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Constructing the 'ideal learner': a critical discourse analysis of the adult numeracy core curriculum.

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ABSTRACT

A critical discourse analysis of the Adult Numeracy Core Curriculum is used to expose and challenge the underlying assumptions of the Skills for Life strategy, and to examine the way in which the text constructs subject positions for adult numeracy teachers and learners. The analysis finds that presuppositions include the unproblematic transfer of classroom numeracy learning to social practice, and the need for adults to learn functional numeracy rather than academic mathematics. Teachers are found to be constructed by the text within a deficit model, as needing help, guidance, and instruction, while learners are positioned as also deficient, passive, childlike and 'other'. Learners are excluded from high status academic mathematics and restricted to functional numeracy, and this finding is considered in relation to the theories of Bourdieu and Bernstein. Implications for the coming review of the Skills for Life core curricula are examined, and alternative discourses considered.

Keywords: Adult numeracy; Professionalism; Critical discourse analysis

Introduction

> Discourse is the favoured vehicle of ideology, and therefore of control by consent.'
> (Fairclough 2001:37)
>
> 'Curriculum defines what counts as valid knowledge, pedagogy defines what counts as
> valid transmission of knowledge.' (Bernstein 1975:85)

Four years before the launch of the *Skills for Life* strategy for improving adult literacy and numeracy (DfES 2001), Roseanne Benn (1997) could examine the competing discourses of adult numeracy education in the UK, and conclude that against the government-driven discourse of economic imperatives and social conformity, was set the liberal, humanist, student-centred discourse of adult educators. In this article, I suggest that government ideology now dominates the discourse of *Skills for Life*, and that other discourses have fallen largely silent.

In many ways the *Skills for Life* strategy is to be welcomed. It has significantly raised the profile of adult numeracy and literacy in England, and has encouraged many adults to return to education. New, nationally-recognised qualifications open the doors to hitherto closed areas of employment or study. Nonetheless, I contend that the strategy has brought with these benefits a narrower, more functional focus for adult literacy and numeracy, and a marginalisation of alternative discourses.

In this article, I use the principles of critical discourse analysis to examine a key document of the numeracy strand of *Skills for Life*: the *Adult Numeracy Core Curriculum* (ANCC) (BSA 2001). In particular, I investigate how the ANCC document presents ideological assumptions as 'common sense', and how it constructs and positions the identities of both the teacher (as reader of the document) and the adult numeracy learner.

Mass-media texts address an 'ideal subject' (Fairclough 1989), and a reader must negotiate his or her relationship with the 'ideal' reader. Readers tend to 'fall in' with these expectations rather than oppose them. Here I suggest that the discourse of the ANCC constructs not only a subject position for the teacher/reader, but also for the 'ideal learner'. The teacher must not only negotiate a relationship with the ideal reader, but also between the ideal learner and the real learners that s/he encounters in the classroom.

I begin with a background to the *Skills for Life* strategy and a brief review of critical discourse analysis in this and related fields. I then discuss the methodology of critical discourse analysis, and the approaches I have drawn upon here. Next, in reporting my analysis, I focus on the ideological assumptions underpinning the numeracy strand of *Skills for Life*, and the way in which teachers and learners are constructed and positioned by the dominant discourse. Finally, I examine whether and how critical discourse analysis can effect social change, and reflect on the limitations of this approach.

As a *Skills for Life* practitioner, my relationship with the ANCC is one of both consumer and analyst. Fairclough (1989:141) stresses the 'essential similarity between what an analyst does and what discourse participants do'. Reflecting on my own experience of reading and using the ANCC in my own practice enables me to give richer insights into the influence of this text – and, of course, makes an 'objective' analysis impossible.

Background

In 1999, a report by a working group chaired by Sir Claus Moser (Moser 1999) led to a major reform of adult literacy and numeracy provision in England, branded by the DfES as '*Skills for Life*' (DfES 2001). At the heart of the strategy were new curricula for adult numeracy, literacy and language.

This is the first time a national curriculum has been imposed upon adult basic education in the UK, learning having previously been planned within a Freirean paradigm of dialogue between teacher and learner. Although the curriculum documents claim not to be prescriptive (BSA 2001), they are inextricably linked to the new system of national qualifications, launched as part of *Skills for Life*. Since both qualifications and curricula are based on the same standards (QCA 2000), and since funding for provision is dependent on the achievement of qualifications, the curriculum is thus made obligatory rather than optional.

