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**Education Subject Centre**

Advancing Learning And Teaching in Education



# **BEYOND THE CURRICULUM:**

**Empowering student teachers to learn,  
think and act creatively within the many  
curricula that impact on their  
experience.**

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## Introduction

'Really I was just concentrating on getting it done.'  
(1st Block Placement student)

'That was to help them with verbs because that was next.'  
(Final Block Placement student)

'I wanted them to think about story structures – that would help them with their prediction.'  
(Final Block Placement student).

These quotations are typical statements that indicate membership of three distinct categories of student teachers. These classifications have informed the motivation for and the thinking behind the need to produce and write this report.

The first category - 'Task Managers' – is for student teachers who, when operating in the classroom, demonstrate a main concern to keep the children busy, regardless of what they are learning. The second category, 'Curriculum Deliverers' describes student teachers who are motivated to 'deliver' learning, but only as it has been externally imposed and without a clear rationale for doing so. The third category, Concept/Skill Builders, represents the only student teachers who appear to demonstrate a holistic understanding of what they are teaching and what the children are learning (and why). The data strongly suggests (Twiselton, 2000) that the latter group are most able effectively to scaffold pupils' learning. In particular, the ability to teach responsively, contingent on pupil's understanding, appears to be closely linked to those student teachers who have a deep and broad understanding of the concepts and skills they are teaching and how these relate to the world beyond the lesson plan and classroom.

The categories emerged from a longitudinal study of student teachers (Twiselton, 2000, 2003, 2004) in which it appeared that at the beginning of their ITE (Initial Teacher Education) student teachers are more likely to concentrate on the activity - and getting through it - more than anything else. As they move towards the end of their ITE, the hope is that the majority of student teachers have learned that effective teaching is about much more than getting the task done. As such, these categories can be presented as points on a developmental continuum and it may be necessary to acknowledge that some student teachers need to pass through each stage.

However, analysis of the findings from the study (which took place over a period that included data collection before, during and after the implementation of the National Literacy Strategy (NLS) (DfEE, 1998a) in England), suggested that highly detailed, prescriptive curricula can have a clear impact on student teachers' progression through these categories. Immediately after the strategy was implemented there was a marked clustering around the Curriculum

Deliverer category, with less task management but also less concept/skill building. The National Literacy Strategy appeared to have helped student teachers, even near the beginning of ITE, to avoid an exclusive focus on tasks at the expense of learning. However, in those early stages it also appeared to have restricted student teachers' ability to reflect on the skills and concepts they were teaching in a wider sense, even when they were near the end of ITE. Data collected later, three years after the NLS had been implemented, suggested that it was possible for student teachers to develop an understanding of the curriculum that viewed it as a tool – a means to an end – and to use it flexibly and responsively to address the broader learning aims that they were striving to achieve for the children (Twiselton, 2003, 2004). However, this appeared to be possible only if the student teachers had been supported through a range of learning experiences in a variety of different contexts to develop a fuller framework of understanding, underpinned by beliefs and values to which they could relate the various curricular objectives as stipulated.

The challenge that is presented is one not only of meeting curricular requirements (which for student teachers are many, varied and sometimes contradictory, as we discuss later in this report) but also of supporting the development of understanding of what lies beneath and beyond them. In this report we are making the case that upholds the need for teachers to be able to critique curricula in relation to wider and deeper frameworks of reference in order to work creatively, dynamically and ultimately more effectively within them.

A number of studies (e.g. Chi, Feltovich and Glaser, 1981, Larkin, McDermott, Simon and Simon, 1980) claim to show that it is not so much *the amount* of knowledge that the 'expert' possesses but *how it is organised* in the memory that determines levels of expertise. In general, experts are sensitive to the deep structures of the problems they solve – they are able to group problems together according to underlying principles. Sternberg and Horvath (1995) suggest that expert teachers possess knowledge that is thoroughly integrated in the form of propositional structures and schemata. These will take account of and connect with a range of types of knowledge including knowledge of subject, pedagogy and the social and political contexts in which teaching occurs. As they claim, 'An expert in the *domain* of teaching must know subject matter and pedagogy. An expert in the *field* of teaching must know how to apply teaching knowledge in a particular social and organisational context.' It can be argued that structural understanding like this can only be developed if student teachers are supported to understand the practical skills of teaching and the curriculum within the broader contexts of the domains that inform them.

This links with work by Tochon and Munby (1993), who describe expert teachers as having a mainly synchronic notion of teacher time. This primarily centres on the intensity of particular moments, which pull together a number of attributes in a context in one informed professional action. This way of working

places considerable emphasis on the contingent nature of teaching – the ability to perceive the demands of a situation as it arises. Teaching in this way also involves drawing on a number of knowledge bases to make the most effective response. Tochon and Munby refer to the expert teachers' thought and action as a pedagogic 'wave function' in which learner and curriculum are connected as a result of the teacher's capacity to read cues, seize the moment and work synchronically. Novices tend to anticipate and sequence their teaching actions in advance, whereas experts often adapt entire semantic or propositional mappings to a particular event. The combining of knowledge and the synthesising of strategies would appear to be a key factor. However, it can be argued that this is possible only if there is a coherent conceptual network of interconnected understandings on which the teacher can draw.

The importance of underlying structures and the role of teachers in helping pupils to make connections is supported by the work of Medwell, Wray, Poulson and Fox (1998) in which they examined the work of teachers whose pupils made effective learning gains in literacy. In this they claim that effective teachers are much more likely to embed their teaching in a wider context and to show how specific aspects of literacy relate to each other. They assert that such teachers tend to make connections, both explicitly and implicitly, and to put features of language use into the broader context of texts. Medwell *et al.* found that the effective teachers tended to have more coherent belief systems that led them to pursue an embedded approach where the more technical aspects of literacy were taught within a broader framework of meaningful contexts. This theme is echoed by the parallel study into effective teachers of numeracy undertaken by Askew, Brown, Johnson, Rhodes and William (1997) who characterise effective numeracy teachers as being 'connectionist – oriented', which involves a conscious awareness of connections and relationships.

These studies all point to the same set of conclusions. In order to become an effective teacher one must have a broad and deep understanding of the contexts surrounding and underpinning the curricula that frame the teaching. A recent DfES (Soulbury and Swain, 03) report on the impact of award bearing INSET supports this view.

