# 1. FIRST CYCLE - ACTION LEARNING, GETTING STARTED

# 1.1 Asking an educational question - How do I improve what I am doing?

Your fundamental commitment as an action learner is to ask yourself a practical question concerning improvements in your practice. Your own 'I' in a question of the kind, 'How do I improve what I am doing?', is both a subject and an object in your enquiry. There is also an assumption in action learning that you will have already had experience of resolving practical problems by defining action plans, acting, evaluating and modifying actions in the light of evaluations. You should check the questions and form of the action planner below to see if it corresponds to your approach to problem solving. It is being used in our action research network as a useful introduction to action learning.

There are a number of ways for you to formalise your enquiry. You may already be engaged in the process of improving your practice and wish to move directly to the action planner. If you do this then the part of the process which I would like to stress concerns question 4 in the action planner below. This question is designed to help you gather the kind of evidence which will enable you to justify or contradict your belief that learning is improving.

A characteristic of many of the first action research reports I have seen is the omission of evidence related to the quality of pupils' learning. I continue to stress that the central purpose of teaching, which is to arrange conditions to enable pupils to learn, does not usually provide a focus for the evidence produced in first, action learning reports. I mention this in the hope that I can encourage you to include evidence in your first report which enables you to justify a claim to have understood something about your pupils' learning.

For those who would prefer a period of reflection before engaging with the action planner I suggest you move ahead to the sections, on conversations with colleagues on your concerns and values, on contradictions in practice and on gathering evidence, before returning to the action planner.

# 1.2 HOW DO I IMPROVE WHAT I AM DOING?

# **ACTION RESEARCH PLANNER FOR IMPROVING LEARNING**

# NAME WORKPLACE

Action researchers usually ask questions which are directed at improving the quality of their own practice, their understanding of their practice and the social context in which the practice is located. The action planner is usually organised through discussions which help to clarify the nature of the enquiry, 'How do I improve.....?', into questions of the form,

1) What is your concern/What do you want to improve?

2) What are your reasons for your concern?

# 3) What might you do to improve your practice?

<u>4) How will you know that your practice has improved? How are you going to find out? ie;</u>

What kind of evidence will you need to collect to enable you to make a judgement on the outcomes of your practice in terms of the quality of your own or teachers' and/or pupils' learning?

5) What kind of resources will you need to enable you to implement your plan?

# 1.3 CONVERSATIONS ABOUT EDUCATIONAL VALUES - Andy Larter

A few years ago, if you had asked me what my values as a teacher were, I would probably have replied that I valued student autonomy, the teacher in the role of facilitator, learning being fun yet worthwhile, talk as an important learning process and the emphasis placed on the process rather than purely the outcome. If this strikes you as vague it is because my thinking at that time reflected my somewhat glib utterances about what I valued as a teacher. I feel that there is nothing unusual in this. During a DES course at Bath University (12/6/85) it appeared that many colleagues on the course were finding it hard to express what they felt to be their values. I feel that this is not because teachers are an unprincipled lot, but rather because much of what we do is taken for granted or implicit in our work. Perhaps we only really think about what our values are when we come to fill in application forms for jobs. Perhaps it is an indictment of the profession that we spend so little of our time thinking about what we do and how we do it, although I'm of the opinion that we don't have the time or the constructive encouragement from school of LEA hierarchies to really mull over our ideas on our practice. By this I mean that we are often scrutinised negatively rather than positively. When you think of teaching practice or the probationary year you get the notion of failure to which our entire educational system, including teachers, is geared. There is so much time taken over administration or being in the classroom on our own that we have little time to stop and consider what we are doing. Perhaps it is so easy to be counted as a 'soft' teacher because your classroom is noisy ( an idea that I feel is beginning to be broken down) that we are reluctant to allow any third parties into our various secrets. Whatever the reasons for our insecurities, we need to share our experiences more. Perhaps the influence of Lawrence Stenhouse, the Ford Teaching Project amongst others could help, should help us here.