There seems to be little critical analysis of the discourse of *Skills for Life*, despite the introduction of the strategy coinciding with a major discursive shift in adult basic education, from a loosely structured set of discourses in a student-centred, Freirean tradition of conscientisation, empowerment, process and identity, to a coherent neo-liberal discourse of competencies, marketisation, outcomes and functionality.

Predating *Skills for Life* by several years, Baker (1998:46) discusses the cultural and ideological components of numeracy as a social practice, and suggests that 'by making explicit and by contesting the dominant position of the formal numeracy practices, power relations in the learners' educational endeavours [should be] made explicit.'

A critical discourse analysis of the subject specialist qualifications for adult literacy teachers (McDougall et al 2006) describes the 'domestication' of teachers and their practice, and relates it to Bernstein's theories of classification and framing.

While not specifically a discourse analysis, Coben et al (2004) critique some of the assumptions and terminology of the numeracy strand of the strategy – for example, highlighting the mismatch between adults' own perceptions of their mathematics ability and the tests which 'expose' their deficits, and questioning the implicit assumption of the 'spiky profile' that there is a 'flat-profiled normal student' (p73).

Morgan (2005) critically analyses the discourse of a related policy, the National Numeracy Strategy, as it is introduced into secondary schools. She concludes that the discourse presents a picture which is: authoritative; 'consistent with the assumption…that teachers need to be forced to change their practice'; new, 'satisfying the political demand for reform'; and familiar enough to encourage compliance. Dowling's work (1998), on how differentiated school mathematics textbooks construct students with different levels of ability, also has relevance to adult numeracy.

A number of other papers analyse the discourse of curriculum reform in other areas, and discuss implications for teachers' professional autonomy and practice (for example Sarangi 1996, Kable 2001, Mulderigg 2003).

Critical Discourse Analysis

The role of critical discourse analysis is to critically investigate social inequality as it is expressed, signalled, constituted and legitimised by language use (Wodak 2002). Unlike other forms of discourse analysis, it also involves theorising the social processes and, in particular, the power structures, which give rise to, and are maintained by, discourse. It includes all forms of semiosis, including written, spoken and non-verbal, and recognises the 'constitutive force of language and discourse in social formation and discipline, economic exploitation and power.' (Luke 2002:97).

Through critical analysis we can seek to expose and challenge the institutional practices which directly or indirectly legitimise existing power relations – in particular the way in which ideological assumptions are projected as 'common sense' (Fairclough 1989:37). Thus critical discourse analysis must analyse language for opaque as well as transparent structural relationships of dominance, discrimination, power and control (Wodak 2002).

Methodology

The range of methodological and theoretical approaches to critical discourse analysis is highly heterogeneous (Wodak 2002), representing 'at most a shared perspective' (Van Dijk 1993:131). Luke (2002:97) describes critical discourse analysis as 'more akin to a repertoire of political, epistemic stances' than a set of analytic and methodological techniques. I have therefore drawn on those approaches which seemed to best suit the needs of my analysis, from Fairclough (1989, 2001), Luke (1995, 2002) and Wodak (2002).

While my approach to linguistic analysis was drawn mainly from Fairclough (1989), the overall procedure tended to match Luke's (2002:100) description of the critical discourse analysis process as:

> a principled and transparent shunting back and forth between the microanalysis of text using varied tools of linguistic, semiotic and literary analysis and the macroanalysis of social formations, institutions and power relations that these texts index and construct.

Interdiscursive Analysis

The relationship between the text and social structures is 'mediated by the discourse which the text is part of' (Fairclough 1989:140). I therefore considered the relationship of the ANCC to other parts of the *Skills for Life* discourse, and also to the wider range of related discourses and social structures in which it is situated.

Analysis of the Text

The ANCC document consists of eleven introductory pages which introduce both the *Skills for Life* strategy and the new numeracy curriculum, followed by a main section of approximately 80 pages, all of which use a consistent, double-page structure to define the curriculum element by element (a total of 141 elements in all). I selected for my analysis the text in the introductory pages, and also the text on illustrative double-page spreads of the main section.

I considered how the linguistic features and the structure of the text are used to construct:

- The ideological assumptions that underpin the discourse of *Skills for Life*;
- The adult numeracy teacher as the 'ideal reader' (Fairclough 1989); and
- The adult numeracy learner.