It is clear from the individual reports that teachers who complete an award feel they have gained new and specific skills, knowledge and understanding from the sustained study required. For some, the gains are in the research skills needed to investigate an issue in their own school. For others, the gains come from a fresh look at the pedagogy of their subject or of a phase, such as early years education. Participants frequently claim to be better informed, more confident and more professional as a result of the training, and better equipped to carry out one or more aspects of their main professional role. Some mid-career teachers go further and talk of rekindled enthusiasm for their subject or their job.

(Soulbury and Swain, 2003, p.7) *LINK TO*  
[www.teachernet.gov.uk/doc/4129/INSET%20REPORT.doc](http://www.teachernet.gov.uk/doc/4129/INSET%20REPORT.doc)

To an extent this view is also supported by the broad range of topics identified in the Teacher Training Agency's recent round of research bids.

*Excellence and Enjoyment - A Strategy for Primary Schools* also picks up the theme of broadening and deepening approaches to knowledge, learning and teaching in its stated aim of

Empowering primary schools to take control of their curriculum, and to be more innovative and to develop their own character ... learning from others in sharing and developing good practice. ...embed the principles of effective teaching and learning both in literacy and numeracy and across the curriculum ... design broad and rich curricula which make the most of links between different areas and provide opportunities for children to have a wide range of learning experiences

DfES, 2003

These moves (and we hope, the case study material we offer) help to create a climate where Stenhouse's (1975) assertion that 'there is no curriculum development without teacher development' (p.208) has more relevance than ever.

### **Epistemological considerations: what counts as 'knowledge' and how does it relate to curriculum and context?**

Questions about the nature of knowledge and the nature of human experience lie at the heart of this report. Finding ways of exploring curricula and working creatively within and beyond them involves understanding how they relate to the knowledge bases that underpin them. This in turn involves examining what we mean by knowledge at all. In keeping with Whitehead (1979) and Berger and Luckmann (1972), it has been a fundamental assumption in this research that knowledge has its genesis in the subjectivity of the individual and, as it is objectified through expression, becomes available to be interpreted by others. Such a view, of course, throws some doubt on the assumptions underlying the notion that curriculum may be *delivered* by teachers to learners. It has been our intention to dispel the view that knowledge consists of inert entities that can be transmitted from one person to another. We consider that subjective knowledge is a state of being brought about by experience and that teaching, at whatever level, involves an attempt to bring about a coalescence of the awareness of part of that being by influencing the experience of the other.

Following Bruner (1987) we see cognitive experience as a process of making sense of the world within and around us. Although this process may involve taken-for-granted, tacit and unconscious elements, what the individual knows is the product of the sense he or she has made of the world. Nevertheless, it should be emphasised that although each individual therefore has an idiosyncratic view of the world, the meanings that the individual develops in the sense-making process are influenced by significant others and therefore tend to be largely congruent with theirs (c.f. Vygotsky (1978) and Blumer (1969)).

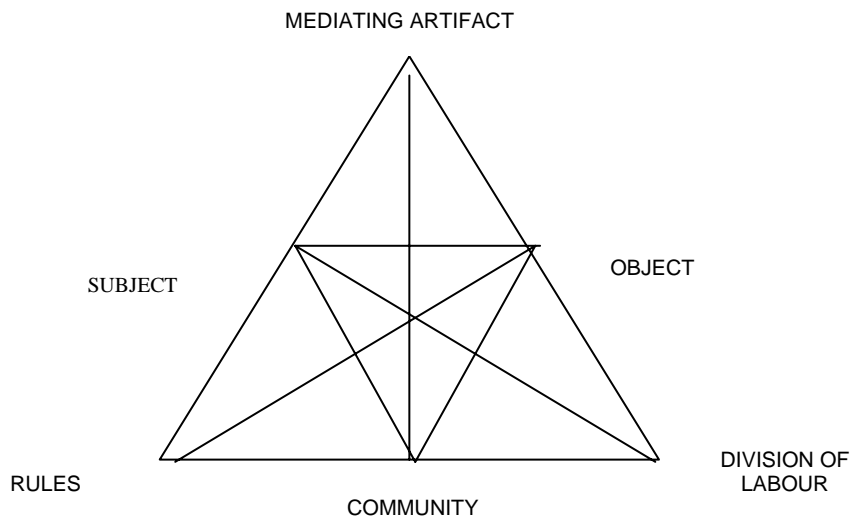
Thus we draw on the cultural historical approach to cognition outlined by Cole and Engeström (1993). This utilises the notion of 'distributed cognition' and places great emphasis on the importance of *mediation*. The key aspect of this model is the notion that cognition or knowledge can be distributed through a mediated process between people. This analysis supports the case for a model of learning that primarily involves sense-making by engagement with the world at the same time as being shaped by it in a way that is socially and culturally driven. This view of 'mind in the world' means that the construction of knowledge involves a process of interpretation. In such a process meaning is ascribed to events and objects in a way in which the mind of the individual actively engages with both physical, external reality and the social and cultural context in which it is found. Through engagement with the world, culturally-based schema are formed (D'Andrade, 1981). So it can be argued that, because mind is active and outward looking, it is socially formed, but not wholly socially determined.

Thus, the classroom is a nexus of disparate consciousnesses contributing to, and striving to make sense of, the experiential opportunities available. As Hough and Duncan (1970) so aptly pointed out,

'The act of teaching is a complex process that is influenced by a field of forces of which teachers can only be in part aware and which the teacher can only partially control.' (p.6)

Such complexity suggests we cannot dismiss the value of Sheldrake's (1987, 1999) work on morphic fields, Bloom's (2001) concept of collective information processing and the notion of meme developed by Dawkins (1976) and expanded by Blackmore (1999). However for the purposes of this research we are putting more reliance on the model supplied by work of Lave and Wenger (1991) which represents learning as a process of acculturation into the ways of thinking and acting of a specific community of practice. Drawing on the work of Stenhouse (1975), we see the practice of classroom communities to be centred on a processual model of curriculum. The structure of knowledge upon which the curriculum is based essentially involves the conceptual frameworks, the principles of procedure and the criteria of validity of each subject. Thus, teaching is seen as a process of inducting pupils into the evolving paradigms (Kuhn, 1970) of the subjects comprising the curriculum. This is related to Wittgenstein's (1957) notion that induction into a specific universe of discourse is like learning to play a game according to its set of rules. It also concurs with Cole and Engeström's (1993) claim that any attempt to capture knowledge and learning must account for the collective nature of human activities – the fact that individuals and individual activity takes place in communities which are themselves culturally embedded. Their activity theory model is helpful in attempting to identify some of the crucial elements that impact on this process.