Nevertheless, my values as a teacher were vague notions to which I aspired without really monitoring or reflecting on what was happening. In conversation with Jack Whitehead on 25/1/85 I said,

"I'm trying to demonstrate that talk is a valuable learning process. Secondly, I'm trying to encourage the students to be more autonomous and rely less on me for what they do in the classroom. Thirdly - I want to encourage cooperation and valuing other people's opinions, negotiating what goes on. What I mean is to see each other as human beings in a particular situation - the classroom. Fourthly (- This is more problematic. I'm not really sure it is an educational value). Within the other three, how do I as a teacher ensure that 4E have the know-how to get good grades in examinations? ..... Whether I like it or not it's part of my job. The economic function of it. I feel that I would be denying something to the kids if I was to deny the whole economic structure. Another thing is they put me under pressure to ensure that and so does the school and further than this the whole society. But I'm not sure that this is an educational value. Let's call it an educational dilemma. Fifth - I would like them to reflect more critically upon their own work and the content and process of what they are doing using both talk and writing"

In response to Jack's question, "What about the values in your relationship with the pupils?" I replied,

"Do you mean things like breaking down the traditional role of the teacher so that she isn't an arbiter of knowledge but an enabler. (This) is a value I try to hold."

I'd like to take each of these values in turn and investigate how my understanding of each has changed, developed, been monitored. I'd like also to include new thoughts and values that have emerged during my year's research into my own practice. I intend to explore the improvements I've made as a teacher-researcher during the last 12 months or so.

First of all, I'd better make it clear that my activities in this review are restricted to the work of myself, an English teacher, and a fourth year mixed ability english class. I have made use of various 'critical friends' in attempts to triangulate the various meanings constructed in the classroom. (This view of validation will be developed later). There have been audio and video tapes made of lessons, journals have been written, accounts have been elicited and conversations undertaken. Here is an attempt to tell the story of part of the year. I would find the task of telling the story of the whole year impossible because there is too much data, too many memories. And anyway, I don't think it is possible to get the whole story : you miss too much or too much is left unsaid by the participants.

The year started with a whole class reader, 'Kes'. I wanted to organise a series of lessons which would,

a) bring the group together at the start of the school year in doing some shared activities

b) be something I have run in the past with some success. I felt that this would give me some confidence in the activities as they were familiar from experience.

c) 'Kes' is a fine book to use with fourth years. There's much in there to which they can relate their own experience.

Here are some journal entries from some students after reading the opening few pages of the book. I'd asked them to write down what they thought of Billy Casper. I'd like to start here and follow a group of five girls through the sequence of work they did on 'Kes'. I'd like to use their experiences to show that there were times when I did live out my values in the classroom and times when I did not. I will interpolate evidence from other students in an attempt to demonstrate what I understand about my own practice.

Here's Mandy's response to the opening of the book.

Billy seems a loner. With no friends and if he tried, he probably could make friends with people, including his family. He has a chip on his shoulder because Jud works in the mines and doesn't have much time to do things, so Billy has to do them. He would probably understand when he works on them.

But he doesn't really get on with anyone and the reader feels sorry for him. He's probably just the same at school. He's on his own a lot and has to do plenty of work around the house before school and probably after school. His only enjoyment is seeing his kestrel, KES.

*He steals things because he's hungry and his brother has his breakfast. The house seems poor. No carpets and he has to sleep in the same bed as Jud.'* 

Although there is the understanding of Hines' technique as a writer ('the reader feels sorry for him') I don't get the impression that Mandy is as involved at the emotional level as she thinks she ought to be. Thus her meaning could be said to be a received one in that she has a particular understanding of what school and learning ought to be about. For instance, later in the year she was able to say,

'It's been all right but I ain't learnt anything.' (Interview with John Smith 13/12/84) and in her journal on 10/1/85, she said, 'It (a sequence of work about giving instructions) hasn't really taught us anything and I haven't learnt anything of use. I did enjoy it though .... Maybe if I had the chance to be the instructor I might benefit from it. At the moment I've probably done them some good'.