My linguistic analysis draws largely on Fairclough (1989), and the features I consider include:

- The experiential, relational and expressive values of the words used;
- Whether sentences are active or passive, and whether agency is made clear;
- How tenses and modality are used;
- Use of pronouns;
- Use of metaphors; and
- Use of textual features such as bullet points and graphics.

Intertextual Considerations: The Discourse of *Skills for Life*

The ANCC is part of the *Skills for Life* strategy and to a large extent shares a common discourse with it. The ANCC will be interpreted by its readers in the context of other components of the strategy, and these must therefore be taken into consideration throughout the analysis.

The discourse of the *Skills for Life* strategy has its origins in the Moser report (1999), which drew on various research sources, including the International Adult Literacy Survey (IALS) and national cohort studies, to assess the levels of literacy and numeracy in the UK population. The discourse here is one of *deficit*. Research is based on how well subjects performed in pre-determined tests of literacy and numeracy, and the results are used to conclude that nearly half of all adults in Britain have numeracy skills 'below the level expected of an 11 year old' (para 2.9).   The discourse of deficit permeates throughout the strategy. In his Foreword to the *Skills for Life* strategy document (DfES 2001:2), David Blunkett – then Secretary of State for Education and Employment – describes the reported

levels of literacy and numeracy as 'shocking.' In the ANCC itself (BSA 2001:1), we read of adults who 'struggle', and who have 'difficulty doing some of the simplest tasks.'

Another discourse which must be taken into consideration is that of the National Numeracy Strategy (NNS) for primary schools, from which the ANCC draws heavily. Brown and Yule (1983) suggest that texts may be interpreted by readers by analogy with other similar texts, and later I discuss the potential implications of this in positioning adult numeracy learners as childlike.

Conspicuous by their absence in the discourse of *Skills for Life* are the Freirean values, formerly prominent in adult basic education (Benn 1997), of dialogue, *conscientization* and empowerment (Freire 1972). Taylor (2004) remarks on this general discursive shift, in which social democratic discourses, especially the discourse of active citizenship, have become marginalised.

Ideology and Presuppositions

Fairclough (1989) defines ideology as the power to project one's practices as universal and common-sense. Dominant structures stabilise conventions and naturalise them so that ideology is taken as given (Wodak 2002). Here I consider the ideology and presuppositions which underpin the ANCC.

Ideology is most effective when their workings are least visible. Through naturalization, discourse types actually appear to lose their ideological character (Fairclough 1989:92). Where discourses are internalised by the subject, the result is non-coercive control, and subjects become complicit in their own regulation (Luke 1995). The aim of critical discourse analysis is thus 'an intervention in the apparently natural flow of talk and text…that attempts to "interrupt" everyday common sense.' (p12)

I would like to examine two presuppositions within the discourse of *Skills for Life* which are presented so as to be accepted as 'common sense' by practitioners. These are: that classroom numeracy enables adults to 'function and progress in work and society' (BSA 2001:3); and that adults want and need to learn *functional* numeracy rather than academic mathematics. Both assumptions are located within the dominant neo-liberal ideologies of lifelong learning which are linked with economic effectiveness, marketisation and globalisation.

Presupposition 1: Classroom numeracy is transferred unproblematically to social practice

There is much evidence that numeracy skills learned in the classroom are not easily transferred to social or workplace practice, even when attempts are made to provide artificial 'contexts' (Lave 1988, Evans 1998, 1999, Wedege 2004). Baker argues that numeracy must

be recognised as a social and cultural practice (Baker 1998, Baker et al 2001). In his model, multiple numeracy practices are acknowledged, only one of which is the set of formal classroom practices needed to gain qualifications.

Coben (2002), following Kell (2001), suggests that numerate practices are located within two discursive domains: Domain One is the numeracy of policy and provision, 'characterised by massive processes of formalisation and standardisation' (Kell 2001:199), while Domain Two is where 'life goes on…people are embedded in literacy practices'. Coben places the numeracy of the ANCC firmly in Domain One.

Attempts have been made elsewhere to identify pedagogical approaches which are more appropriate to social practice and which facilitate learning transfer (Bessot and Ridgway 2000, Wedege 2004, FitzSimons and Wedege 2004). FitzSimons (2005) draws upon Bernstein's distinction between vertical and horizontal discourse and applies it to adult numeracy learning. She suggests that while many adult numeracy courses attempt to follow the vertical discourse models of school mathematics, numeracy as a social practice is learnt as a horizontal discourse.