*The Basic mediational triangle expanded (after Engeström, 1987) to include other people (community), social rules, and the division of labour*



In addition to identifying the important dimension of social context in the form of community and its goals, this model also includes the idea that subject and community are mediated by 'rules' (the norms and sanctions that specify and regulate procedures and interactions) as well as artefacts. Communities also involve a 'division of labour' – the distribution of tasks, powers and responsibilities among the participants of the activity system. The particularly valuable contribution that this model makes is that it helps us to find a way to go beyond mediated action to specify the socio-cultural *processes* within which learning as participation in social practices becomes meaningful. We would argue that taking account of the process element of knowledge and knowledge construction is crucial to developing effective models of Initial Teacher Education. Twiselton's (2002) study of student teachers on placement distinguished the *task managers* and the *curriculum deliverers* from the *concept/skill builders* in that the former groups treated knowledge as static, isolated products rather than treat it, as did the latter group, as concepts and skills that link to the world beyond the classroom.

As Calderhead (1987) points out, the knowledge that teachers must develop has a varied nature; it includes:

'knowledge of the learner, knowledge of the curriculum, knowledge of the context, and knowledge of pedagogy.' p. 114

We consider that Clandinin's (1986) concept of image of teaching provides a useful insight into the multidimensional nature of teachers' professional knowledge. Clandinin demonstrated that professional knowledge not only involves a combination of practical and personal knowledge, with theory and practice being seen as inseparable, but it also has emotional and moral dimensions that are expressed in what a teacher wants to implement and feels should be implemented. Further research by Calderhead and Shorrock (1997)

and Bundy (1999) identified a further dimension that suggested that teaching could be a crucial expression of self for teachers. We therefore consider Nias (1989), Tickle (1991 and 1994) and Zimpher and Howey (1987) have been right to argue that the management of self and emotions is an important professional skill which requires more emphasis in the education of teachers.

Thus, it is argued that an Initial Teacher Education programme that is based solely on the outcome and curriculum driven model of knowledge outlined in 'Qualifying to Teach' (TTA, 2002) risks the failure to induct student teachers into the paradigmatic model of knowledge as suggested by Stenhouse (1975) and Kuhn (1970) (and therefore risks the same failure in the school classroom) and to provide for them an effective, affective education.

### **Curricular constraints in Initial Teacher Education**

An examination of the recent history of Initial Teacher Education in England, and a comparison with that in Scotland, offers instructive insights into the different models of knowledge and concepts of curriculum prevalent in the two countries. It also reveals sharp differences in the processes of policy formation and implementation in England and Scotland. In both countries the major features of policy and practice in ITE are consequent upon, and mirror, developments in the school curriculum.

Summarising distinctive features of education policy and practice in England, Brehony remarks:

'Both initial teacher education and CPD courses tend to concentrate on preparation for local education practice and rarely pay attention to the rest of the UK. Given the emphasis in the European Union on mobility of labour (for example through the Bologna agreement) this localism is somewhat surprising.' (Brehony 2003 p 1)

Practitioners of teacher education in England will be surprised that a researcher is surprised! With regard to Initial Teacher Education in England a range of causal factors leading to such localism can readily be identified, including:

- successive statutory instruments setting out requirements for courses of initial teacher training, increasingly concentrating on the English school curriculum, especially in the core curriculum subjects;
- prescribed sets of competences and standards to be demonstrated by those seeking Qualified Teacher Status, again related to the English school curriculum and context;
- inspection frameworks and methodologies focusing on compliance with statutory requirements and tied closely to observation of trainee teachers teaching the English school curriculum;

- insistence by the Department for Education and Skills that the bulk of a trainee teacher's school experience must take place in a school teaching the English school curriculum.

These features are consequences of two trends in English education policy formulation and implementation.

First, education legislation in the past quarter century reveals a marked shift away from a concern by national legislators to articulate broad educational aims within which Local Education Authorities and schools were to provide both the content and the processes of education in the maintained sector (Ministry of Education 1944). Acts and circulars from 1980 onwards instead have demonstrated increasingly detailed central prescription of issues, from school governance (*DES 1980*) to the content of the curriculum (*DES 1986*), culminating in the Education Reform Act (DES 1988) giving statutory definition of a subject-based curriculum with compulsory programmes of study. Secondly, by the way in which these major changes were achieved, with collaboration reduced to token consultation, the legislature redefined the roles of LEAs, schools and teachers. Instead of being devisers of curricula designed to provide an education, the personnel involved in the education service became deliverers of a pre-set curriculum. This new, restricted, identity for education professionals was confirmed and consolidated through the effects of a new inspection regime (DES 1992), the publication of Standard Assessment Task results and consequent league tables, all of which purported to measure and report on teachers' performance against the centrally determined criteria linked with the imposed curriculum.

Once statutory prescription of school curricula had been established, it was soon mirrored in centralised definition of teacher education programmes, particularly in Initial Teacher Education. Between 1989 and 1998 four versions of requirements for ITE courses were issued, successively more prescriptive of content and intended outcomes. This trend culminated in Circular 4/98 (DfEE 1998b), the most detailed of the sequence, which listed 863 atomised items that a trainee primary teacher must know or be able to do prior to being recommended for Qualified Teacher Status. The current document (TTA 2002), while much less detailed, is nevertheless still expressed in terms of an outcome and curriculum driven model of knowledge.

In summary, English education policy since James Callaghan's Ruskin College speech of 1976 has been characterised by increasing involvement, direction and control by central government and its executive agencies, and this has extended to prescribed programmes of study for each subject in a compulsory curriculum. By implication, the teacher has become identified with curriculum delivery.

