Cultural determination of curricula, theories and practices

DEREK WOODROW
Manchester Metropolitan University, United Kingdom.

Abstract
This article looks at the differences in learning assumptions and principles that are evident between societies, both internationally and intra-nationally. The underlying value systems which are embedded in the ways in which societies and subgroups of societies view the nature of learning makes international exchange on the one hand and social equity on the other problematic. Differential valuations of cultural capital create differential power. Comparisons are, however, valuable in raising awareness about the underlying principles and implicit discrimination present in school curricula and methods of teaching. In particular the assumptions about autonomy and authority dominate much of the decision making on school curricula. The roles of teachers as guardians of knowledge or facilitators of learning and the prioritisation of individual rights over social responsibilities create major variations. Mathematics and science teaching are used to epitomise different national assumptions, and constructivist theorising in particular is used as a focus for the discussion. This has clear significance not just for international co-operation, but for the equality of treatment and access to learning for the different subgroups within English society. No education is without values and whilst those values should be recognised they should not be universally imposed.

Introduction
Varying cultural and national identities have had a clear impact on formal education and different societies have different informal child-rearing and adult-initiation practices. Formal education is itself socially created and generally only becomes universal with the rise of the urban industrial dwelling. Different societies have different perceptions of authority and respect for elders, different perceptions of freedom (especially for children) and different assumptions about gender roles and gender relationships, all of which have a significant influence on educational practices. Even within a single society these assumptions change over time and within subgroups and lead to changes in educational practices. In Western Europe the Marxist educationalists of the 1960s and 70s clearly established the role of education as a vehicle for socialisation, for confirming and continuing the social order and for conditioning the populous to their varied roles. In more recent times education has been similarly viewed, with fewer overt political overtones, as a vehicle for enculturation by both majority and minority cultures. Of course this assertion about ‘fewer political overtones’ is in itself a Western, even perhaps ‘Anglo-American’, view of education that it should ideally be non-political. For many cultures and societies the interweaving of education with politics and religion represents the ideal, a holistic and comprehensive view of the world and people. Certainly Islam would reject such separation as not reflecting the importance of dedicating to Allah the whole of ones life-actions. Gerdes (1985), writing about Mozambique, D'Ambrosio (1990) about Brazil and Vithal and Skovsmose (1997) about South Africa write and talk movingly about the role of mathematics education in promoting just and fair societies.
Cultural mores and beliefs relate not just to social behaviours and interests but affect assumptions about ways of learning, even the meaning of ‘learning’ may be different within different social constructs. Bourdieu (1977) with his concept of habitus and Kelly’s construct theory (1973) both emphasise the impact of cultural context on thinking and learning, with different communities providing different cultural capital to their offspring. On a macro level the dialectic between culture and learning presents problems in that different societies (often unwittingly) misunderstand each other. On the micro level it can create a mismatch between local subculture and that of the wider society within which that subculture exists, leading individual learners to a sense of dissonance and classroom unease.

International dissonances

Even within Western states there are significant differences in theoretical beliefs that need to be recognised. When the ‘new mathematics’ swept the world in the early 1970s the differences were clearly visible in the different national outputs. Having initially arisen in America, Continental Europe and Britain, it was then carried by the dual power of evangelism and commercialism to many other countries, in particular British and American texts appeared (often problematically) throughout Africa. Yet the nature and content of the developments in the originating Western countries were significantly different, with a general categorisation being represented by an American drive towards knowing things, a British drive towards doing things and a French drive towards understanding things. (A comprehensive analysis of these differences will be found in Howson et al., 1981.) This reflects the different educational principles and beliefs that underpin these systems. The American priorities throughout most of the twentieth century were directed towards creating a national identity. It was for this reason that it developed a cumulative, modular and essentially non-intellectual (even at times anti-intellectual) philosophy which was fundamental to the creation of a sense of belonging and a furthering of the American dream. In contrast to this, Western Europe had no crisis of belonging, simply being born somewhere confirmed national membership, so that the educational philosophies were concerned with division and stratification, finding and nurturing the intellectual elite. As Hartnett (1998, p347) says ‘(Fifthly) the English system has an obsession with differentiating, grading, sorting, classifying, and testing pupils from an early age’.

Within this European context the ‘nation of shopkeepers’, England, holds a matching pragmatic quasi-practical approach, whereas in mainland Europe there has been a greater concern for grand ideas. As Grace (1994) stated ‘English education has never been as hospitable to education theory as other European systems’. Howson et al. (1981 p.51) commented ‘The emphasis on logic, orderliness of mind, and clear thinking associated with the French -ce qui n’est pas clair n’est pas francais - characterises their ‘modern maths’ texts on the same way in which a pragmatic approach does that of their English counterparts.’

The various school texts produced by the three different systems of mathematical curriculum proved almost totally unexchangeable during the major reform periods. Bierhoff (1996) in a more recent comparison reaches the same conclusions commenting that the continental texts are more structured and showed more progression and continuity than English texts which often introduce more complex...
ideas early in the process. These stereotypical variations are also represented in the dominant field psychologies to which the three educational systems have generally adhered. British education has been dominated by Piagetian developmental psychology; American education dominated by the notions of behaviourist psychology; European education underwritten by gestaltian traditions in which grand ideas are the object and end points rather than particular skills (see Woodrow, 1997a, for a fuller discussion). No doubt all three systems have changed over the past twenty or more years, but they have also retained distinctive characteristics.