> the acquisition of numeracy competence could be compared to the development of a tradespersons' knowledges, skills and techniques, developed via an apprenticeship model. This model blends theory and practice, formal and informal learning, and the physical presence of an experienced practitioner is essential. (p5)

In the discourse of *Skills for Life*, however, no distinction is made between classroom numeracy and socially situated numeracies, nor is there any acknowledgement of the value of alternative numerate practices. For example, having reported on the poor performance of adults when subjected to formal testing, the Moser Report (1999) finds that:

> many adults underestimate their need for help. Less than 5% of adults…acknowledge a difficulty with numbers. Many people are unaware of their poor skills, and many, even if aware, don't regard it as a problem. (para 2.22)

One inference might be that many adults have informal numeracies which serve them well in their daily lives but which do not suit pen and paper testing (c.f. Hamilton and Barton 2000). However, the report instead concludes that adults must be made 'aware' of their own inadequacy, and that their deficiencies must be 'exposed' through testing.

Consistent with this refusal to acknowledge multiple numeracies, is the assumption that classroom numeracy can be transferred unproblematically to social situations, and this assumption is maintained throughout the ANCC document. A full-colour page, showing photographic representations of social 'contexts' for numerate practice – including DIY, shopping, buying petrol and reading charts of financial growth – points out that:

> In everyday life we are confronted with numbers, from getting on the right bus or putting coins in a parking meter, to choosing the best deal on a mobile phone or a pension plan. (p10)

The elements in the curriculum (i.e. Bernstein's vertical discourse) are described as 'the building blocks that everyone needs to use numeracy skills effectively in everyday life' (BSA 2001:8).

Each of over 140 curriculum elements throughout the document is accompanied by 'examples' of how the corresponding numeracy skill might be used in a social context, from 'Count children in a group to make sure no-one is missing' [Entry 1] (p20) to 'Identify the possible outcomes of the gender of twins' [Level 2] (p86).

Presupposition 2: Adults need to learn functional numeracy rather than mathematics

Recently, research has also raised debate about whether all adults want or need to learn 'functional' numeracy, and whether some adults are more motivated by, and gain greater cultural capital from, 'academic' or 'autonomous' mathematics.

There are ideological assumptions behind the very title of the *Adult Numeracy Core Curriculum*. The term 'numeracy' was coined relatively recently by Crowther (DES 1959: para 398). Although there are many definitions of numeracy (see Coben et al 2003), encompassing concepts from basic arithmetic through to critical citizenship, the ANCC uses a utilitarian interpretation, copied from the Moser Report.

> the ability to…use mathematics at a level necessary to *function* at work and in society in general. (BSA 2001:3, my italics)

Numeracy is understood here to be a functional subset of mathematics, and alternative, wider definitions, such as Tout's (1997:13), are not considered:

> This view of numeracy is very different from numeracy just being about numbers, and it is a big step from numeracy or everyday maths that meant doing some functional maths. It is about using mathematics in all its guises - space and shape, measurement, data and statistics, algebra, and of course, number - to make sense of the real world, and using maths critically and being critical of maths itself. It acknowledges that numeracy is a social activity. That is why we can say that numeracy is not less than maths but more.

The assumption that adult numeracy must be functional recurs throughout the ANCC. Terms such as 'straightforward', 'everyday', 'familiar' and 'practical' distinguish the numeracy of the ANCC from more esoteric and higher status forms of mathematics.

Tomlin (2002:3) points out that the functional purpose for the teaching of mathematics:

> seems to be assumed, rather than argued through … "Satisfactory functioning" has become a standard purpose for adult maths education; it has attained the status of "common sense".

Data from her participant action research project challenges such assumptions. She found that her students were fascinated with abstract mathematical topics such as multiplication of

fractions. When she tried to steer them away from topics of this type, her students persisted in setting their own abstract problems and talking through their solutions.

Tomlin's observations resonate with a larger study by Swain et al (2005). This study investigated students' motivations for attending adult numeracy classes, and found that motivation was rarely related to the needs of employment or everyday life. The main motivations expressed were:

> to prove that they have the ability to succeed in a subject which they see as being a signifier of intelligence; to help their children; and for understanding, engagement and enjoyment. (p9)

Students wanted to learn mainstream school mathematics and engage with abstract mathematical concepts. Baker (1998:41) suggests that culture and ideology are as much components of numeracy as content and context, and suggests that educators should engage with the culture and ideology of learners, including 'what they see as acceptable and legitimate numeracy.'