My claim here is that Mandy is quite capable of forming an opinion and articulating it. This shows confidence on her part but also, perhaps, shows a confidence and security in the

situation to be able to voice her opinions. I like to think that this is because Mandy knows that she will not be chastised for making such remarks. If I want the students to make sense of their experiences in their own ways then they must feel secure in doing so. I think that Mandy is here showing that she does feel that she can be critical.

# A response from Maureen Barrett and Jack Whitehead 27/6/85

Andy - a number of us have said that we need to establish a relationship in which the pupils feel confident that they can express their own ideas. When you say in the paragraph above that 'you like to think that this is because Mandy knows that she will not be chastised for making such remarks', could you ask John Smith to talk to Mandy to see if this is what she does feel. Can she tell us what she feels about the relationship in terms of helping her to feel confident and or secure and to be critical?

In the next draft should we expect to see more evidence of, 'I'd like to use their experiences to show that there were times when I did live out my values in the classroom and times when I did not. I will interpolate evidence from other students in an attempt to demonstrate what I understand about my own practice.'?

# 1.4 EXPERIENCING YOURSELF AS A LIVING CONTRADICTION

It is usually worth while video-taping a lesson before you design your action plan. The video-tape is the most powerful reflector of what you are doing and can often reveal contradictions between what you believe yourself to be doing and what you can see yourself doing. I have referred to this experience in terms of being a living contradiction. All the teachers I have worked with have reported the experience of seeing themselves as living contradictions as they recognise, often in a surprising context, that they are not living their educational values as fully as they believed.

For example **Margaret Jensen (1987) of Hardenhuish School,** in her MPhil Thesis, *A Creative Approach to the Teaching of English in the Examination Years,* reported the experience of seeing herself taking the best parts in the reading of Shakespeare. This is also confirmed in pupils' written reports. **Andy Larter (1987),** in his MPhil Thesis, examined his feelings on viewing a video-tape of his response on being given a racist poem. Andy explained how his responses prevented the kind of exploration he wanted to have with his pupil. **Erica Holley of Greendown School** reported her surprise on seeing transcript evidence which showed that she, rather than her pupils, were asking the questions which Erica wanted the pupils to ask. Feminist researchers have reported their surprise at viewing video-tapes of their classrooms which showed that they were still spending a majority of their time responding to the boys, when they believed that they were distributing their time justly. **Mike Fertig of Culverhay School,** gives his response (in **Jean McNiff's** book on Action Research, Routledge 1992) to viewing a video-tape which shows a conflict between encouraging conformity and promoting cooperation.

It is often the experience of oneself as a living contradiction which stimulates the imagination to think of ways of overcoming this experience in a desired direction. Whilst acting to improve your practice it is often useful to gather data which will enable you to make a judgement on the effectiveness of your actions in terms of the pupils' learning.

# 1.5 GATHERING DATA

**Gathering data on your values and intentions** is perhaps best done through taped conversations with colleagues who question you about your purposes and the intentions in a future set of lesson plans. These conversations are time-comsuming to transcribe but can be most rewarding because of the data they contain (See Andy Larter's transcripts above)

**Evidence from pupils can be gathered in a number of ways.** Xeroxed examples of pupils' work over time can give some evidence of the way in which the pupils are relating to what you are doing. In art and technology you can photograph the pupils' work as it is developing. Taped conversations with pupils as you move round the class are also a good source of evidence on the way you are relating to the pupils. The radio-microphones we have in the School of Education have been used most effectively by Andy and others. They allow you to have a tape-recorder set up in another room whilst you or the pupils wear the small microphone.

The traditional methods of interview and questionnaire can be used and the latter is most helpful in gathering factual material on a class basis. If you interview your pupils do obtain their opinions on some aspect of their learning or your teaching. You should listen to a tape of some pilot interviews to check that you are not asking leading questions which presuppose the answers you want the pupils to give! This is an elementary precaution but it is often surprising how your tone of voice can indicate how you want your pupils to answer. The transcript of the conversations with pupils at Wootton Bassett School (see pages 82/83), shows what can be revealed by this approach to data gathering. **Tessa English** has produced an evaluation tookbox which summarises the advantages and disadvantages of different methods of evaluation. This is published by the School of Education and costs £2.50.