In Scotland, during the same period, politicians have been no less interested and involved in the formulation and implementation of education policy (Finlay 2003). However, the Scottish process of debate and decision-making has been markedly different from that in England, in that education professionals have been centrally involved at all stages.

The General Teaching Council for Scotland has far greater powers than that in England (Finlay 2003), for example in the accreditation of Initial Teacher Education courses, and GTC(S) membership at all levels includes staff in university Education Departments as well as school teachers. Paterson (2002) identifies as pivotal the role played by Her Majesty's Inspectors of Schools in every major development in Scottish education in recent years, and notes that their contribution as agents of standardisation has been effected through their roles as advisors and evaluators, rather than the narrowly inspectoral role. He also records that the Conservative governments of the 1980s relied upon the advice of Scottish HMIs regarding what policy amendments would be acceptable in Scotland, at a time when political involvement in English educational policy appears to have been relatively unmediated by the English inspectorate.

The extended role played by the various players in the Scottish education service (HMI, GTC(S) and University Departments of Education) in comparison with their English counterparts, is reflected in the way in which Curriculum 5 – 14 was generated through a collaborative process between the profession and the Scottish Education Department (Paterson 2002). The mode of its generation, coupled with the fact that its status is that of guidance rather than statute, means that Curriculum 5 - 14 is not generally perceived or experienced by education practitioners in Scotland as an 'imposed' curriculum. Moreover, its lower level of specificity in comparison with the English national curriculum leaves Scottish teachers with greater scope for the exercise of professional judgement when designing and planning curricula for their classes.

Since devolution, the Scottish Executive Education Department (SEED) has rapidly introduced a variety of policy initiatives with significant implications for all partners in the education service. The process of change is nevertheless still characterised by the involvement of stakeholders in framing the detail of proposals, especially regarding the implementation of policy.

The effect of the central role played by Scottish education professionals in the evolution of policy and practice in ITE becomes clear when a comparison is made between the standards that trainee teachers are required to demonstrate in Scotland and England.

The English standards (TTA 2002) comprise a series of outcome statements organised under three headings (*Professional Values and Practice: Knowledge and Understanding*, and *Teaching*). Although the sections are described as inter-related (p.2), cross-references are not provided. No attempt is made to align the standards with any element of the National Qualifications Framework. Requirements for providing initial teacher training are specified elsewhere in the same document.

The Standard for Initial Teacher Education in Scotland – October 2000 (<http://www.qaa.ac.uk/crntwork/benchmark/itescot>) comprises *benchmarks* specifying design requirements for ITE programmes, *expected features* which

clarify and illustrate aspects of student performance in relation to each benchmark, cross-references to *competences* previously set out in Scottish Office guidance and *transferable skills* derived from and integral to the benchmark statements. The Standard identifies three main aspects of professional development, *Professional knowledge and understanding*, *professional skills and abilities* and *professional values and personal commitment*, which it describes as inherently linked to each other. The interrelationship among all three is specifically mentioned as vital to the professional development of the teacher. Their interaction must be central to ITE programmes, although distinctive emphases are invited from designers of programmes. The benchmark statements 'incorporate "competences" and other nationally specified qualitative requirements in Initial Teacher Education as well as the requirements of academic study' (Section 7: introductory paragraph). The phraseology of the Standard is readily identifiable as indicative of a programme of study at honours level in the National Qualifications Framework, and the Standard is published by the Quality Assurance Agency for Higher Education.

Superficially the English standards and the Scottish Standard appear similar in their tripartite emphasis on knowledge, skills and values in courses of initial teacher education. When compared in detail, however, the Scottish document reflects far more of the complexity inherent in the process of learning to teach and, we argue, has the greater potential to shape the development of beginning teachers as concept/skill builders. The English document, predicated on the notion of a curriculum whose detail is pre-set, may well have the ability to develop trainee teachers from task management to curriculum delivery; it is unlikely to take them further. The Scottish document reflects a more 'open' curriculum whose status is 'guidance' and which requires teachers and schools to provide balance, shape and detail. Despite the fact that in Scotland, as in England, there is an emphasis on preparation for local practice (Finlay 2003) there is, nevertheless, an expectation that trainee teachers will be able to critique the curriculum. For example, an *expected feature* anticipates that student teachers will 'demonstrate the knowledge and understanding to justify what is taught within the area of the curriculum or subject(s), in relation to its value in the curriculum; its contribution to children's learning and general development: and its relevance to the needs of the pupils being taught'. (Benchmark 1.1.3, [www.qaa.ac.uk/crntwork/benchmark/itescot/individual-text-docs/aspects-texton](http://www.qaa.ac.uk/crntwork/benchmark/itescot/individual-text-docs/aspects-texton)). Nothing similar to this expectation appears in the English standards.

Current developments in the statutory curriculum in England challenge the restricted outlook of the English standards for QTS. *Excellence and Enjoyment – a Strategy for Primary Schools* looks to schools to 'take control of their curriculum' and to 'design broad and rich curricula' (DfES 2003). The interim report of the 14 – 19 Reform Group (QCA 2004) carries an implication that schools and colleges will provide curricula to fit the identified needs of individual pupils. This will be a complex process, requiring sophisticated professional judgements by teachers as they respond to the interests and aspirations (as well as attainments and aptitudes) of pupils and to the ambitions of parents. Newly Qualified Teachers whose training has assumed

a fixed curriculum will not be equipped to participate in such ventures. One's knowledge of X is partly constituted by knowledge that it is not Y or Z; ignorance of Y and Z thus represents a deficiency. Similarly, one's knowledge of the English National Curriculum for schools is incomplete without some knowledge of alternative curriculum models. Yet comparative curriculum studies are entirely absent from English ITE requirements or QTS standards.

We conclude that trainee teachers in England are unlikely to proceed beyond the category of Curriculum Deliverers unless their programmes of study go well beyond the requirements implied by the English standards. In our view, the current training model for initial teacher education in England is inherently defective because it assumes a fixed school curriculum. By militating against student teachers' consideration of alternatives, it effectively prevents their being able to offer critical, analytical comment on the school curriculum. Further, by its emphasis on delivery of the fixed curriculum, it fails to address the need for student teachers to learn how to handle contingent teaching situations which arise, for example, through spontaneous questions asked by pupils.