The discontinuity between the aspirations and motivations revealed in these studies, and the 'ideal learner' constructed by the text of the ANCC, is explored in more detail later in this article.

These underlying assumptions: that classroom numeracy transfers unproblematically to social practice; and that 'functional' numeracy is the appropriate form of mathematics for this purpose; have, I suggest, become so naturalized that they are accepted and internalised by both teachers and adult learners, who have become complicit in their implementation throughout adult basic education.

Constructing the Teacher as 'Ideal' Reader

The ANCC has been written 'primarily for use by adult…numeracy teachers' (BSA 2001:1). Here I examine the role of teacher as reader, or consumer, of the ANCC.

Power in written texts is one-sided, and the producers of texts address an 'ideal subject'. Readers must negotiate a relationship with the ideal subject, and will often feel that they should 'fall in' with the subject position of the ideal reader, rather than oppose it (Fairclough 1989). Thus teachers who find that their own views, experience or practice are not reflected in the claims of the ANCC, may feel that they must adjust their position to conform.

Fairclough (2001:254) describes how government communications are an 'essentially promotional genre', a crucial element in producing change. The teachers are brought on-board the *Skills for Life* strategy and its discourse via the 'soft' rhetoric of the ANCC

introductory pages. The first person plural is used inclusively, suggesting a complicit, colleagual relationship, for example:

> *we* know that the 7 million adults struggling with literacy are not a homogeneous group. (BSA 2001:5, my italics)

The ANCC presents itself as an 'invaluable tool' (p.v) to 'help' teachers. It claims that '*for the first time* adults and the teachers who work with them have a clear set of skills…' (p1, my italics). Criticism of previous approaches is implied, and the suggestion is that teachers need the ANCC to guide them.   A deficit model of teaching is dominant within the discourse of the *Skills for Life* strategy, one strand of which is the professional development of teachers.

A range of navigational metaphors reinforce the message of guidance: 'map' (p3), 'signpost' and 'signal' (p4). Bullet points and numbering are used throughout the document and, while these can make text easier to understand, they can also be interpreted as directive (Fairclough 2001).

In the main section of the document, in which the curriculum elements are prescribed, the teacher becomes invisible. The passive tense is used on every page to state that 'Adults should be taught' each curriculum element, and agency becomes unclear, reducing the role of the teacher to an anonymous, compliant provider of instruction.

The mood of the clauses in the introductory section is largely declarative, and there is little use of modalising expressions which might give a sense that adult numeracy is a difficult or controversial area where problems may be difficult to resolve. The ideological assumptions discussed earlier in this paper are presented as assertions of fact, with no room for dialogue or debate.

> Education *is* a route to equality of opportunity for all, a healthy and just democracy, a productive economy, and sustainable development. (BSA 2001:2, my italics)

> Over 7 million adults in England *have* difficulties with literacy and numeracy. (p5, my italics)

> The application of skills to solving problems in a range of contexts *will* enable learners to demonstrate capabilities defined in the national standards for adult numeracy. (p8, my italics)

In the main sections of the ANCC, the mood is imperative. On each page, standards are defined, followed by a list of the skills 'adults *should be* taught'. Examples, sample activities and guidance follow. The sample activities and guidance are arguably the most useful part of the ANCC document, and within a discourse of democratic professionalism (Sachs 2001) these features might be positioned as the sharing of good practice, with expressive modality used to convey the subjective and evaluative nature of the discourse. In the ANCC however, the modality is imperative and assertive, for example

The right-hand pages also contain guidance on techniques and approaches that teachers *will* use to develop numeracy. (BSA 2001:6, my italics)

The solution *is* to learn to use the memory button. (p47, my italics)

How then is the identity of the adult numeracy teacher constructed by the discourse of the ANCC? It is clear that the teacher is someone who needs help and clear guidance. The teacher and the learner cannot be trusted to decide what is to be learned, but must work to a set curriculum and national standards. Finally, the teacher must be instructed on the pedagogies which must be used to achieve these standards. The use of the first person plural is used to position the teacher as a complicit colleague.

