Differentiation – Enhancing the Quality of Teaching and Learning

Two central questions remain for teachers to address at any level: "What is my understanding of how pupils learn?" and, "How does this inform the teaching strategies I adopt?" Teachers who wish to raise their pupils' achievement will find an examination of the issues of differentiation instrumental in developing a professional response to children's needs.

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A TERM SPANNING MANY ISSUES

Terms come and go in the language used by educators as they attempt to describe the parameters of teaching and learning. Differentiation is one of these terms - a piece of jargon invented, according to some, when the national curriculum was introduced in England and Wales. It was said to be one of the six principles of the curriculum - broad, balanced, relevant, continuous, progressive and differentiated (NCC, 1990).

The issues covered by the term are, however, not new. They focus upon the nature of diversity in pupils and how teachers define, provide for and teach their pupils. In this respect the term encompasses a number of separate but inter-linked approaches. Some educators have used it to describe how to cope with diversity by placing pupils in different types of school or group. They go on to debate issues surrounding segregated provision rather than inclusive schooling; or setting, streaming, banding and mixed ability teaching within individual schools and classrooms (see for example Ainscow, 1991; Swann, 1988; Norwich, 1990; McIntyre, 1993). The term has also been linked to the notion of different curriculum provision. Here the debate centres upon curricula which are common, alternative, modified or provide for choice (see for example Chitty, 1989; Beveridge, 1993; Hart, 1991).

THE NATIONAL CURRICULUM: MAXIMISING PUPIL PROGRESS

The entitlement to a common national curriculum, introduced by the Education Reform Act 1988 in England and Wales, together with other developments such

as the introduction of a Code of Practice for pupils with special educational needs and increasing awareness of the needs of the more able pupils, has led to a reexamination of how pupils achieve progress in the curriculum. In this respect differentiation has come to focus upon the diversity of pupils within classes, however they have been grouped. The focus here, brought about in part by entitlement, is how to ensure the greatest match between teaching and learning to maximise progress for pupils (Visser, 1993a, 1993b). Other reasons for this focus on differentiation appear to lie with concerns about behaviour problems, job satisfaction, enhancing pupils' achievement and perceptions of what OFSTED, the schools' Inspection service, are looking for in their inspections.

REINFORCING A MECHANISTIC VIEW OF EDUCATION?

The advice offered to teachers to achieve this match varies from increasing the range of worksheets offered to a class to allowing for a wider range of 'outcomes' from lessons. Most of these suggestions appear to rely on a simplistic model of what teaching and learning is about. It is suggested that the teaching and learning process has only three components, input (by the teacher), task (performed by pupil), and outcome (achieved by pupil and assessed by teacher). In this model of teaching and learning, teachers are exhorted to vary their input, have a range of tasks and allow for differing outputs. Whilst not wishing to sweep aside the usefulness of the ideas which derive from this approach, the model seems to have a number of inherent problems, two of which are worth highlighting.

Firstly, it is a fairly mechanistic view of education. It smacks of the "I teach, you learn" model of teaching where "If you don't learn - I still teach." The problems in learning are seen as lying within the child, or within the school, rather than in the interaction between teacher and pupil. Secondly, it has a tendency to reinforce outcome, which the research indicates is the most common form of differentiation. An analysis of OFSTED inspections reinforces this perception with a common refrain being that "differentiation is only allowed for by outcome." All too often the consequence of this is underachievement as pupils produce the minimum to get by.

ADDRESSING MORE FUNDAMENTAL FACTORS

Teaching and learning is more complex than this model would suggest. The achievement of good quality in teaching and learning will not come about by merely manipulating inputs, tasks and outcomes. It will come about by acknowledging the individuality of pupils' learning styles whilst teaching them in groups.

Teaching strategies have to acknowledge the diversity within pupils rather than between them.

Input, tasks and outcomes may be a part of this but should not be seen as the key elements of differentiation. They will be addressed when more fundamental factors have been reflected upon. The values, attitudes and beliefs that individual teachers hold regarding the nature of diversity will inform their perception of the need to enhance the match between teaching and learning. Differentiation is achieved by teachers acknowledging this and by its relationship to how pupils learn. Here lies a key to enhancing achievement.

Summarised in the box are the factors which a number of researchers (Brown & McIntyre, 1993; Postlethwaite, 1993), have indicated pupils identify as contributing to the building of this relationship. For experienced teachers there is little new here.

PUPILS' VIEWS ON QUALITY TEACHING AND LEARNING

- Teacher is in control
- Lively presentation
- Lesson has clarity of purpose
- Explanations are clear
- Expectations are explicit and appropriate
- Support available when difficulties occur
- Self-esteem is protected and raised
- Teacher is secure in knowledge of subject

AN EMPHASIS ON TEACHING

One of the main strands in considering the teaching aspect of pedagogic differentiation concerns the planning before teaching and the importance of teachers' approach to it. A number of authors see teachers' beliefs, values and attitudes regarding pupils as central to this aspect of differentiation (see for example Postlethwaite, 1993; Pollard and Tann, 1993; King, 1990; Visser, 1993a). Where teachers have no sense of the individuality of pupils and their diversity, the 'need' to differentiate teaching is lessened since in effect the view of teaching becomes one where information is presented in a particular form for all children, which

they then have to learn. It is an "I teach, you learn" model of teaching where no interaction takes place between the teacher and the taught as each has a separate role.