Any attempt to compare and contrast schooling in different countries needs to understand and recognise that such fundamental differences exist. Thus Hungarian colleagues commented that in England ‘Not to hurt the ‘self image’ of the children is more important than to force them to achieve better results, there is more emphasis on creativity than knowledge’ (Hatch, 1994, p30). Exhortations in the early 1990s to import Asian education without importing Asian values were certain to produce conflicts in cultural assumptions and educational practice. Indeed, even at a trivial level, the daily experiences of barter and exchange in which many Asian societies are rich, compares favourably in supporting arithmetic learning to the English supermarket, in which even the weekly visit involves cards and no monetary exchange. Two significant features in which value systems differ are the ways in which societies emphasise the individual versus the collective and the related concern for the role of authority compared to autonomy. These contrasting notions will be explored in the context of mathematics and science; the two subjects most commonly the focus of international comparison. Essentially this use of mathematics and science as the vehicles by which to contrast cultural intrusion in learning runs counter to the belief that they are value free with the same meaning for the specified content. Whilst this is now frequently challenged it remains a commonly held conviction and underpins the major international investment in cross-national testing. Gates (1997, p3) reflects the recent rethinking of this assumption when he declares ‘Mathematics education plays its part in keeping the powerless in their place and the strong in positions of power. It doesn’t only do this through the cultural capital a qualification in mathematics bestows on an individual; it does it too through the authoritarian and divisive character of mathematics teaching’. Both subjects have also been the focus of considerable debate in a drive to relate both subjects to constructivist views of learning, a theory that clearly prioritises the individual and negates authoritarian traditions.

**Autonomy and authority: individual rights and social responsibilities**

Many of the concerns within education lie within conflicting notions of authority and correctness, whether it be in instilling ‘morals’, establishing the nature of ‘proof’, following grammatical rules or in decision making. Cultures which have strong respect for ancestors and elders will tend to have a view of knowledge which is heavily based on the notion of a ‘body of knowledge’ rather than knowledge as a creative and individual voyage of discovery. Both mathematics and science have a commitment to truth and accuracy rather than goodness or quality (doing better means knowing or doing more) and this will resonate with some cultural mores rather than others. One of the critical drivers in the investigation and problem solving in the 1980s was the opportunity it provided to allow more personal rather than content based assessment. It was hoped that this would also address the then apparent
gender imbalance. Note, however, that problem solving also represents different meanings in different cultures with word-problems being an American meaning and real-life and investigations being the English understanding.

Fasheh (1982) writing from the West Bank of Jordan pointed to the issue of authority as relating to political needs, and saw the moves in mathematics education towards investigatory and exploratory methods as removing or undermining that authoritarian culture which some societies feel they required. The source of authority is critical. Individual identity as contrasted with belonging to a societal group (be it family, ethnic or cultural) will bear fundamentally on such issues. The growth of ‘constructivist’ theories in both mathematics and science education relates to the rejection of ‘bodies of knowledge’ and extrinsically created truth and authority which challenge the supremacy of the individual and self-determinism. It would appear to be an interesting paradox that this development of ‘constructivist theory’, with its stress on individual conceptions of knowledge, should have taken place in mathematics and science. These two curriculum subjects are traditionally perceived as being the least related to individual pupil contribution and creative activity compared with concerns for external truth, facts, rules and objectivity. Yet it was probably the very neglect of individual autonomy that led researchers to focus on this omission from the academic portfolio of these subjects.

In radical constructivist theory it is held that there is no knowledge other than that which is owned by the individual. The role of the teacher is therefore to create situations for experiences that present the learner with new ideas to rationalise. It is a ‘teaching for meaning’ psychology in which metaphor and language exploration are the vehicles for development. This places enormous emphasis on the images and constructs that the pupil owns, and many of these will be focused within, and derived from, the pupil’s own culture rather than that of the teacher or society at large. ‘It crucially removes from the teacher the position of arbiter of knowledge, the only person in the classroom with authority. In some societies this removal of authority is unacceptable, or unimaginable, and makes this particular psychology of learning irrelevant and inapplicable.’ (Woodrow, 1996, p32). It is related too to the roles and responsibilities accorded to the teacher and pupil. It assumes not only the possibility of a negotiated position between teacher and pupils but also one in which pupils have autonomy and rights. Children appear to have adult rights, and adult responsibilities for their learning. (Yet interestingly constructivism claims its inheritance from Piaget, whose major contribution was to delineate the way in which children think differently from adults.) Any such ‘negotiations’, of course, take place within cultural assumptions which may leave little room for variance or re-definition, the pupils may simply not allow the teacher to abdicate the role of knowing authority.

It is also perhaps no accident that the ‘constructivist’ theory should have arisen largely within USA and English education as a response to the commitment of the culture and society to capitalistic and self-reliance philosophies. One of the basic outcomes of the right wing ‘Thatcher/Reagan-ite’ policies was that the ‘state’ (‘there is no such thing as society’ said Mrs Thatcher) was no longer responsible for individuals. The current position of individuals as employed or unemployed, rich or poor, and by implication literate or illiterate, is their responsibility and all they need do is to exert their entrepreneurial talents. Guilt is passed onto the individual rather than
the responsibility of collective society. They are not enterprising enough or just do not have the right internal language. Aronowitz writing from the U.S.A. comments:

Most conventional educators ... believe that given a relatively level playing field in purely educational terms, the problem of succeeding rests squarely on the learner. In this view, which remains the dominant one, the fundamental thesis of the conservatives that the culture of poverty – chiefly the absence amongst poor people of strong families and the work ethic – explains the inability of poor children to master school knowledge. ... the resurgence of individual psychology coupled with a new version of the culture of poverty thesis to account for educational performance is surely distressing. ... (it) is a rather tired version of autonomous individualism and an unwavering commitment to the American dream.