Although teachers in schools have been subject to a national curriculum since the late 1980s, until relatively recently teachers in adult basic education worked to an essentially Freirean philosophy, in which teacher and learner could agree what was to be learned. Although, in practice, funding and qualifications restrained choices, the discourse of dialogue remained open. With the introduction of the new curricula, the teacher's role is changed from selecting 'from the total that is knowable' to taking 'as a starting point, that which has been sanctified' (McDougall et al 2006:170). According to Bernstein (1996:27) 'Classification refers to *what*, framing is concerned with *how* meanings are to be put together, the forms by which they are to be made public and the nature of the social relationships that go with this process', and with the introduction of the ANCC, adult numeracy teaching has become strongly framed and strongly classified.

Teachers in all sectors are being increasingly told *how* to teach, a matter which had previously been considered one 'of professional judgement, to be debated among teachers…but not to be explicitly prescribed' (Morgan 2005:1). This brings us to the question of what it means to be professional. According to Codd (1997), within neo-liberal, market-driven discourses, good practice is perceived as being a skilled, competent technician who produces the attainment of specified learning outcomes. This is contrasted with the professional, or 'activist' view, which values reflective practice, integrity and the development of diverse human capabilities.

In the technocratic view, good practice can be reduced to a set of predefined skills or competences, with little or no acknowledgement given of the moral dimensions of teaching.
In the professional view…the good practitioner is a well-rounded person who can integrate all aspects of their prior knowledge and act in a teaching situation with moral integrity.
(Codd 1997:140)

To what extent do adult numeracy teachers 'fall in' with the subject position constructed by the text of the ANCC? As a numeracy teacher-trainer, I train both new and long-standing numeracy teachers, and have observed that new adult numeracy teachers are more likely to accept unquestioningly the identity and positioning constructed by the discourse of Skills for Life. More experienced teachers, previously exposed to alternative ideologies, can be less compliant. In a study by Brooks et al (2004:6), stakeholders complained that some teachers were 'living in a "lovely past" where basic skills tutors had considerable autonomy and could

run courses tailored to what they perceived as the needs of their students.' The derision of the anonymous participant(s) is unmistakeable, though it is not clear why the ANCC is more able to 'perceive' the needs of learners than the teachers who work with them.

Constructing the 'Ideal' Learner

Luke (1995:8) explains how discourse can shape 'grids and hierarchies for the institutional categorisation and treatment of people.' Discourse constructs 'truths' about the natural and social world by which members of communities define themselves and others.

Here I consider the way the text of the ANCC is used to construct the adult numeracy learner. Firstly, learners are constructed for the *reader* of the text, namely the adult numeracy teacher. Secondly, indirectly, the content of the core curriculum will also contribute to the construction of learners *own* identities. I propose an analogy with Fairclough's 'ideal reader' (1989), in that both teachers and learners will find themselves having to negotiate a relationship with the 'ideal learner' constructed through the text.

A deficit model of adult numeracy learners dominates the text of the ANCC. They '*struggle* with basic…maths' (BSA 2001:1). The only time the voice of an 'adult learner' is included within the text, the message is one of helplessness and childishness:

> "I couldn't book holidays. I couldn't write cheques if they were over £13. I'd learnt to spell out figures from a children's book but it only went up to 13." Sue Torr, Adult Learner. (p11)

The use of first person plural inclusively (of teachers as readers) positions adults with numeracy and literacy difficulties as 'other', for example, they have:

> difficulty doing some of the simplest tasks – tasks that *most of us* take for granted. (p5, my italics).

The national standards, which are reproduced on every double-page of the main section, together with the element by element listing of the curriculum, contribute to the deficit model. According to Baker (1998:44), such curricula consist of 'an accepted list of skills that the student must acquire, and if they do not have these they are deficient.'

Adult learners are also positioned as being without agency, as passive objects to be acted upon. Every double-page spread in the main section of the curriculum begins with the phrase 'Adults should be taught to', followed by a bullet-pointed description of the curriculum elements for that page. The use of *adults* as a generic term, without an article or qualifying phrase, serves to depersonalise and objectify learners. The passive tense and the reference to the process of *teaching* rather than *learning*, strips learners of any agency or responsibility for their own development.

Adult learners are constructed as childlike. The phrase 'Adults should be taught to' needs further to be considered intertextually. The phrase is adapted directly (and perhaps without due consideration) from the National Numeracy Strategy (NNS) for primary schools (DfEE 1999), replacing only the word *pupil* with the word *adult*. Since discourse is interpreted in the light of past experience of similar discourse, by analogy with similar texts (Brown and Yule 1983), it seems likely that, for teachers previously familiar with the NNS documents, this similarity will reinforce their perceptions of adult numeracy learners as childlike.