ACKNOWLEDGING INDIVIDUALITY

The need for these attitudes, values and beliefs to be explicitly stated in a collective form as a school policy, is a factor which could promote differentiation (King, 1990). The importance for differentiation lies in the position the school and individual teachers take regarding the equal valuing of each pupil. Without each pupil being 'valued' on an individual basis, King argues there can be little point in pursuing differentiation. Postlethwaite (1993) similarly argues that it is teachers' views of, beliefs about and attitudes towards individuals which provide the impetus for differentiation. The extent to which teachers acknowledge the individuality of pupils will affect the differentiation a teacher engages in.

TEACHER FLEXIBILITY AND DIFFERENTIATION

Garcia et al (1995) indicate that in order to differentiate, teachers must also have a professional attitude in the classroom which enables them to cope with constant change, as well as deal with what they refer to as non-stable institutional changes. Teachers need a flexible approach to the teaching styles they adopt. Teaching is seen as a dynamic process where teachers need to be able to cope with, and react to change. Garcia et al (1995) argue that teaching can be viewed as the creation of change in order to enhance diversity amongst pupils. Pollard and Tann (1993) argue similarly that it is the teachers' responsibility to use classroom responses from pupils to provide points at which they alter what they are doing in order to meet a change in needs or a new perception of pupils' learning style. Being wedded to a static teaching style will not promote differentiation.

DIFFERENTIATION AND TEACHING STYLES

The central role of the teacher in differentiation is perhaps too obvious to need stating. However, there is a need to emphasise that given an entitlement curriculum the role of the teacher has shifted more to ensuring access (NARE, 1990) and away from issues concerning the content of what is taught. The issue is how to ensure access. This leads to an examination of teaching styles.

Having a range of teaching styles as part of a teacher's resource bank is seen as a necessary prerequisite for differentiation (Kyriacou and Wilkins, 1993;

Waterhouse, 1983; Atfield - undated). As mentioned earlier, King (1990) indicated that to achieve the match needed to ensure that differentiation took place, teachers need to use a variety of teaching styles within any teaching period. Defining teaching styles as "the different methods teachers can use to enable pupils to learn," Alexander, Rose & Woodhead (1992) indicate that being aware of the range of teaching styles in use is an important aspect of good quality teaching. The implication in all these sources is that the range of teaching styles used by individual teachers is relatively narrow and that they remain static over the period of a teacher's professional career.

TEACHERS' PLANNING FOR MEETING PUPIL DIVERSITY

A second strand running through this perspective in the literature is that of teachers' planning for teaching. Newton (1994) indicates that planning is an important part of the teaching process. She argues that if differentiation is left to the delivery stage of teaching it will be an entirely reactive process. Differentiation then becomes merely the teacher's reaction to the 'failing pupil'. Planning, according to School Inspectors, is all too often a haphazard process where much that is to be taught, and particularly how it is to be taught, is left to chance. This view is reinforced by NCC (1990, 1993b), which makes a plea for clear thought through planning of teaching. It is in the planning process that the teacher can build in strategies for meeting the diversity of pupils' learning styles.

Laycock (1994) indicates that it is in their planning that teachers fail to acknowledge the range of differences in pupils. Mercer and Mercer (1985) indicate that teachers fail to do this because they believe that they cannot cope with a wide range of diversity in their classes. Dransfield (1994) also believes that the teachers' planning process is the point at which differentiation is built in to the learning experience. It is for him the point at which the teacher needs to ensure that he or she will not be taking individual pupils beyond what Vygotsky called their 'zone of proximal development'. Bell and Kerry (1982) indicated that without good preparation individual pupils' different needs would not be met. They agreed by implication with the comments by Inspectors that planning preparation. particularly at secondary level, has generally been haphazard, leading to too much inappropriate whole class teaching. Throughout, these sources emphasise that it is teaching styles which need to be differentiated (Moore, 1992); the pupils are already different. For these writers, differentiation is a reflection of teachers' responses to these differences particularly in why and how they plan to meet them. both in terms of long and short term planning (NCC, 1993a).

PLANNING FOR EFFECTIVE TEACHING AND LEARNING

According to Merrett and Wheldall (1993), there is some contradiction between these views which implies that teachers' approaches to planning are haphazard and in particular that teaching styles are left to chance. They investigated teachers' views of their training and found that teachers felt the 'planning' training was good. The issue here may be one of what constitutes 'planning'. The Merrett and Wheldall (1993) study concentrates upon context issues and behaviour management. Other authors have used the term 'planning' more generically applying it to resource use, teaching styles, assessment and evaluation of previous lessons, and knowledge of pupils' learning styles. There appears to be a gap in the literature regarding teachers' planning generally as well as in relation to differentiation. The process of planning to teach is covered by a number of authors but little appears to be available as to how teachers, particularly secondary teachers, actually go about the process, and in particular if the order in which they engage in aspects of the process of planning affects the way in which they then teach. This could have implications for the amount of differentiation which takes place.