(Aronowitz, 1997, p184)

Constructivism becomes more problematic as a theory when family rather than self is the identity unit and social responsibility rather than self-aggrandisement is the motivating force. In constructivism there is no knowledge except that known by the pupil and it is individual self-exploration which is central. This also becomes a difficult theoretical position when the teacher's role is founded in a culture which values authority and leadership. The conflicts can be seen in the paradox contained within a recent PhD thesis in which the Kenyan author expressed a firm commitment to constructivist (and hence individually focused) theory but felt constrained to interview pupils in groups, since it was so abnormal for a Kenyan teacher to talk with a pupil individually (Wanjada, 1996). Where authority, rather than autonomy, is valued then it is likely that traditional approaches to mathematics and science will cause fewer stylistic conflicts and constructivist theories will not find favour. With classes of 80/90 and few resources discourse is problematic and the teacher is more likely to provide skeletons rather than scaffolding. Johnson (1997) relates of teaching in Lithuania that partly because of lack of books the subjects are taught by lecture exposition where students take detailed notes which they learn to recapitulate for formal examinations. He describes ‘recitation’ as the main teaching mode in Lithuanian schools. Noddings (1993, p159) noted that ‘constructivism as a pedagogical orientation has to be embedded in an ethical or political framework’.

Making a similar point Cobb (1996) describes the work of Leontev and Davydov of the Soviet school, building on Vygotsky, in proposing ‘learning through action’ as distorting the theory in order to respond to the Communist principles of relating academic learning to manual work contexts. I would maintain that Cobb is also taking up a value-laden socio-political stance. Popkewitz (1998) argues clearly that the works of Dewey and Vygotsky (and indeed all theorists) must be seen in their own historical contexts and cannot be merely relocated into present day ideologies without re-interpretation, an historical analogy to the intercultural transportation of ideas with which we are concerned here. Radical constructivism I would suggest is a theory created to be in concert with the societies in which it is assumed, societies for which individual autonomy rather than social responsibility is preferred.
The imperialism of individualism

Individualism is seen by Howard Gardner as very much a Western concept which does not fit as easily into other cultures. In a lengthy discussion related to inter- and intra-personal interactive skills he comments:

Rather than being an object of study, the world is an active subject whose impact is felt by the passive individual. How different this perspective is from that customarily assumed in a Western particle society. The emphasis on the self as a single atomised particle is a peculiar legacy of Western political, philosophical and literary traditions, dating back perhaps to Greek times and apparently unrivalled elsewhere in the world.

(Gardner, 1993, p273)

The influence of this contrast between individual rights and social responsibility on the fundamental concept of ‘democratic’ education is discussed further in Woodrow (1997b), but the position is far from clear and paradox is ever present. In a book about 14-19 education Hustler and Hodkinson state:

One answer, then, about why we should adopt student-centred learning approaches draws on what might be termed democratising ideology. Fundamentally it is about social justice ... It can be argued, for example, that it is a student’s right to have access to student-centred learning practices, as part of any educational system which has autonomy or self-actualisation as a key purpose.

(Hustler and Hodkinson, 1996, p111)

Yet later in the same book we read a comment drawing on Avis (1991) that:

Student-centred learning rarely involved real sharing of control but, by focusing on the individual learner, directs attention away from societal and institutional forms of ‘disempowerment’, for example due to inequalities of class, ethnicity or gender. In particular there is an unquestioning acceptance of the social, political and economic status quo ... blaming the individual victims for their educational failures.

(Hustler and Hodkinson, 1996, P115)

It would seem to me that the notion of democracy (c.f. Carr, 1998) is inimical to isolation and individualism, it is impossible without the interaction of people and without reference to ‘society’. The value of radical constructivism is in its contribution to maintaining the debate, and highlighting the conflict between individuals and society. An interesting early debate about the paradox which must be sustained between ‘rights of individuals’ and their empowerment contrasted with the ‘identification of needs’, which more paternal societies try to fulfil, can be found in Rappaport (1981), who maps the move in the USA away from social paternalism in community support to individual responsibility. This same paradox needs to be sustained (accepted but not resolved!) in learning theories where contradictory notions such as individual construction and bodies of knowledge just have to co-exist. To say that ‘individuals’ exist and that individuals ‘construct their own thoughts’ are rather banal statements until they are juxtaposed with other notions such as ‘bodies of knowledge’ and ‘social mores’ or ‘citizenship’. There is a delicate balance to be held between the autocracy of tradition and anarchy of existentialism, and it is easy
for democracy and justice to vanish or become misrepresented through imbalance towards either position.

**Socially impressed learning styles**

For those brought up within the Western traditions of individual rights and individual freedoms differences such as those discussed above may be fairly easy to recognise and appreciate. It is not, however, easy to understand or comprehend the significant impact this has on the assumptions and ways of thinking that result. Nor is it easy to recognise how deep rooted and implicit are our views and beliefs on such important issues as authority and autonomy. In a recent study of Chinese pupils in English secondary schools (Sham and Woodrow, 1998; Verma et al., 1999) significant differences were found in the assumptions and learning styles of Chinese pupils even though many had been in England for some considerable period and many had been born in England. The research was conducted through case studies of five Chinese families, questionnaire responses from 150 Chinese and British-Chinese pupils and 200 British-European pupils and interviews with 65 Chinese and British-Chinese pupils and 35 British-European pupils.