Many other aspects of the NNS are copied over to the adult curriculum. Adult numeracy teachers are encouraged to introduce new algorithms for calculation strategies. These have been developed for use with primary school children, and while cumbersome, they can be seen in the primary school context as an important learning process. For adults, familiar (if not securely so) with traditional written algorithms, these can represent a significant backwards step, requiring a re-accommodation of mental schema (Skemp 1971). Similarly, children learn to understand the concept of measurement using non-standard units (such as the width of their own hands, or the capacity of a cup). This use of non-standard units has been copied to the ANCC (BSA 2001:53) :

> Measure the length and width of the room in paces. Record and compare results and discuss the need for standard measures.

A study of adults' attitudes to measurement in numeracy provision (Baxter et al 2004) concludes that many adults have sophisticated, situated measurement practices, and that the learning of measurement as it is presented in the ANCC is not relevant to adult lives.

The ANCC tends to exclude adult numeracy learners from the discourse of academic mathematics. Dowling (1998) categorises mathematical activity into a hierarchy that exists between the superior intellectual (the esoteric domain) and the inferior manual (the public domain). Dowling's analysis of a differentiated mathematics textbook scheme showed how lower level students were constructed as engaged in 'everyday' practices and were excluded from esoteric mathematical practices. Swain et al's study (2005) suggests that, while most adult numeracy learning is restricted to the public domain, many adult numeracy learners, including those at Entry Level, aspire to the esoteric domain.

We may draw on Bourdieu's concepts of cultural capital and social reproduction here (Bourdieu 1979; Bourdieu and Passeron 1977). Bourdieu demonstrates the role of education in creating a particular kind of habitus and thus reproducing society. A qualification in the higher status, esoteric domain of mathematics confers greater cultural capital than one in the lower status, functional domain of numeracy, yet the status quo is maintained by restricting adult numeracy learners to the functional domain.

Bernstein (1990) shows how the values of the dominated group are distorted in pedagogic discourse, and are constructed as having less value.

> Vocationalism appears to offer the lower working class a legitimation of their own pedagogic interests in a manual-based curriculum, and in so doing appears to include them as significant pedagogic subjects, yet at the same time closes off their own personal and occupational possibilities. (p87)

To summarise, adult numeracy learners are positioned by the discourse of the ANCC as deficient and 'other'. The 'ideal learner' is constructed as passive and lacking in agency, needing to be 'taught' rather than being capable of learning. Learners are assumed to be child-like and to benefit from learning activities originally developed for teaching 6-year olds. They are excluded from the discourse of high-status academic mathematics with its associated cultural capital, and must be restricted to learning low-status functional numeracy.

The teacher-reader of the ANCC will need to 'negotiate a relationship' between this ideal learner and the wide range of real learners s/he will encounter in the adult numeracy classroom. Even when the real learners turn out to be motivated, determined, self-directed and interested in esoteric mathematics as an intellectual exercise and personal challenge (Knowles 1978, Tusting and Barton 2003, Swain et al 2005), it seems likely that the subject position constructed by the discourse of the ANCC and other components of *Skills for Life* will influence the teacher's perceptions and expectations of his or her learners.

Personal Reflection: The Limitations of my Analysis

In my introduction to this paper, I explained my dual position as consumer and analyst of the *Adult Numeracy Core Curriculum* text. That dual role has inevitably both enriched and compromised my analysis.

Here I indulge in a brief personal history of my relationship with this text. When the document was first released in 2001, my initial response was positive. Hitherto, our teaching had been loosely based on the school curriculum, and we were delighted to have a curriculum written specifically for adults. Having read the Moser report (1999) and as a relatively inexperienced practitioner, I was convinced of the need for functional numeracy which was relevant to adults' lives.

My doubts began when I attended a core curriculum training course, then mandatory for all *Skills for Life* tutors. Although the course was positioned as continuing professional development, we were clearly being instructed in implementing reform (Locke et al 2005). We were asked to participate in a range of activities borrowed from primary school pedagogies which, it was suggested, would be motivating and stimulating to our learners. Although we felt extremely self-conscious ourselves during these exercises, such was the ideological sway of the training course that we convinced ourselves that our learners, adults already positioned by Moser as 'deficient', would not find these exercises demeaning.