Teacher researchers often refine their data gathering in their second and third cycles as a result of discovering the kind of evidence they need to collect to help them to continue their enquiry and to produce more convincing case reports. The way this has been done will be considered in Cycle Two and Cycle Three and the following examples can be read in the University Library.

**Marguerite Corbey** as a member of the Wiltshire Curriculum Support Team produced detailed case studies on the work of individual pupils over periods of up to a year. Marguerite's case report for her Advanced Diploma in Professional Development (1991) contains an exemplary account of the educational development of her pupil Carrie. Jo Fawcett's case report for the Advanced Diploma (1991) also contains detailed longitudinal evidence on the writing journeys undertaken by individual pupils over a year. Sue Jackson, the Head of Ivy Lane Primary School in Wiltshire has undertaken a different kind of action research study into her educational management of a school (1991). The data collected by Sue includes the policy statements on various aspects of the curriculum at different stages of development and data from working groups of teachers as they come to terms with the different external demands related to the curriculum and assessment. Sue has examined these influences in relation to her commitment to a number of educational values which she is committed to realising with her teachers and pupils at Ivy Lane.

**Daniela De Cet (1991)** working in the English Department at Wootton Bassett School has produced a case report for her Advanced Diploma in Professional Development. Extracts from this report are included in this booklet in Cycle Two to show how Daniela has integrated evidence on the development of her pupils' understanding of poetry within her claim to educational knowledge about her professional practice.

Some of the most important evaluations on your work are likely to be gathered in a Validation Group Exercise in which you tape the conversations between colleagues as they offer constructive criticism on your first case report. An example of such an exercise is provided in cycle three with extracts from **Martin Forrest's (1983)** MEd Dissertation, on the Teacher as Researcher.

Moira Laidlaw has gathered together a collection of case studies by PGCE students (1991-1994) and a list of these is included in the Appendices.

# **1.6 PRODUCING YOUR FIRST REPORT**

The following example of a first report is from Mary Johnson (1991) of Wootton Bassett School, for the Advanced Certificate in Professional Development.

# HOW CAN I IMPROVE THE PERFORMANCE OF LOWER ATTAINING PUPILS IN HUMANITIES THROUGH THE USE OF DIFFERENTIATED LEARNING MATERIALS?

## FIRST ACTION RESEARCH CYCLE January 1991

Mary Johnson The Bassett Action Research Group Wootton Bassett School Wootton Bassett Swindon Wiltshire

# (Note - The tables diagrams and appendices referred to in the text are kept at the school and the pupil's names have been changed)

## MY CONCERN

The 1988 Education Act points to the need for the National Curriculum to be broad, balanced, relevant and differentiated.

The Wiltshire Curriculum Policy 5-16 (Revised 1989) reminds us that:

" the school should recognise that each child is different in terms of ability, aptitude, interests, motivation and social and ethnic background."

The curriculum therefore has to satisfy two seemingly contrary requirements.

1. It has to reflect the broad aims of education which holds good for all children, whatever their capabilities.

2. It has to allow for differences in the abilities and the characteristics of children, even of the same age.

After five years of teaching Humanities at Wootton Bassett School, I am of the opinion that the curriculum appears to satisfy point 1 and is 'broad, balanced and relevant' However, I have become increasingly aware that the learning materials produced for the Lower School Humanities groups were not appropriate for all the pupils within those mixed ability groups. I felt that we were failing to meet the requirements outlined in Point 2. I was concerned that the learning materials that were produced were informative, but that the work seemed too demanding for lower attaining pupils. I felt that unsuitable materials actually inhibited learning, since their feelings of failure are constantly being reinforced by being presented with written material which they find difficult to understand. The lower attaining pupils often became frustrated by their lack of achievement and as a result became withdrawn or indisciplined.