The overwhelming conclusion from this research was the extent to which the British-Chinese pupils were conditioned by traditional Chinese behavioural rules. The family context was overwhelming and totally dominant, so that even those who were born in England were immersed (submerged) in their family context. The two fundamental rules of ‘respect for superiors’ and ‘loyalty and filial piety’ provide a framework within which they create expectations and attitudes with regard to their education. The extent and depth of that enculturation was surprising, with little apparent movement towards assimilation and adaptation into British-European culture compared to many other ethnic minority groups. (The sample in the survey appeared biased towards family connected to the catering trade, about 80% compared to a national norm of about 65-70% for the Chinese community. This undoubtedly reinforces the strength of family relationships since it often involves the whole families working collectively in the restaurant/take-away.) These British-Chinese children live in a cocoon within British society under distinctive socialisation practices in terms of language and heritage, cultural values and a set of behaviour rules. The strengths of this cultural inheritance provide a significant ‘cultural capital’, but one at odds with that of the majority British culture. As a result, British-Chinese children have distinctive forms of learning styles compared with their British-European counterparts. These distinctive preferences remain somewhat suppressed and covert due to the controlling influence of the imposing principle to present no overt challenges to the authority of elders.

*The bird that stands out will be shot first*

*The tree that stands tallest will catch the wind first*

Again, the differences in authority patterns are highly influential and effective in determining attitudes and assumptions about education and learning. Surprisingly it should be noted that, contrary to the usual assumptions about the impact of such differing demands on self-identity, the many contradictions between their school life and their home life do not engender conflict in British-Chinese pupils. They seem quite at ease with the existence of distinctive elements in their lives. They seem fully capable of living with the contradictions of experiencing different criteria in the home and in their peer society. How long this will persist is hard to tell but even within
families that have lived in England for thirty years or more it remains strongly entrenched. Because the cultural impositions are so strong they do not have room for much questioning and this breeds a comforting satisfaction of a kind often found in strong religious faiths, and this leads to little impetus for growth and change.

Not unexpectedly British-European pupils have the ‘right’ cultural capital and have learning styles which seem compatible with the teaching styles they experience. The individual autonomy that is emphasised resonates with the social assumptions of parents and the stress in British society on individual rights and freedoms. The classroom atmosphere is relaxed and informal, there is little or no competition with plenty of discussion and group work. They are many opportunities for the pupils to think and work independently, problem solve and make up their own minds. There is very little memorising or homework. Generally the Chinese pupils would much prefer to work on their own rather than in a group and would prefer a quiet classroom. For Chinese pupils the purpose of group work seems little understood and being questioned in class is embarrassing and makes them nervous. Discussions with their peers, a common feature in English schooling, is to them irrelevant when it is the teacher who holds the knowledge. Copying down notes, being told what to do and memorising facts would be their ideal learning style. The Chinese pupils find it difficult to ask questions of the teachers when they do not understand. Doing tests and examinations are preferable to projects. Solving problems or making up their own mind is the most difficult learning strategy, yet this is at the root of most English classrooms.

The British-European pupils believe that the teacher’s job is to help them to understand the work and to make lessons interesting and enjoyable. They accept that their teachers may be boring, easily annoyed and sometimes moody, but if they obtain poor marks in tests or in their work they are sure that it is their own fault because they have failed to work hard enough. The majority genuinely accepts responsibility for their own learning. They understand the purpose of the teaching style, which is to make them think, consider and form their own view. The British-Chinese pupils believe that the most important part of a teacher’s job, their prime responsibility, is to provide the pupils with enough facts and knowledge to enable them to pass examinations. Their teachers should set homework on the facts and test them. If they, as pupils, obtain poor marks it is because the teachers have not taught them well enough, respect for teachers carries with it assumptions about reciprocal responsibilities. They value being praised; being liked and being told their schoolwork is good.

One interesting outcome of similar study in Hong Kong was that one of the most distinctive differences between Hong Kong classrooms and English classrooms was in this matter of praise. 80% of English (Chinese or European) pupils had been the object of praise by their teachers at some time whereas only 17% of Hong Kong pupils reported that their teachers had ever praised them. One of the fundamental beliefs of English teachers is in the efficacy of praise, yet the Hong Kong pupils expressed even more liking for school than their English counterparts and seemed no less confident despite having been deprived of this ‘essential’ ingredient. Once again cultural expectation leads to a cultural need, and expectation leads to self-fulfilling prophecies. Is the role of praise a social construct rather than a deep-rooted basic human requirement, a learned behavioural trait?
Yangyuang Chen (1999) describing curriculum change in mainland China (the majority of immigrants to England arrive from Hong Kong) implies many of the same characteristics, clearly derived from a dominant Confucian philosophy which emphasises the family as the structuring unit. There is a dominant commitment to 'encyclopaedic tradition' (which respects subjects which have a high degree of 'rationality'), a strong commitment to 'utility' (defined in terms of value to the state/society/family rather than individual skill training) and a commitment to universality (with all pupils receiving the same education). Chen describes the Peoples Republic as committed to the politicisation and polytechnicalisation of the curriculum. He describes some initiatives for changes to a more individualised curriculum and a more interactive teaching regime but also emphasises the general resistance towards such changes and the slowness of any change to be apparent.

