-1965*, London: Macmillan

Simon H A (1947, 1976) *Administrative Behaviour*, London: Macmillan

Literary reviews



Professor David Stephens of the Education Research Centre has recently written a new book 'Qualitative Research in International Settings: A Practical Guide', published by Routledge.

Qualitative Research in International Settings: A Practical Guide

David Stephens

Routledge | Paperback | 160 pages | 23.2 x 15.6 x 1.2 cm |

ISBN: 978-0-41-528058-7 | Publication date: 29 June 2009 | Price £19.99

Reviewed by Mr Christian Beighton, Canterbury Christ Church University
<http://escalate.ac.uk/6154>

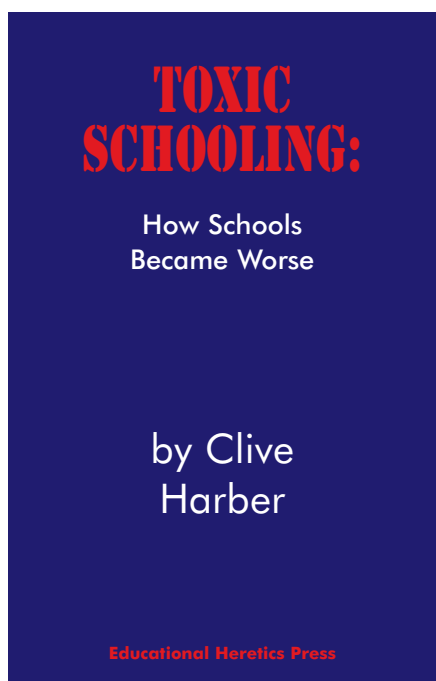
David Stephens' book on qualitative research is an impressive introduction to this area of research and presents a range of informed, pertinent themes with clarity and style. There are three parts: the first section on 'frameworks' reviews fundamental points about qualitative research. The second looks more closely at aspects of designing a research project. The third usefully gives an alphabetical list of sources of support, including an annotated bibliography, tips for journals and up to date software. One of the book's key aims is to provide a focus on issues of context which Stephens draws from his wide experience of qualitative research in international settings. Many of the examples relate to practical questions arising in fieldwork and come from experience in team working, for instance in developing countries. The book shines here in using personal examples and expertise gained in significant projects with major international aid partners. The advice is skilfully presented with anecdotes and broader conclusions drawn from important questions. 'Key extracts' and 'case studies' are presented in boxed-off sections and provide an insight into fundamental points such as epistemology, colonization or field work. Consideration is given to concepts of 'writing up'/'writing down' and 'thick' description in ways which succeed in both problematising assumptions we may have about the nature and purpose of research and tools for getting round to actually doing it.

What I would like to highlight however is not so much the way in which the book fulfils its brief in relating to international settings – which it clearly does – but rather the way in which it adds a useful slant on qualitative research generally by considering precisely what we mean by 'context.'

"Setting or context is not something that can be pushed to the background but is integral to the character of qualitative research, providing the process with a fabric from which meaning and interpretation can occur" (p. 12).

It seems to me that Stephens is making here a crucial and potentially quite bold statement about the nature and purpose of qualitative research. Few would disagree that context must play a part and that we neglect the material aspects of the research process at our peril. But I feel Stephens goes further than this in suggesting that, having perceived context, we then conceive it by imposing from outside interpretative paradigms which may miss the point of the interactions in question. Philosopher Gilles Deleuze (2004) returns frequently to the problems which arise when our attempts to take cognizance of something, end up being instead a re-cognition as we take ownership of concepts which thereby lose any originality they may have had. As Stephens implies, meaning is not something that the researcher can graft onto or draw out of research data. On the contrary, the relationship between semantic value and material is intertwined and perhaps better described as expression than communication. Meaning and interpretation can 'occur' because they have their own density and require nothing from outside beyond the imaginative connexions that are made in the research dialogue. In practice, this suggests that a form of theoretical 'bouncing' takes place which optimises both the regard given to the voice of those researched 'in here' and that of wider theories 'out there.' A context is established which neutralises the dichotomy, and rather than seeing the relationship as a linear one of placing local views in a wider context, a form of theoretical 'vibration' or 'refrain' takes place. The question is less 'what does it mean?', and more on 'what does it do?'. Stephens' skill in incorporating such insights from Wittgenstein and Hume (p. 15) is, for me, both illuminating and inspiring. Elsewhere on this site Jonathan

Tummons rightly argues for caution in the face of 'technical' texts and 'how to' manuals, and Stephens may show a way forward in re-engaging with more complex issues of perception and expression which might actually respond to the need for research techniques called for, for instance, by one of the many sources of inspiration for the text: Lincoln and Denzin's *Handbook of Qualitative Research*. Not only do they provide a basis for Stephens' advocacy of narrative approaches, but they also suggest a 'seventh moment' in qualitative research looking to the future in calling for innovative and creative research techniques. Engaging with new materials and approaches can include turning to the richness of narrative techniques which, in the international context at least, according to Stephens, have been neglected. Clearly, this turn involves a reflexive approach which combines a triple form of reflexivity. On the first hand, it is essential, and perhaps obvious, that a critical regard be maintained about one's approaches and practices in the field. But especially in interactive, qualitative settings where cultures and languages play such a powerful role, it is critical that researchers maintain a degree of reflexivity about themselves as researchers and their research subjects if we are to have a 'sharpened sense of responsibility' (p. 9). Stephens' point is a convincing one, I think, in trying to move beyond stale and sometimes rather facile qualitative/quantitative oppositions and to take a more sophisticated and critical stance regarding the fit of the particular project and techniques chosen. Asking such questions, as Stephens points out (p. 131), might bring us closer to the creation of some really useful knowledge.