To acquire the appropriate professional understanding and versatility to respond to the role that awaits them in classrooms, beginning teachers in England deserve more than a set of outcomes-related criteria. We believe that the Scottish model, in which relevant levels of practical competence are integrated with associated levels of academic study, is more likely to ensure that entrants to the teaching profession have a good range of graduate understanding and skills with which to interrogate and sharpen their own professional practice.

### **Conversations with School Based Tutors**

#### **Creating thinking teachers: An analysis of data collected from mentors in primary schools**

This enquiry was conducted through questionnaires distributed to mentors drawn from the St Martin's HEI/School Partnership in the north west of England, and structured conversations with mentors about weekly seminars that they led with student teachers during school placements.

In a climate of curricula externally imposed upon teaching and learning establishments and national standards that must be met, teachers and student teachers are being forced to grapple with the dichotomy of meeting set standards and imposed criteria whilst still being that great teacher who inspires. Embroiled within this dichotomy is an issue of whether providers of ITE are training students to teach or empowering and encouraging them to become teachers. Perhaps this in itself is contained within a wider context of whether providers are allowing a surface level approach or encouraging their trainees to engage in deep learning.

Examples of surface level processing include learning where students' consider that the key requirement is the ability to reproduce learned content in order to produce 'right' answers. By contrast, students adopting a deeper level of approach are concerned with the process of searching for answers; they look for connections, pose questions and seek a fuller picture. They also recognise the contested nature of many of the issues that confront them.

When asked about the characteristics they would expect or hope to see in a final block placement student, school-based mentors included qualities such as confidence, having good subject knowledge, initiative, enthusiasm, ability to inspire children, creative, innovative and people who were willing to take risks. These are very much to do with qualitative responses to the challenges of the classroom. The SOLO taxonomy (Biggs and Collis 1982) is a hierarchy of responses displaying stages of complexity in the outcomes of students' learning demonstrates that these qualitative responses are as a result of deep learning (see figure 1 below)

<b>Pre-structural</b>	<i>Uni-structural</i>	<i>Multi-structural</i>	<i>Relational</i>	<i>Ext. abstract</i>
Misses the point	Identify, do simple procedure	Enumerate Describe List Combine Do algorithms	Compare/contrast Explain causes Analyse Relate Apply	Theorize Generalise Hypothesise Reflect
<i>Quantitative phase</i>			<i>Qualitative phase</i>	

(Figure 1: A hierarchy of verbs that may be used to form curriculum objectives; Biggs and Collis 1982 – cited in Biggs 1999)

Mentors interviewed agreed that, in order to meet many of the characteristics stated above, students need to be able to explain, analyse, relate and apply objectives and methods outlined in external curricula and apply them to the pupils they are teaching. They then need to be able to reflect on their planning, the pupils' learning styles and the material and arrive at a place where they are able to inspire children. These qualities go beyond Teacher Training Agency standards and begin to consider the notion of being a teacher and perhaps being a graduate. They involve the education of the teachers themselves, rather than their training simply to deliver the curriculum. Fostering deep learning methods that lead to qualitative responses in ITE courses may enable students to engage critically with curriculum materials and develop thinking around them rather than seeing them as givens.

With regard to the Teacher Training Agency Standards, the mentors interviewed allowed that they did provide focus, ensured cross-country parity and meant that there is some quality assurance for teachers going into the profession. However with the notion of 'graduateness' in mind, many of the mentors felt that the standards provided the wrong focus in that they allowed for a surface level response. Some felt that for many students the standards were a 'box-ticking exercise' or a series of hoops they had to jump through.

They also said that external curricula in schools, especially the National Literacy Strategy, can allow students to be solely 'curriculum deliverers' (Twiselton 2002) rather than encourage them to have vision and to inspire children by doing something different and taking risks.

Within this context of deeper learning, the school-based seminar becomes of great importance. Many mentors and students felt the importance of a small group environment within the context of known children, routines and expectations where they could reflect, compare and analyse experiences as well as draw out wider issues for discussion. Mentors felt that this was a useful forum for encouraging thought, dealing with misconceptions about hearsay 'rules' and to encourage students to have a go, take risks and dare greatly. However they also experienced some tension and frustration. The focus of the seminars tended to become a problem-solving arena for the more mechanical aspects of teaching such as target setting, assessment strategies and classroom management. Some mentors raised issues to do with meeting external demands impinging on time that could be spent improving the more creative elements of teaching. Some mentors showed genuine concern that their seminars were becoming led by external demands that they referred to as 'box-ticking' as opposed to being allowed to deal with what they regarded as more important issues to do with becoming a teacher rather than just being able to teach. This raises an important question of what knowledge is. Gibbs (2002) describes the surface approach as *'intention to memorise and reproduce – no transformation of knowledge'* (Gibbs, 2002 slide 007) and the deep approach as *'intention to make sense and explain – building personal reconceptions'* (Gibbs, 2002 slide 007). Gibbs explains that student teachers arrive with a variety of learning experiences and concepts of the nature of learning. Some see learning as knowing something, accumulating factual information. Others may see learning as understanding that leads to application and therefore a change in the way they view the world. It is this deeper level of response that is the challenge for educators to facilitate.

In conclusion, the mentors clearly valued professional values and subject knowledge and were very keen to promote professional judgement, thinking and initiative, qualities associated with 'concept/skill builders' (Twiselton 2002). All mentors wanted to encourage the students in using the curriculum as a foundation from which to be creative, innovative and take risks. They were in general opposed to the curriculum, particularly non -statutory tools such as the national numeracy and literacy strategies, being regarded as rigid, and mentors expressed concern about the variety of messages that students received about this from different schools that they attended for placements.

The demands of fixed curricula and associated teaching methods often became the focus of tutorials and students wanted to be shown a 'right' way of doing things. There is an issue here of 'graduateness'. One mentor commented, 'We want the all pervading message of our seminars and the whole way we work with students to be about creating 'thinking teachers', not just teachers who can deliver a pre-set curriculum, but people with a deep understanding of children's learning who can match the curriculum to pupils' needs and stages of development'.