**Contextual learning issues**

These findings confirm assumptions made by other writers such as Parker (1995) writing about Chinese pupils, Purdie and Hattie (1996) contrasting Japanese and Australian students and the work of such researchers as Dunn et al. (1990) looking at differential learning styles (see below). It reflects, for example, the employment of 'surface approaches' and 'deep approaches' as learning strategies. There is evidence that Western educationalists value deep learning strategies more highly than surface strategies. It is clearly questionable whether this too is essentially a socially constructed preference. It is reflected in the changing paradigms of the curriculum in Western countries, where the nature of education has to some extent moved from being founded on knowledge and facts to a concern for the process skills, problem solving and the application of fundamental mental abilities:

> This attention to generalised process skills as the central feature of education is not true of learners in some other countries, where knowledge is still rooted in facts, and where the investment possible in education makes very large classes inevitable, and teacher knowledge precarious. Where factual knowledge and algorithmic skills are precarious they maintain their central importance. Learning in this situation is inevitably 'book bound' and rote-learned skills are not just valued but found useful and are indeed valuable. Students and teachers believe that success comes from being told what to learn and this can then be memorised for success.'

(Woodrow, 1997a, p39)

As an example in early learning a friend emigrated many years ago to India. Her three-year-old daughter was taught from a standard English primer which portrayed blond-haired, blue-eyed white children playing in the snow. It had not at that time rained in Bihar for over two years - never mind the temperature falling below 20 degrees Celsius! Reading for meaning is problematic in such circumstances and skill acquisition is clearly the order of the day.

The value being placed on international comparative tests is leading to significant contradictions as Western curricula, founded as they are on process skills and individual constructivist notions of learning, seek to attain the same levels as more formal educational systems in the factual learning that these tests measure. There is a paradox in that the notions of 'school efficiency' and 'league tables' of excellence are manufactures of British/American right wing educationalists who prize
Cultural determination of curricula, theories and practices

individualism. The market-force doctrines which lead to the desire for international comparisons are confirming socially based educational systems as more effective than individualistic (capitalistic?) Western philosophies on the chosen criteria. Darling-Hammond in her address to AERA points to these dilemmas:

These days the talk is tough: standards must be higher and more exacting, outcomes must be measurable and comparable, accountability must be hard-edged and punitive, ... yet if we are to education for democratic life, I believe we must be concerned about education that nurtures the spirit as well as the mind, so that each student finds and develops something of value on which to build a life whilst learning to value what others offer as well.

(Darling-Hammond 1996, p5)

Such dilemmas and paradoxes should not, however, be devalued by attempts to resolve them. It is in the nature of education that dilemmas and paradoxes are essential motivating features. Education in serving multiple (even contradictory) purposes must perforce employ multiple (contradictory) strategies.

Even within a single socio-political context, as in the research on Chinese pupils in England discussed above, different minority groups indicate significant differences that a single system of schooling finds difficult to accommodate. Dunn et al. (1990) considered a group of 21 elements in a ‘Learning Styles Inventory’ (LSI) which revealed some interesting differences between Mexican-American, Chinese-American, African-American and Greek-American fourth, fifth and sixth-grade pupils. The LSI included personal construct items (such as responsibility/conformity, authority, self-motivation, parent and teacher motivation) together with methodological issues (such as learning alone, preferring a variety of approaches, tactile and kinaesthetic approaches) and contextual issues (such as morning/afternoon working, noise and temperature preferences). The African-American and Chinese-American profiles proved to be consistently opposites, almost perfect mirror images. Aloneness was a strikingly strong positive for Chinese and an equally strong negative for the African; indeed 15 of the 21 items were statistically significantly different. Chinese-Americans seem to require a variety of instructional approaches, whereas African-Americans prefer established patterns and routines to their learning. All the profiles contained some significant differences, the two nearest being Greek and Mexican-Americans with only six significantly different attributes.

Cultural dominances

The cognitive style approach is complex but it does highlight important issues about individual learning styles. In the context of this argument it would appear that it might be significant that such stylistic differences clearly exists between sub-groups of a society. A Black colleague has emphasised to me the importance he feels of ‘vibes’, intuitive responses that most of White (Greek-derived) academia rejects with distrust. This issue is also discussed by Asanti (1987) and Collins (1990), amongst other black writers, who stress the ‘spirituality’ of Afrikan thinking and the holistic view of reality this provides.

In contrast to Western, either/or dichotomous thought, the traditional African worldview is holistic and seeks harmony.'
Cultural determination of curricula, theories and practices

(Collins, 1990, p212)

The myth of objectivity and the use of methodology of objectification (scientism) is one aspect of universalism as an expression of the European driving force and as a tool of Western cultural imperialism. Objectification becomes a means of claiming universality where there is none. European cultural imperialism is therefore an inherent part of European objectification (scientism)

(Ani, 1994, P.411)

The factors that create these differences would appear to be culturally or socially based and will lead to the prioritisation by different groups of different descriptions of the learning act as better descriptions of how their learning takes place. Problems only arise when the systems (or the teacher) unnecessarily and discriminatorily prioritise some factors above others, and hence some pupils above others.