Action research gave me the opportunity to focus on my concern: how to improve the learning of lower attaining pupils within Lower School Humanities by creating new work material that is designed to be appropriate for children of different abilities.

#### **STRATEGIES**

I believed that if ALL the children in the humanities groups were to have worthwhile learning experiences, then their learning materials would have to be adapted to cater for the differences in abilities that is found in our mixed ability classes. This redesigning of the materials to meet individual needs can be termed **DIFFERENTIATION**. Libby Faulkener (Wiltshire Special Needs Advisor) states that:

"Differentiation is about,

1. ENSURING all pupils are given TASKS which are COMMENSURATE with their LEVEL OF ATTAINMENT thus enabling

2. pupils of different backgrounds and abilities to demonstrate what they KNOW, UNDERSTAND and are ABLE TO DO thus

3. allowing pupils to ACHIEVE SUCCESS and FEEL that LEARNING EXPERIENCES have been WORTHWHILE."

I believed that if such aims were to be be realised, the current learning material would have to be radically changed in terms of layout and style. In the past, the learning materials used in much of the humanities course in years 7,8, and 9 was in the form of typed sheets. In some modules they were in booklet form, but in others the worksheets were 'drip-fed' on a lesson by lesson basis. In the main, there was no differentiation, although there were 'extension exercises' in some of the booklets.

It was not feasible to change all the materials used in lower school humanities, so I decided to focus on year 7. All the child-centred research is carried out in the year 7 class that I am currently teaching. This a mixed ability group of 24 pupils who are in their first year at Wootton Bassett School. I see the class for five forty minute periods a week. However the revised material is actually being used in all year 7 lessons (10 groups - 9 teachers).

The humanities course is modular in structure and in year 7 has the following format:

Module 1	Home, School and Beyond	12 weeks
Module 2	Settlement	6 weeks
Module 3	Festivals	6 weeks
Module 4	Romans	6 weeks
Module 5	Farming	6 weeks

I made very little change to the content of the modules, since they have been designed to provide a broad, balanced and relevant course covering all the humanities subjects (Geography, History, Religious Studies, Economics, and Social Science). Some alteration in content will be necessary when National Curriculum criteria for history and geography have been finally ratified. Such changes will involve whole faculty discussion and cannot be part of my research.

In order that the 'new' material was produced with the real needs of the pupils in mind it was essential not to rush into the 'production' stage before establishing how learning problems can be helped by careful design of materials. I therefore decided on a Problem/Solution approach which involved three stages:

Stage 1 - I spent some weeks attempting to discover what learning difficulties were being experienced by lower attaining pupils using the unchanged materials in module 1 (Home, School and Beyond).

Stage 2 - On the basis of what I had learnt from these children, I was able to establish the ways in which the current materials were unsuitable and adapt Module 2 accordingly.

Stage 3 - I evaluated the value of the action taken.

## **STAGE 1** DETERMINING THE PROBLEMS

For the purpose of this investigation I focused mainly on John, an outgoing boy who had real problems coping with the original worksheets and learning materials. I made a lesson by lesson entry in a Journal of the problems that John faced during September and October. The evidence was collected in many ways:-

- \* pupil reaction through informal discussion
- \* exercise marks
- \* test results
- \* examination of his work
- \* consultation of his 'reflection sheets'
- \* behaviour often a reflection of a child's

ability to cope with the work.

My observations highlighted many areas where the present learning materials were unsuitable for John.

\* He is unable to absorb information from large pieces of text, including written instructions. Sometimes he is so daunted by the length of written text that he doesn't even attempt to read it. This problem was particularly evident in the 'Mark Pullen' exercise where the aim was to extract evidence from a page of unbroken text and a stencilled resource page in order to determine his movements on the day of his death. (Appendix 1) John told me that he was finding it difficult to pick out the evidence because:

*"the background information is too long, so that by the time I've reached the end, I've forgotten what it said at the beginning."* 

Much of the learning materials contains largish pieces of unbroken text with a rather uninteresting format. For John whose reading ability is limited this was an immediate 'turn-off' and he simply lost concentration and interest in the task. He needed some way of organising his ideas.