## **So what might help?**

### **A selection of 'snap shots' from HEI involved in ITE**

In presenting this material we need to acknowledge from the outset that the notion of what is 'effective' is problematic. Please read our approach to this as stated in the overall introduction to the reports. In this we claim the examples included as no more than examples of practice that have *been found by contributors to be effective within their particular context* in supporting student teacher learning within the parameters we identify. Judgements about the desirability of what has been achieved in each case are left to the reader but can be related to the position we hope we have established through the context of the report as a whole. The material we include is there because it was identified in response to the interviews and questionnaires we conducted. These took place within a context that included exploration and discussion of the potential role of curricula and the examples emanated from the ways in which people involved with student teachers (in both sides of the school/HE partnership) felt they had worked that had been helpful. We have organised the material under headings – the level of detail for each example varies according to the amount of information that was provided. In some cases, where further detail is available we have included a link (external or internal) to where it can be found. We would particularly like to thank colleagues in the institutions mentioned below who found time in their busy schedules to respond so helpfully. We would also like to establish that this report is only the first stage in a 'work in progress'. If there are more examples that could be included in our future work in this area we would be delighted to know.

### **Course design**

This section includes examples where teams within HEI have structured the progression of student teacher learning experience over time in ways that have consciously taken account of a desire to facilitate broader and deeper understanding of what lies beneath and beyond the curricula they are working with. This broad definition includes a wide range of examples, from where an element within an entire programme has been conceived to this end to the structure of a module to the pattern of delivery associated with a school placement.

#### **Primary PGCE Bradford College**

[www.bilk.ac.uk](http://www.bilk.ac.uk)

In this example the response to the need to bring PGCE programmes in line with the National Qualifications Framework has been seized as an opportunity to create a programme that is genuinely post graduate (all contributory modules being validated at Masters Level). This involves an explicit requirement for student teachers to critique all aspects of the work they are engaged in, both in school and in HEI in terms of curriculum, pedagogy and subject knowledge. The programme is designed so that critical thinking is an explicit component of every taught session. All subject sessions link explicitly

to the central themes identified by the contributory modules, each of which culminates in a 4000 word essay at Masters Level. This means that on successful completion of the course, student teachers have developed high level understanding of the broader contexts in which their role as teachers is situated. They also have the very real benefit of acquiring a PGCE (as well as QTS), which supplies them with sixty credits towards an MA. The framing of the programme as being fully at Masters Level has involved the team in conceptualising the academic elements as being central to the programme, with the QTS standards embedded within modules, rather than treated discretely.

### **University College Chester**

[www.chester.ac.uk](http://www.chester.ac.uk)

In this example the college has seized the opportunity to create a programme that reflects the rationale and philosophy of the Primary Strategy, *'Excellence and Enjoyment in School'*, and allows the students to make progress in academic learning alongside professional practice. Recruitment issues in some main subjects for example the strength of the Early Years Specialism led to the College reviewing issues for placing trainees appropriately in school for compliance with the QTS standards. The rationale for considering a clustering of subjects for main subject provision was supported in that the new Primary Strategy lays great emphasis on moving away from a narrow curriculum. As part of their review of the curriculum the College validated a programme designed to model teaching and learning for students in HE that reflects good practice in primary school. As a result the programme has identified four specialisms designed to draw upon a thematic approach encompassing more than one curriculum area, but continues to maintain academic standards and rigour

The four areas are:

- Early Years
- Communication in Education
- Creative Arts
- Human and environmental studies

In years one and two students study four modules of main subject study, two in each year. These modules take up approximately 14% of students' taught time. The two modules in year two contribute 7% each towards the degree classification. The programme has given the course teams the opportunity to review and develop the range of modes of assessment. To reflect the range of teaching and learning styles which the programme offers, the team are developing associated modes of assessment. Main subject assessments range from presentations and exhibitions to traditional approaches of essays and exams. The programme has also explored the potential of working with outside agencies. For example in the Creative Arts Specialism there will be off site teaching in galleries and assessment of art projects is planned.

## **University College Bishop Grosseteste**

[www.bgc.ac.uk](http://www.bgc.ac.uk)

In this example the response to a range of Government funding opportunities has resulted in a change of course from 4 year undergraduate with QTS to a 3 + 1 route with QTS. The 3 year degree is a HEFCE funded BA (Hons) in Education Studies designed and assessed using the Education Studies benchmarks. The specialist subjects available reflect the National Curriculum subjects and Early Childhood Education. Integrated within the programme are 15 weeks of school based work.

The course team have developed what could be considered a traditional Education Studies route for an honours degree but have been creative in designing the course with the opportunity to accredit some school based experience to the award for QTS. For example in year 1 there are three education modules: Child as Learner; School as Classroom, and Curriculum. Typically one day a week is spent in school during the first semester: this is a paired placement with students acting as classroom helpers. Tasks are related to the modules and these are undertaken with supervision of the class teacher. In semester two there is also a block placement of 4 weeks. Years two and three follow a similar pattern of placement and school based tasks. A distinctive feature of year two is placement in a special school, while in the third year of the degree students build up to a teaching commitment during a final school placement.

The importance and relevance of this school based work is directly linked to the PGCE programme which the College has developed. Of the weeks in school during the undergraduate programme, five can be credited to the award for QTS in the PGCE: this means that students can move quickly towards recommendation for QTS. The first cohort of students will reach the PGCE in the academic year 2005/6 but it is envisaged that in the majority of cases its students will be able to utilise the summer term of 2006 for a range of options, having already completed QTS requirements and reached the standards. The time could be spent in further study or in employment. At an academic level there will be opportunities to take courses at Masters Level.