Whilst cognitive techniques such as memory are universal, the way they are used to develop concepts and solve problems differs from person to person and group to group. Different societies value and utilise these skills in different ways, with rational, emotional, empathetic and interpersonal skills being differently prioritised. When social groups are effectively locally (family) based these discrepancies can be accommodated and adjustments made to ensure individual worthiness and esteem. Sham (1996) describes how the Chinese families manage and cope with children with learning disabilities in a different way from the English system, being able to support and contain the needs within the wider family structure. The causes, meanings and response to such disabilities are radically different in different cultures and are almost impossible to place in correspondence. As societies have become larger, families smaller and more mobile, structured in more complex ways, they are no longer adaptable to individuals in the same way. The days in which the village ‘idiot’ was accepted and socially nurtured by a small supportive community are long gone in England. Those with distinctive needs must be assimilated and they can only try to conform as best they can. (In a similar way all world markets begin to look the same. The same stores, the same merchandise and little attempt to localise the product. It probably has quality but does it have character? In Ritzer’s (1993) evocative phrase it represents the MacDonaldisation of Society, a complex process of pseudo individualisation of a unitised universal product.) As a consequence different cognitive styles and strengths result in more discrimination and inequity. Schools have always had to cope with the complexity of varying learning styles, and individual pupils have needed careful support. Clearly, however, where there is a dominant assumption about how the students are learning then any pupil dissonance from that assumption will lead to disadvantage and lack of development consistent with those expectations. As educational valuations in England have become more overt and incontestable so more pupils have been excluded.

Cultural Capital and Imperialism.

The discussion in this article provides a rich annotation of the notions of Pierre Bourdieu, whose use of ‘cultural capital’ to denote the outputs of culture on social power and dominance matches much of the underlying concern. Both home and school provide the Chinese students with ‘capital’, forming a richly developing habitus in which they operate. Some of their home ‘capital’ is also valuable within the school economy, the acceptance of authority without overt questioning makes them ‘good’
Cultural determination of curricula, theories and practices

pupils. By contrast the attributes of the Black pupils appears to have generated much less valued cultural capital. The ability/commitment/application of Chinese pupils to memorising knowledge is positively powerful in the school market and the absence of over-desire for leisure activity and a habit of working are seen as useful school currencies. The late 1990s have seen an apparent shift of valuation by the dominant English cultural field towards these currencies and apparently less commitment to the currencies of the 1980s, viz. problem solving, peer interaction and democratic debate within classrooms. It is still evident, however, that the habitus of the English classroom is focussed around individual rights, individual responsibilities and individual choices as the significant currencies. Sociability, being liked, 'belonging to the club' are still dominant:

The most privileged students do not only owe the habits, behaviour and attitudes which help them directly in pedagogic tasks to their social origins, they also inherit from their knowledge and savoir fair, tastes and a 'good taste'.

(Bourdieu and Passeron 1964 p30; quoted in Grenfell and James, 1999, p21)

It is assumed, of course, that as the generations of immigrants pass through, the habitus within which individuals exist will be more and more affected by the ambient social milieu and this will provide more usable symbolic currency for the young assimilated people. Indeed the 'Brit-Asian' culture is already becoming more assertive in creating its own social field with its own valuations. It is assumed that such a strong alternative culture will in its turn affect British traditional culture – the dynamics of habitus as opposed to tradition – the acceptance of the hip-hop culture.

There are, however, two dangers, one that they remain (or are constrained to remain) within their own field rather than emerging and succeeding within the dominantly White culture (thirty percent of all Asian male applications for degree courses are for mathematics and information technology). The other is that success comes from real assimilation and the distinctive, and internally valuable, attributes of these minorities are dissipated. An idealistic objective would be that what is required is a curriculum that can respond to variety and variation, since there is clearly as much of that within all social and ethnic groups as there is between them. Whilst ethnic origins and family life may affect the habitus of an individual, so too do their own characteristics, their extraversion or introversion, their excitability or pacifity, and many other variables which make individuals individual. Assumptions about how students learn almost inevitably discriminate for or against particular learning preferences. Teachers often excuse themselves in terms of ‘if only I had known I wouldn’t have done that’ when in practice you can never know enough and must teach in a way which doesn’t depend upon knowing and teach in a way that allows for individual learning traits. This assumes, of course, that education really can be an altruistic empowering agent for all individuals rather than a vehicle for pre-determined enculturation. It is evident that much of the altruistic empowerment agenda of the 1980s social development policies served to empower the powerful more effectively than it did the underclass it was promoted to advantage. The ‘headstart’ curriculum, introduced in New York in the 1970s to improve the achievement of pupils from ethnic minorities, was also used by the strong middle-classes to promote their own offspring, leading not to catching up but to the falling further behind of the children it was intended to help. According to Bourdieu (see Grenfell and James, 1999, pp20-21) as the subcultures become symbolically richer and have more capital, the governing society will intuitively change the exchange
rates and work to devalue the currencies in which the subcultures have saved. Ways of teaching and the messages passed on by curriculum assumptions are an essential part of that maintenance of cultural dominance. Power changes are a slow process without a total collapse in the market.

On the wider stage, assumptions of constructivist principles of learning re-enforce Western valuations of individual knowledge, individual rights and individual autonomy compared to ‘book knowledge’, traditional bodies of knowledge and authority which depend upon social valuations. There is a concomitant commitment to social interaction and debate as the form of academic self-validation and justification, rather than reference to traditional texts, authority and expert opinion. Valuations such as these are determined by the dominant participants in the field of operation. They legitimise the symbolic exchange rates in which the educational economy trades, defining the power and influence which the social capital represents.