\* Also, he made the comment that the printing on the resource sheet was "rubbish" and that it "put him off doing the work"

\*John finds some of terminology on the worksheet too difficult and often not within his own experiences. Sometimes he attempts to overcome this problem by asking a 'friend' to explain what he has to do. For example, he explained that he couldn't do a particular question in the 'Mark Pullen exercise because he didn't understand the word 'remote'.

\* He appears to have an inability to grasp certain concepts, especially where several ideas and skills are being presented in the same piece of work. He has particular problems when the concepts are either too complex or very abstract. For instance when asked to measure the classroom and then draw a scaled-down plan, he had problems understanding the idea of scale, orientating the plan and manipulating ruler and pencil. He became very concerned about a minor mistake which was constantly worrying him to the extent that he couldn't continue with rest of the plan. Eventually, he was becoming so discouraged that I suggested that he just drew a rough plan of the room (not to scale) which at least gave him the satisfaction of completing the exercise.

His lack of understanding is reflected in many ways:- For instance, he attempts to delay starting work by asking irrelevant questions, sharpening pencils or by simply daydreaming. He only spends a small percentage of the time in class actually concentrating on the task in hand. The rest of the time he looks around or talks. Also his work is always incomplete. Thirdly, His attainment and effort marks are extremely low. Out of the six assessed exercises, John received the lowest attainment mark in five of them. In the end of module test, he gained 27%. The class average was 60% and the marks ranged from 27% to 76%.

\* Writing poses very real problems for John. When asked on his Reflection sheets 'What parts did you find most difficult?' he nearly always answered: 'Writing' or to be more accurate 'Riting'. After a trip to Avebury to investigate 'Early Man', John's follow-up work was almost entirely in the form of drawings. However, he was loath to label the diagrams and field sketches because "that's writing. "When he was talking to me about the trip, he said:

#### "I found it very interesting. I like going on fieldtrips because I think that you learn more than sitting in a classroom."

When I asked him why he had not written anything about the things that he had seen, he replied:

#### "I like drawing pictures. Writing is hard."

Whilst out on the fieldtrips to Avebury and Danebury, he showed a real interest in what we were investigating, but on return was much keener to talk about it than write about it.

His handwriting and spelling are poor and I feel these two problems must inhibit his flow of ideas through writing and partly explain his unwillingness to write. The following extract is John's empathising story of 'An Attack on DaneburyHill Fort':

"Chife Mob diced to attack on Danebury Hill fort. the meseg is all aroun before he tells the hole villiage. The meting is now started all the men go get your slingshots men and spears plus swords. we are going to attact on Danebury now we need to have a plan of attack on danebury Hill fort. Now we now that we have got a plaen off it"

In this piece of writing, there are 10 spelling errors as well as many syntax mistakes. He genuinely finds imaginative writing tedious and difficult; hence the brevity of the story. When I suggested that he ought to ask for help with his spelling he said that he knew it was a problem, but he didn't want to bother me.

\* Another problem that soon became apparent was that his powers of concentration were particularly poor. My informal chats with John revealed that he found many of the worksheets "boring" and that he found a double lesson (80 minutes) a "long time to think." I felt that we should take heed of these comments on the length of the lesson and the quality of the learning materials if we are to make learning a more satisfying experience for the lower attaining pupil. Certainly the 'worksheet approach' linked to a rather didactic style of teaching has done little to stimulate John's interest in Humanities. \* John lacks confidence, which is not surprising since he rarely completes his work and therefore gains little satisfaction from it. He feels that he is constantly 'failing'. This is inevitable with worksheets that have equal challenges for children of all abilities and make no allowances for differences.

\* He tends to hide his inadequacies. For instance, on his Reflection Sheet for the classroom plan he wrote that he found the task easy and yet seconds before he actually told me that he found it hard.