## **Education Studies, St Martin's College**

[www.ucsm.ac.uk](http://www.ucsm.ac.uk)

In reviewing the primary ITE undergraduate routes the Division of Education Studies was committed to developing courses which would equip students with the necessary skills to be reflective practitioners with a strong values base and a sense of moral purpose. Additionally it was acknowledged that these courses should enable students to develop the understanding, knowledge and skills necessary for achieving high academic standards in Education Studies as well as in their subject specialisms. The first course of this suite of modules was designed to allow the students to explore their own learning styles and

develop a meta cognitive perspective on their own learning. Students would understand the relationships between the cognitive, emotional and physical dimensions of learning and the role of different learning modes in promoting learning. Lectures, seminar work and directed tasks would focus the students on the key theories of learning and the implications of these for pedagogy. This would then enable them to link their own understanding with the provision of high quality learning opportunities for their classroom experience. The rationale for this ambitious level 1 course was rooted in the belief that it was important for students to make sense of their own learning experiences before they could apply this knowledge and understanding to the classroom. The content of the module focussed on the following issues:

- Relationship between adults' and children's learning: novice-expert shift
- Theories of learning
- Cognitive, emotional and physical dimensions of learning: emotional intelligence, multiple intelligence theory
- Learning styles and modes of learning: kinaesthetic auditory and visual
- Motivation
- Thinking skills and cognitive acceleration: accelerated learning strategies
- Self esteem

The assessment for this module is designed as a two part assignment. Part one requires the students, working in groups, to plan a learning event for their seminar group. Part two of the assignment requires the students individually to evaluate the effectiveness of this learning event.

### **Application of Subject, St Martin's College**

As part of the 4 year route offered by the College, students undertake a double module designed and assessed against the level 3 Education Studies Benchmarks but which is also linked to their specialist subject. Students are helped to develop a personal philosophy based on a critical analysis of their specialist subject in the school context, and to challenge assumptions about the nature of their subject. Through lectures, seminars and directed tasks the students explore the importance of being a reflective practitioner within their subject specialism and the wider curriculum.

A main focus of this study is to develop students' professional skills in subject leadership in the school setting through critically evaluating generic issues relating to their specialist subject, for example inclusion, cross curricular elements and PSHE. In this double module students undertake six days of school related activities and complete a school related assignment reflecting a negotiated project related to their specialist subject. This assignment requires them to work in subject groups to undertake supported action research. The

topic will be negotiated between the student group and the school, and will involve managing an aspect of change.

The module content addresses:

- The nature and structure of subjects
- Mapping the student's specialist subject within the curriculum
- The nature of teaching and learning
- Current topics within the educational agenda
- The role of the subject leader
- The subject leader's accountability
- Curriculum development and teacher development
- SMSC
- Cross curricular elements

The placing of this module with the final year of the 4 year programme gives the students the opportunity to consolidate action research skills that they will have encountered in an earlier Education Studies module. This gives cohesiveness to the suite of modules and also to the range of student experience. Additionally links will be made with Masters level/CPD opportunities to enable students to begin to address further professional development issues during/after their Induction year.

### **Curriculum English Programme Structure, St Martin's College**

The structure of this example originates from the 'Beyond the Curriculum' (Twiselton, 2002) research outlined in the introduction. The primary English team at St Martin's view the different categories of student teachers (Task Managers, Curriculum Deliverers and Concept/Skill Builders) as stages on a developmental continuum. As such it is accepted that, to an extent, student teachers need to go through each stage as they develop into effective and knowledgeable English teachers. Early modules are therefore structured to allow the student teacher access to the curriculum knowledge and technical skills to allow them to be able to operate confidently both with the requirements of the school curriculum (in this case the National Curriculum, QCA, 2000 and the National Literacy Strategy, DfEE, 1998) and with the practical demands of managing pupil behaviour. Modules deal with the different teaching approaches student teachers are likely to encounter in school (e.g. shared and guided reading) and support them in the competent planning, teaching, evaluating and assessing them in school. This initial focus, then, addresses two of Shulman's (1987) seven categories of teacher knowledge – curriculum knowledge and general pedagogical knowledge.

Later modules, however, have been explicitly planned to facilitate the transition from competent curriculum delivery to principled, conceptualised teaching and thinking underpinned by fuller frameworks of understanding, pitched at Honours level (QAA). The fourth of five modules in total is viewed as the pivotal point at which student teachers are required to focus on beliefs and

values and their relationship with knowledge and understanding. The curricula are explicitly examined in relationship to broader contexts and an assignment submitted at this point requires student teachers to articulate, substantiate and exemplify their personal values and beliefs about the teaching of English. (further details below)

This module therefore focuses on Shulman's (1987) remaining categories of teacher knowledge – content knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, knowledge of educational ends. This model also links with Eraut's (1994) conception of initial teacher education. Eraut criticises traditional forms of teacher training, where 'practical knowledge' and 'propositional knowledge' are delivered in discrete blocks of teaching practices and college course, on two grounds. He claims that the university delivery is based on propositional knowledge in an academic framework, which does not fully use and develop the professional context. On the other hand, the practical delivery does not necessarily analyse and develop the propositional knowledge effectively. An approach that combines the development of broad-ranging knowledge bases with good use of the professional context is what the structuring of these modules is hoping to achieve.

### **School experience**

The way school experience is structured can provide a context for student teachers to have their preconceptions challenged and developed and for them to stand back and reconsider teacher roles, the curriculum and models of learning and teaching.

### **University Of Derby**

#### **A school-based collaborative project**

[www.derby.ac.uk](http://www.derby.ac.uk)

Before and during this placement student teachers work closely with a school facing challenging circumstances and associated professionals to engage with the school improvement process. ITT tutors and LEA staff work closely with groups of student teachers to support them in developing inspiring resources and activities to support the school improvement process in English and Mathematics. Student teachers team-teach with the school staff to implement their ideas. A joint INSET conference for both the school staff and student teachers enables both to reflect on effective strategies for raising achievement.

### **High Intensity School Placements (St Martin's College)**

In this example school placements are planned explicitly to ensure that student teachers experience both their own and pupils' learning in a way that is very different from the standard placement. The aim is to put the student teacher into a role that is different from the typical model where s/he takes over some aspects of the traditional teacher position. This is done partly by putting several student teachers in each class with a brief that goes beyond teaching

the children in the usual way. The large numbers of adults opens up possibilities for creating pupil-learning experiences that could seem too challenging for one adult alone. It also facilitates opportunities for focusing closely on individual pupils, enabling the student teachers to have a focused 'teacher as researcher and data collector' identity. In one such placement planned for March 05, the student teachers will be explicitly collecting pupil data for a TTA research project.

The strength of such placements (in addition to the advantages outlined above) is that, as large numbers of student teachers are placed in a small number of schools, the possibilities for creating genuinely shared understandings between HEI and schools are greatly increased. As the placements are usually short and sharp (one week or less) schools are able to be very flexible about the curriculum model and structure of delivery for the period the student teachers are in school. This allows for a genuine re-examining of curriculum and pedagogy. As such it involves student teachers and their tutors in both HEI and school to revisit the broader aims of education and so to consider afresh teachers' professional identity.