Bourdieu also uses the notion of mis-recognition, whether it be a conscious decision or an unwitting act. In any ‘game’ the intention of players is to win, regardless of expressed or consciously recognised motives. Thus on both a local and a global front cultural capital is trapped in the implicit, if not consciously recognised or acknowledged, valuations of the dominant field (Grenfell and James, 1999). Within the global field there is no gainsaying the value provided by English as the language of exchange within the social market of which education is a major element. It is not necessarily, however, the critical factor in the evaluation; the style and procedural knowledge hidden within the language provides a more important legitimisation of the value of the language, retaining power for the Anglo-Saxon community distinct from that of simple linguistic dominance.

There is in this analysis mis-recognition occurring when critics of English education press for a move towards Asian practices in learning, or conversely when Japanese educationists promote a Western problem-solving curriculum. The social market cannot be so simply manipulated or it would prove too volatile to persist. Such values are invested in a social patterning, they are connected to many other factors in a complex sustaining, even if developing, habitus. There is in any such ‘transportation’ process a taking over, an asset stripping quality in which the absorbing market revalues the commodity and uses it for its own productive ends. Global interchange of this kind takes place within a structure in which global knowledge is defined in the terms established by the imperial knowledge holders. Burton and Robinson (1999) describe vividly the realisation of such power dominance in their description of interactions between English and Russian psychologists, and the loss of symbolic capital which resulted from the ‘take over’ of the Russian educational market by Western rules and validations. Such varying legitimation of different currencies was less relevant in the past when local markets could more independently establish their own recognitions and valuation. The global economy and global social movement have enhanced and highlighted the consequences, and increased the intellectual and academic stakes. The power of the dollar, the drive of the Euro will determine many futures, and unless there is a ‘black Monday’ within the symbolic capitalistic intellectual market the hegemony of Western thought will persist.

Edwards and Usher (1997) contrast the term ‘globalisation’ with that of ‘univers-alism’ to create a more positive image of developing trends. They begin from a similar premise that:
Educational practices are primarily formulated within the universal legitimising discourses or grand narratives of modernity – narratives of individual and social betterment resulting from the development of scientific knowledge. They justify the work of producing bodies of knowledge, held to be universal in scope which is transmitted through certain pedagogical forms within educational institutions to provide a training in a particular form of rationality which is yet held to universally applicable. ... There has been therefore an inherent tension in the universal messages of education, the particular bodies of knowledge transmitted and their development in specific national cultures. Here 'borders do not offer the possibility to experience and position ourselves within a productive exchange of narratives' (Giroux 1992, 55), but privilege certain positions as universal, thereby excluding those narratives which do not fall within legitimate boundaries and bounded legitimacy

(Edwards and Usher, 1997, p137)

(As an aside there is a growing and strong concern from some currently academically minority groups that the whole nature of Western rationality is problematic, excluding as it does notions of intuition, emotive argument, vibes, and the sense of 'emotional intelligence' and described by Goleman, 1995). They go on to say:

Bounded canons of knowledge and their transmittal in traditional forms of pedagogy become problematic when globalisation displaces 'univers-alism' as a way of framing practices. Where univers-alism homogenises, globalisation diversifies. There can no longer be a presumption as to what constitutes an 'education' or an 'educated person'.

(Edwards and Usher, 1997, p137)

This globalisation of knowledge through e-knowledge is not in practice, of course, equally available throughout the globe. By the time some of the technologically less developed communities have it available the expertise to manage it will have been grabbed by the existing decision makers (Microsoft has won despite the courts). The easy availability of academic debate has revolutionised discussion amongst the already 'rich'. There is now clear cultural capital from the grasping of the new technologies. What is interesting is that the ease of communicating is accompanied by an ease of ignoring, it is remarkably easy to delete the messages from those with whom one disagrees. There is developing a new 'in-group' who believe that because communication is easy to send to all that all are participating. In practice a relatively small group are again grasping the power of representing universal beliefs. They are establishing valuations and exchange rates in the real belief that they do so on behalf of the whole community.

It could be, of course, that the redefinition of education sponsored by Edwards and Usher, this denial of the tradition orthodoxy is yet another way of moving the exchange rates, of preserving the advantage and power of dominant groups. Redefining the curriculum, moving towards 'lifelong learning', merely devalues the existing currencies as the subordinate groups begin to accumulate what they thought was cultural wealth. There is in-built into education a dream that increased education will mean increased opportunities for wealth creation and personal control, and a necessary corollary of this is that society can continue to create unlimited rewards of this kind. If social structure is seen as a zero-sum game, in which entropy is conserved, then these guiding principles fall. The impact of the sharp rise in
unemployment during the early 1980s had repercussions within education, as its vocational motivation was proved false. As staying-on rates increase, however, the symbolic capital of staying on will become devalued and qualification inflation will continue.
Conclusions