Toxic Schooling: How Schools Became Worse **Clive Harber**

Educational Heretics Press | 168 pages | 20.6 x 13.4 x 1.4 cm |
ISBN: 978-1-90-021937-2 | Publication date: 3 September 2009 | Price £16.00

Professor Clive Harber of Birmingham University gave a very thought-provoking keynote to the Brighton Education Research Conference, examining some of the themes from his new book *Toxic Schooling: How schools became worse*.

The book critically examines the widespread and taken for granted assumption that schooling is automatically and always of benefit to both individuals and society. It reviews a selection of key texts on education written in the 1960's and 70's (Holt, Freire, Illich, Goodman, Postman and Weingartner and others) and examines whether their criticisms of formal education still hold true today. The keynote explored some of these themes and provided a stimulating and challenging frame for the conference.

Conferences

British Educational Research Association (BERA)

Annual Conference
University of Warwick
1 – 4 September 2010
<http://www.beraconference.co.uk/>

European Educational Research Association (EERA)

Annual Conference, Theme: "Education and Cultural Change"
23 – 27 August 2010
Helsinki
<http://www.eera-ecer.eu/ecer/ecer2010/>

American Educational Research Association (AERA)

Annual Meeting, Theme: "Understanding Complex Ecologies in a Changing World"
30 April – 4 May 2010
Denver, Colorado
<http://www.aera.net/>

ERC Research Seminars

A series of seminars has been planned with invited speakers, which in the immediate future include:

2 December – Viv Ellis

More than a load of old triangles: CHATTER – cultural-historical activity theory and teacher education

6 January – Centenary Seminar: Telling an institutional history

3 February – David Stephens and Clive Harber

Evaluating a Save the Children Fund Project

3 March – Norbert Pachler of the Institute of Education, London

Third Wednesday of every month, 1 – 2pm

Series of 'Research Conversations' in the School of Education throughout 2009 – 2010 on the theme: What does it take to be a researcher?

Carol Robinson, of the ERC, has been involved in the biggest enquiry into English primary schools for more than 40 years, The Cambridge Primary Review. The Review draws on 28 specially-commissioned research surveys and Carol led research survey 'Children and their Primary School: pupils' voices' which focuses on pupils' perceptions of the purposes of primary school as well as their perceptions of learning, teaching, the curriculum and assessment.

Her chapter is published in The Cambridge Primary Review Research Surveys (2010), Children and their Primary School: pupils' voices. In Alexander, R (ed.) The Cambridge Primary Review Research Surveys, pp. 17 – 48. Oxon: Routledge. Carol has also been involved in other research focusing on the voices of learners, publishing both a book chapter on Learners' voices and the Personalisation of learning and various papers on theorising student voice.

Welcome to Dr Oscar Odena, a new member of staff in the ERC, who recently delivered a keynote on 'Music Education as a Tool for Inclusion and Respect for Diversity' on the 19th of November, at a conference held at the Cyprus Pedagogical Institute, in Nicosia, Cyprus. The conference theme was 'Intercultural Education and living together: The role of the school'.

Research in the School of Education:

The School of Education is seeking to develop strategies for research as well as teaching and learning to maintain and enhance its record of excellent teaching. To support the development of the research strategy in particular, Nadia Edmond and Carol Robinson, subsequently joined by Jen Colwell and Mike Hayler, conducted research to investigate staff's existing perspectives on research in the School. The team will be reporting on the progress of the research strategy in the next issue of R.Ed.

CAL 09 Conference: Professor Avril Loveless chaired the Computer Aided Learning (CAL09) international conference held in Brighton, aided by Keith Turvey and Chris Sweeney who also acted on the Conference Academic Committee. Professor Loveless was also Co-editor of the Special Issue of Computers and Education, an international peer-reviewed and highly rated journal. The conference was a great success with over 250 delegates. Keith Turvey, Brian Marsh and Carol Robinson of the School of Education all presented papers at the conference and were all successful in having their articles accepted for publication in the Special Issue from the conference, in a widely competitive field.

Brighton Education Research Conference June 20th 2009

Back in June we held the Brighton Education Research Conference, which brought together practitioners from a range of disciplines. Throughout the day participants had opportunities to attend seminars given by students who have recently completed their MA Education and others on the EdD and PhD routes. A poster session was also held where those preparing to carry out their MA dissertation research presented and discussed their research proposals.



Sally Pearce who retired as course leader from the BA (Hons) Primary Education (QTS) has been continuing her work as a local historian with a colleague from the Uckfield and District Preservation Society (UDPS) in collaboration with Uckfield Community and Technology College. They have published a book: Harker, M. & Pearce, S. (2009) Uckfield Through the Lens. A Photographic Record of Uckfield 1968-2008, Uckfield: Uckfield and District Preservation Society.

Notes for contributors

We are now looking for contributions to the next issue in July 2010. Contributions should be sent to Sylvia Willis by 23 April 2010 at: sylvia.willis@brighton.ac.uk

Short pieces should be approximately 1500 words, and longer pieces between 2500 – 3500 words.

If any articles contain photographic images of people or children please ensure that you have their consent for publication on the web. Harvard referencing conventions should be followed.

Copyright for all published articles remains with the author. By submitting to R.Ed authors acknowledge that all submissions are their own work and that all sources have been acknowledged.



University of Brighton

1909–2009
A century of learning

“This edition of R.Ed brings together contributions from teachers, students, academics, youth and community workers... As such it is an invaluable contribution to professional development for all those who work with children and young people.”

Baroness Estelle Morris