This research hs shown that the current teacher-produced material has six main faults:

- 1. The language used is too difficult
- 2. The full ability range is not catered for
- 3. The visual quality and layout are poor
- 4. Concepts are often too abstract or too complex or too many are introduced.
- 5. Instructions and aims of task are often unclear
- 6. Lack of variety of approach

Skills

John and other lower attaining pupils were making little progress during module 1 and I feel that their frustrations and inadequacies were being reinforced every time they were presented with a piece of work that was pitched at an inappropriate level.

## **STAGE 2** DIFFERENTIATION OF MODULE 2

I felt that the materials should be designed in such a way that all pupils should be able to:

1. complete a task and have the option to extend their ideas

- 2. feel satisfied with the quality of their work
- 3. learn some skills and understand new concepts

Black was one of the first to publish a model which aims to incorporate the full range of abilities Black's Core-Extension Model (1980):

Core Assessment Mastery: Yes Extension Teach Key of next Concepts/ Core Mastery: No Remedial unit

I decided to adapt Module 2 (Settlement) so that every unit of work had

1. **A CORE** element - this should contain key concepts and basic skills essential for all pupils. The language level should be accessible to all pupils.

2. **EXTENSION WORK** - this should provide a challenge to more able pupils. The tasks should involve higher order skills and more research.

I decided not to include the Remedial element of Black's model because the lowest attaining children are already taught in a separate 'withdrawal' group where the curriculum and resources have been adapted to suit their needs.

My task, therefore was to produce learning materials that could be tackled by the lower attaining pupils and yet could stimulate the mainstream and extend the highest attainers. This presented quite a challenge!

For each problem defined in Stage One, I tried to establish how the material could be redesigned to help to solve it. Whilst searching for possible solutions, I consulted with the Special Needs Department and liaised with a colleague from the Humanities Faculty who also had an interest in differentiation. I also referred to published material on differentiation but written material on this subject does not appear to be very prolific.

I shall outline the proposed solutions in the same order as the problems were described.

### **PROBLEM 1: Problems reading long pieces of text**

#### SOLUTION: Text simplification

The new worksheets do not contain long unbroken text. Many of the ideas from DARTS (Directed Activities Related to Texts) are have been applied. The intention is to focus the pupil's attention on the principal ideas in the passage, for example:

\* Extracting summary points (Appendix 2 p16)

- \* Underlining key sentences or words (Appendix 2 p5)
- \* Sequencing re-ordering a scrambled text. (Appendix 2 p20)
- \* Use of bold print (Appendix 2 p6)
- \* Close text blanks to filled in perhaps from word-bank (Appendix 2 p17)
- \* Labelling paragraphs (Appendix 2 p8)

\* Illustrations - help to organise information and break up lengthy texts. (Appendix 2 p6)

## **PROBLEM 2: Poor visual quality of the worksheets**

#### SOLUTION: Improving the legibility of the materials

\* The new stencil machine produces more legible sheets than previously.

\* A larger type size has been used than in the worksheets previously used.

\* Much of the text is double-spaced.

\* There is a greater use of 'white space' in order to give an uncluttered look to the booklet.

# **PROBLEM 3: Language problems**

#### SOLUTION:-

\* The terminology was carefully chosen. Over-use of multi-syllabic words or complex sentence patterns were avoided. I have tried to strike a balance between using a language that relates to the child's experiences and but at the same time expands the language. Any words that I considered would be beyond the child's own experiences but were essential to the context of the work, were put in a word bank. These word banks were in boxes at the end of each unit and contained any subject-related terminology and definitions. All the words contained in the word bank were underlined and written in bold type within the text. The word bank used in the unit of work on 'types of settlement' is written on the next page:

#### WORD BANK

built-up area - land in a settlement that has buildings on it.

population - the number of people in an area or settlement.

rank order - sorted into order with the largest first and smallest last.

<u>classify</u> - sort into particular groups.