Inter-cultural comparisons of classrooms and the schooling experience of students will raise issues and problems which arise from the different assumptions and principles which underlie the very meaning of what it is to learn. Within any classroom this raises questions not only for students who have had to change the cultural contexts of their studies through family migration and movement but also where home, social and school contexts provide different and competing assumptions. Comparisons between classrooms will always be held in the post-modern embrace, complex contexts and power relations leading to the significance of meaning rather than actuality of events. There has been some debate as to the connection between particular theories such as constructivism, active learning and deep learning structures and the actual pedagogy of the classroom (see e.g. Driver et al., 1994). However, the way in which classroom interaction is described and valued in the current debates contains an implicit Western recognition of learner autonomy as opposed to teacher authority. The language we use in the West is used in the context of learning rather than instruction. The debates take place within clear socio-cultural valuations that remain implicit and often not even recognised, and are certainly not universal. Driver et al. (1994) and Cobb (1994), in linked papers exploring the dichotomy of constructivism and socio-cultural perspectives, seek to defuse the conflict through the notion of multiple beliefs held simultaneously and utilised in a pragmatic manner. The claim is that for individuals the truth of a belief is replaced by its viability. So too for social groups and their socially held beliefs, they will be based upon the viability of that belief leading to local (but not universal) truth. This ignores the wider field within which the learning takes place, the habitus of the students and the valuations placed on these by the dominant culture. Neither does this attempt to mediate between theories deal with the problems that emerge when contemporaneous theories held by an individual are in conflict rather than peaceful co-existence. The problem is compounded when particular valuations are simultaneously held by the teacher and the curriculum but not the pupil. There are national and/or dominant attitudes to learning within all societies and there will inevitably be subcultures that may or may not respond sympathetically at any particular point in time to these encultured values.

Of course, the whole tenor of the argument presented in this article is in some sense essentially constructivist, but of group construction rather than individuals. What is being argued is that different societies view learning from their own perspectives and using their own images. There is no fundamental central ‘true’ knowledge of how people learn but only that which is mediated within a particular society. The isolated individual and necessarily autonomous mind of radical constructivism is replaced by the independent collective and particular mind-set of individual societies. The advent of globalisation and worldwide inter-cultural exchange may eventually challenge this hypothesis. Experience suggests that not only is this still some way off, but that the dominant cultures will continue to use their power to impose valuations designed to maintain their power. Such an analysis carries with it a rather fatalistic sense of perpetual dominance. The notion of ‘habitus’, however, does carry with it an adaptable and influenceable connotation. It allows for change and development. The manipulation of the language and the agendas of discourse during the early 1980s suggested the notion of control and autocracy. The subtlety of modern methods of communication makes such manipulation of opinion and concept difficult.
Cultural determination of curricula, theories and practices

to resists and difficult to recognise. The conflicting priorities of the global information exchange, however, does give hope for conflicting and contradictory messages and images which open the door for a re-appraisal, as suggested by Edwards and Usher.

Western views on individual rights and individual autonomy lead to distinctive assumptions about how learning takes place. The commitment to generic skills and process learning changes the curriculum and focuses on learning and student action. Emphasis on social responsibility and respect for tradition and traditional knowledge leads to more formal instructional assumptions and teacher focused learning. This may present no problem when a teacher or pupils, like the Chinese children described above, can hold and respect multiple beliefs, but many theories of cognition are held more as exclusive faiths. If we are to really progress in understanding cognition then each description, each attempt at clarification, should contribute to a rich patchwork of available images just as multiple experiences provide much richer understanding and knowledge. This is fine for beliefs but is impossible for faiths. The evangelical and exclusive attitude by which learning theories are promulgated and universally imposed is in the long term likely to be counter-productive. Much of Western thinking has been presented as the ‘right’ way of viewing learning, just as competition and enterprise are presented as the only way forward in the political arena. Such conviction is necessary for ensuring progress of a theory, but it should not become dogma. Lerman (1996) rejects this approach as producing incoherence. I would hold that, whilst incoherence may be important within a theoretical stance, when those theories are applied within classrooms in an inevitably pragmatic and intuitive context coherence takes second place to efficacy.

Where then do we go in moving from these theoretical stances into realities? There is the positivistic notion of a search for an ultimate single over-arching grand theory, albeit derived from a number of culturally grounded versions of learning theory. This is echoed in the request by government advisers for a clear ‘theory of teaching’. This would seem an unlikely outcome, the more so given the temporal and changing nature of those sub-theories and the variety of valuations of different cultural capital. This might not, however, invalidate the need to continue the search for the Holy Grail! Journeys may be more exciting than arrivals. Secondly there is a position that all these different, socially grounded paradigms are mutually incompatible and cannot be held together, leaving an individual to choose one and live with it until it becomes untenable, as is often presented as the case in scientific philosophies. Such a position seems somewhat unproductive but for some has the satisfaction of certainty - even if that certainty is ultimately wrong. This again neglects the inequality of treatment for different paradigms. Thirdly is the notion of a need to respect all these differing theories, since they are all culturally grounded in some reality. They cannot ever be combined as one so we need to abandon ‘faith’ and retain a sense of the inevitable stand-pointed related relativism. What are needed are respect, humility and dialogue. By holding faiths rather than beliefs we discriminate and give differing values to the beliefs held by others, leading to unnecessary and arrogant assumptions of superiority. We have to strive to moderate our valuations, questioning and accepting the equivalence and worthiness of different behaviours. It would move world societies into a different pattern than that described by Bourdieu, and indeed most of the twentieth century educational philosophers. As the world gets smaller, interactions become more frequent and harmony becomes essential.
then maybe different motivations will emerge. This demands respect for other views, other assumptions and other.

References


Cultural determination of curricula, theories and practices


Cultural determination of curricula, theories and practices


Woodrow, D. (1997b) Democratic Education; does it exist and can it exist for mathematics education? *For the learning of mathematics* 17 (3) pp.11-16