### **Variety in School Placements - St.Martin's College**

In this example within the requirement for students to spend 32 weeks in school on a four year degree, a three week placement has been designed to allow students a range of choices. This placement is experiential and is not assessed on a pass/fail basis, which has proved crucial to enabling creative possibilities.

- In conjunction with the TTA Primary French project, some students have been able to do their placement in France to develop their ability to teach French. A good GCSE in French is essential to undertake this and students have reported back that this has been a life changing experience.
- Collaborative agreements with Higher Education Institutions in Holland, Germany and Finland have enabled students to go to these countries for their placements. Funding from the Leonardo da Vinci fund has enabled some language and cultural preparation to take place in advance so that the students can gain as much as possible from the experience. The emphasis on these placements is more on comparing and contrasting education systems because the amount of teaching in most instances is limited by language difficulties. This has happened for the first time in 2004 and initial feedback is excellent.
- Some students have been able to do this placement in Northern Ireland as they wish to return there after graduating and their employment chances will be greatly enhanced by having some experience in a Northern Irish school.
- An elective module on Special Educational Needs is offered in the third year of the Programme and on completion students can do their

placement in a special school. A range of schools has been used and this has been a hugely enriching, as well as very challenging, experience for the students.

### **Approaches to mentoring - Dallas Road, School, Lancaster**

In this example, the opportunity to strengthen partnership between the HEI and the school, and to integrate the experience students receive in the HEI with its application to the classroom has been seized upon. The approach consisted of expert personnel in the school being drafted in to lead group tutorials with all the student teachers in the school for a half hour period each week. The tutorial programme consisted of five sessions in the order that expert personnel were able to deliver them. They were; *Classroom organisation and behaviour management, cross curricular approaches to planning, Special Educational Needs, planning for children with English as an additional language* and *managing support staff*. These titles were arrived at because they were important issues particularly for Dallas Road School and also general wider teaching skills. They also applied to the standards in circular 02/02 *Qualifying to Teach*.

Within these areas the students were asked to critically engage with the subject in relation to their particular class and evaluate their own approach, as well as to compare the college taught sessions and dovetail their knowledge and experience with what they saw and experienced in school. This greatly increased their ability to reflect on their own practice as managers and helped them begin to critically engage with the wider role of the teacher. Students could also see more clearly the relevance of their college study and that the work teachers do is not removed from what they are taught in college. Students became more aware that teachers are applying theory and putting it into practice, demonstrating concept/skill builder attributes at honours level and beyond.

### **Active partnership in a training school –**

**Anchorsholme Primary School  
Training School**

[www.anchorsholme.blackpool.sch.uk](http://www.anchorsholme.blackpool.sch.uk)  
[www.standards.dfes.gov.uk/trainingschools/](http://www.standards.dfes.gov.uk/trainingschools/)

### ***Whole School Commitment***

One of the key elements for success in initial teacher education is acknowledged to be a genuinely whole school attitude:

‘Effective teacher education will depend on schools as a whole having thought through and adopted an appropriate policy for ITE, and on many different members of the school staff making informed and mutually complementary contributions to student teachers’ learning experiences.’ (McIntyre and Hagger 1996 p.149)

Anchorsholme's commitment to ITE is genuinely 'whole school' – Student teachers are welcomed and encouraged to feel part of the school from their first point of contact. The majority of teachers at Anchorsholme are trained mentors, with a number being involved in gaining advanced mentor status (which can lead to MA level awards). In line with the DfES (Soulbury and Swain, 03) report findings, younger teachers at Anchorsholme realise the value of this mentoring role as part of their professional development and the more mature teachers see this as an important rekindling of their interest in their career.

### ***Reflective Practitioners***

As a whole school Anchorsholme undertakes a great amount of reflection on what makes for effective teaching and learning at all levels: for pupils, student teachers and staff. They believe this leads to higher order thinking among staff, which can be identified as being at honours or Masters Level. An important spin-off from the mentors' own professional development is that they identify with the process the student teachers are expected to engage with because they too are experiencing a parallel educational process.

### ***Sharing Good Practice***

The Training School Manager at Anchorsholme is also a mentor training tutor at St Martin's and the school has been involved in the development of St Martin's distance learning mentor training materials, ensuring the school is up to date with HE teacher training programmes and mentoring needs. In accord with TTA (2004) findings, Anchorsholme believes that having many student teachers at one time is of benefit to all involved, allowing for greater interaction between student teachers, class teachers and mentors; all being better able to share good practice, creative thinking and individual perspectives. This provides a forum for co-enquiry and reflective discussion that is concentrated on the learning needs of the pupils. The school has developed a programme of focused tutorials that they can select from depending on student teacher need (and include Newly Qualified Teachers in tutorial sessions when appropriate).

### ***A Developing Partnership***

Anchorsholme's involvement in a flexible modular distance-learning PGCE programme has strengthened the school's understanding of the ITE process and partnership with St. Martin's. Furthermore, staff report that the integral Needs Analysis Module – an intense student teacher observation week, designed so that mentors and college tutors can work together to assess the best flexible route into teaching for up to a dozen candidates three times a year - has helped to develop their QTS assessment skills. The Needs Analysis Grid' adopted for student teacher assessment during the week is a compact overview of the QTS standards graded from 4 to 1, which allows the standards to be used in an interconnected manner and tracks progress across the week.

### ***Working with 'The Standards'***

Anchorsholme have found advantages and disadvantages in focusing on the QTS standards' when working with student teachers.

They have found that the standards:

- create parity of focus across providers;
- ensure that NQTs are proficient, competent and aware of their strengths and weaknesses;
- give a broad basis and, like the National Curriculum, are a source for guidance and act as scaffolding;
- give a common language for school, HEI and student teacher;
- are starting points for a continuum that is followed through in NQT year and throughout a teacher's career; linked to their continued professional development programme.

The two main disadvantages are that the standards:

- could be used mechanistically, particularly if their interconnectedness was not made explicit;
- could be used in a way that fails to address '*Excellence and Enjoyment*' philosophy in schools.

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