APPROPRIATE RESOURCE USE AND DIFFERENTIATION

Some authors view pedagogic differentiation as a teacher's ability to use resources. Bell and Best (1986) indicate that for teachers to move from a narrow range of teaching styles they need access to a wide range of resources. The Audit Commission (1992) also indicated that teachers need access to appropriate resources to meet pupils' individual needs.

Both Crouch (1992) and King (1990) indicate that teachers view the resources issue in terms of 'worksheets'. In particular they indicate that the 'three worksheet technique' is viewed as sufficient differentiation for secondary classes, where one sheet is for the more able, one for the less able, and one for the average pupil. For King (1990), Crouch (1992), Visser (1993a), McManus and McManus (1992) and others, this approach to differentiation is seen as very limited in what constitutes using a range of teaching styles. Merely to vary the number of worksheets will have little effect upon the teaching styles adopted by the teachers concerned. The worksheets, whilst varying in complexity, maintain a unitary style of teaching that of 'worksheets'. Worksheets often limit children's learning (McManus and McManus, 1992) in that they require a particular learning style for successful completion, and are often limited in the opportunities they provide or encouragement they give to pupils to pursue the topic further. (Simpson, 1989; HMI, 1993).

EFFECTIVE USE OF CLASSROOM ASSISTANTS

A further resource noted in the literature which can provide teachers with the ability to differentiate is the use of classroom assistants. These are seen (ASE, 1991) as important to the provision of differentiated lessons and the achievement of a match between learning and teaching particularly in relation to those pupils who have a special educational need. ASE indicate that the effective use of classroom assistants in achieving a well differentiated approach lies in the extent to which they are fully briefed by the class teacher. Merely assigning a child or group of children to the extra resource of a classroom assistant will not achieve a match between learning and teaching.

SUBJECT KNOWLEDGE

As well as resources, Edwards (1993) and Postlethwaite (1993) indicate that teachers need to have a sound knowledge of the subject matter. Without it they maintain that differentiation is not possible since teachers are unable to plan for differences, and more importantly cannot cope adequately with pupil differences as they arise during the course of the lesson.

'MEASURING' DIFFERENTIATION

Differentiation has been described as 'an intangible', something "difficult to spot happening but only too easy to see where it isn't happening" (Bourne, Davitt & Wright, 1995). Entwistle (1990), whilst acknowledging that differentiation is concerned with a match between teaching and learning, indicated that it is essentially a process, something which teachers do as they teach. He felt it was therefore difficult to manage and measure. Lacy (1970) indicates that where he saw teachers coping with diversity, they did so as a 'natural' part of the teaching. Lewis (1991) writing of primary teachers concurs with this view. She indicates that differentiation takes place in teaching as teachers adjust and change their teaching in a seamless manner. As McIntyre (1993) indicates, this would seem to suggest that the more experienced the teachers the easier it is for them to differentiate. They have a great knowledge of the "professional craft of teaching, a greater understanding of what is implicit in teaching and learning and what goes on in the classroom." This view of differentiation as a teacher's professional skill in achieving a seamless match between the teacher and taught is one which Schon (1983) indicates a wide variety of professions achieve where there is a client/service relationship. The professional teacher is one who, having been able to articulate the individuality of his or her pupils, will seek to use a variety of teaching styles to establish the most effective ways of enabling the individual to learn (Schon, 1983). Schon calls this 'reflection-in-action'. His view is that for teachers to meet individual pupils' needs they must be capable of this reflection in action as they teach.

CONCLUDING THOUGHTS

The interface between teaching and learning is built up in a dynamic series of interactions which are the lifeblood of the majority of classrooms. The most common form of differentiation in these classrooms is not by 'outcome' but rather 'on the hoof'. This form of differentiation takes place as the teacher manipulates the teaching, whilst he or she is teaching. It is difficult to describe, since it involves so many variables. Based upon their knowledge of the subject, their experience of teaching, their understanding of their pupils, their effective use of resources, and their perception of the teaching/learning environment, teachers differentiate as they teach and perceive incomprehension in their pupils. Experienced teachers often do this without even conscious professional thought; it is seamless-knowledge-in-action.

The problem with 'on the hoof' differentiation is that it occurs at a point of failure, and only when the failure in learning is recognised. If the pupil manages to disguise the failure by filling in the worksheet appropriately, or regurgitating what the teacher has said in some way, always remembering to write neatly and putting the date in the right place, or even displaying behaviour which draws the teacher's attention away from the learning that hasn't occurred, the differentiation which takes place will be largely by outcome, if it occurs at all.

Two central questions remain for teachers to address: "What is my understanding of how pupils learn?" "How is this informing the teaching strategies I adopt?" If pupils' progress is to be enhanced then this is the key to its achievement. Teachers the world over who wish to raise their pupils' achievement will find that addressing these two questions will result in differentiated quality teaching and also high quality learning.

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