Soon I also found that my learners did not all fit the model constructed for them by the ANCC. They enjoyed the challenge of abstract mathematical problems, often more so than functional numeracy situated in so-called 'contexts'. Their motivations were not to use numeracy in work or social life, but as a personal challenge or to help their children. As Fairclough (1989) describes, I attempted to 'fall in' with the ideal reader. I wondered whether our area had unusually numbers of middle-class learners, or whether our recruitment strategy was missing hard-to-reach learners. It wasn't until the publication of the studies by Swain et al (2004), that the ideology was exposed and 'interrupted' for me.

However, while my own experience gives me richer insight into the discourses of *Skills for Life*, it also compromises my analysis.

Following critical theory (Bhaskar 1986), Fairclough (2001) suggests that the starting point for critical discourse analysis is the recognition of a social problem. Since one of the fundamental premises of critical discourse analysis is that interpretation will depend upon the subject position of the reader, it seems inevitable that a reader-analyst who has identified a social problem will find evidence of it within discourses which pertain to it.

Convinced as I am that the *Skills for Life* strategy tends to position learners as deficient, and contributes to social reproduction by restricting learning to 'functional' skills, it is impossible for me *not* to interpret the discourse of *Skills for Life* in these terms. I cannot use critical discourse analysis to *prove* that these ideologies exist; merely to demonstrate what I believe to be examples of the ideologies in action. I am therefore not convinced of the power of critical discourse analysis as an investigative tool, and feel that its main strengths lie in its expository function.

Taking it Forward: Constructive Outcomes of Critical Discourse Analysis

What can we gain from critical discourse analysis? Criticism does not take us anywhere unless we can suggest a better alternative, nor will it effect social change if it remains only within the discourse of academic publications (Fairclough 2001).

Fairclough suggests that critical discourse analysis should focus on a social problem, and analyse how discourse becomes an obstacle to overcoming that problem. He suggests that the representation of a social practice may constitute such a problem, and I would suggest that this is the case with the representation of adults' numerate (and literate) practices within the discourse of *Skills for Life*. What, then, can be done differently?

The adult literacy and numeracy core curricula are to be reviewed over the next year (LLU+ 2006). A national consultation is taking place, and I believe that this process can create a discursive space in which the ideology of the current curricula can be exposed and challenged.

It is to be hoped that those involved in rewriting the curricula will be reflexive about constructing and positioning teachers and – especially – learners, in the new versions of these documents.

A second way in which critical discourse analysis can effect social change is by giving students, teachers and others agency to see how they are positioned, and their relations constructed, by dominant discourse. Adult literacy teachers already learn the principles of critical discourse analysis as part of their subject specialist teaching qualifications (FENTO 2001). I suggest that other teachers and their learners would also benefit from gaining the skills and critical awareness which enable them to recognise when an ideological position is assumed, and to question and challenge that assumption.

Conclusion

My critical discourse analysis of the ANCC shows how ideological stances about what it means to be numerate, and the subject positions of both teachers and learners, can be constructed through text in such a way as to be largely unchallenged by practitioners and accepted as 'common sense'.

Luke (1995) notes that 'it is extremely risky to engage in the construction of texts of curriculum, educational policy, and research without some explicit reflexivity on how and whom we construct and position in our own talk and writing' (p41). While the current text constructs versions of adult numeracy provision and its participants which resonate with neo-liberal ideologies of economic effectiveness and marketisation, alternative discourses must be considered.

Instead of presenting numeracy as a set of functional competencies to be achieved in response to employer demand, numeracy can be seen as an on-going social practice which can bring empowerment, personal achievement and critical literacy to the learner (Swain et al 2005, Ivanicv 2006). Instead of presenting numeracy teachers as deficient and in need of guidance, the curriculum could be used to open a discourse of professional autonomy and the sharing of good practice. Most importantly, numeracy learners could be presented, not within a deficit model as passive and without agency, but as highly motivated, self-directed adults who bring a variety of numerate practices to their learning which can be celebrated and developed.

According to Fairclough (2001:240) 'The aim of analysis is to show how semiotic, including linguistic, properties of the text connect with what is going on socially in the interaction.' By exposing ideologies, critical discourse analysis can disrupt them, and create space for a wider and more democratic range of alternative discourses.

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