# **PROBLEM 4: Conceptual Problems**

#### SOLUTION:

\* I attempted to relate new concepts to the childrens' everday experiences and pitch it at an appropriate intellectual level, bearing in mind that this material was to be delivered to 11/12 year old students. This entailed avoiding unnecessary complexity. For example, whilst studying 'Building Types,' the classes were taken out several times into Wootton Bassett to observe and sketch buildings of different ages. In this way, the idea of recognising the features associated with buildings of different ages was tackled at the children's own experience level - they see some of these buildings everyday. I hoped that a 'look and see' approach would be an improvement over studying diagrams in a classroom.

\* Only one concept was introduced at a time.

\* Group-work was encouraged so that the learning of new ideas was a shared experience and that any understanding problems could be discussed with colleagues. Hopefully, this also would enable the teacher to assist with groups or individuals with particular problems. An example of where groupwork was an integral

part of the activity was in the 'Saxon Settlement Game', where the students were learning about the siting of settlements by making group decisions. (Appendix 2 pp 7-9)

\* I made sure that the tasks were always clearly defined, so as to avoid understanding problems. Every unit of work has the tasks numbered in the same way: Task A, Task B, Task C etc. Also symbols have been used to illustrate whether the task involves:-

\*\* DIAGRAMS TO BE ADDED

reading

writing

working on your own

pair work

group work

Any questions or activities for them to do are enclosed in a box, so that their attention is drawn to it. For example:

#### LOOK AT THE PICTURES AGAIN

#### WHICH ARE PERMANENT SETTLEMENTS?

#### WHICH ARE TEMPORARY ONES?

# WHAT MATERIALS DO YOU THINK WOULD BE

# USED TO BUILD EACH OF THE SETTLEMENTS?

#### **PROBLEM 5:** Writing and spelling problems

#### SOLUTIONS:

\* Much of the writing is in the form of reports which are only done after a series of decision-making activities have been completed. Consequently, the writer should already have a clear idea of what is to be written, using the results from the previous tasks as guidelines. The 'Settlement Site Exercise' shows how the final report on why they chose a particular site is done after marks are allocated to the different sites according to the suitability of the various siting factors. (Appendix 2 pp 7-9)

\* Any unfamiliar words are written in bold and underlined, and these words are then placed in a word bank at the end of each unit.

\* Close Texts have been used in the new material in order to precis the information from a unit of work and as an understanding check. The intention is that they should also help those pupils who are physically slow at writing, since they will be able to write the missing words on the sheet, rather than copy out the whole piece of text. (Appendix 2 p17)

\* 'Hotwriting'. The quick jotting down of ideas without too much concern for spelling or sentence construction is encouraged at times in an attempt to overcome the observed problem that some of the pupils have of being unable to write for the fear (or certainty) that they will make mistakes. There was not much opportunity for hotwriting in this module but I intend to use it more widely in the 'Romans' module where we will be demanding some empathetical writing.

## **PROBLEM 6: Low concentration / interest level**

## SOLUTIONS:

\* Phil Coates suggests that 'the learner will find material that he considers interesting to be easier to read than that he finds dull or irrelevant.' Consequently, careful thought was put into the organisation of the material. The aim was that it should be interesting to the student and hold their interest. Subject-related illustrations have been used on most pages and the new learning materials have been designed to be attractive to look at and hopefully stimulate the student so that he/she is eager to learn.

\* It was felt that in order to improve concentration and interest levels, not only must the format of the learning material be adapted, but there should also be a change in the methods of learning. In the 'Settlement' module, active learning techniques are encouraged. An example of such an approach is shown in Appendix 2 pp 13-14 ('Types of Settlements'). The aim of the exercise was to classify a selection of local settlements into cities, towns, villages and hamlets by playing a card sorting game and group discussion. The teacher's role was intended to be supportive rather than didactic.

\* It is hoped that some of the other changes already mentioned will help to stimulate interest and maintain concentration:- having meaningful tasks, using familiar language, keeping concepts simple etc.

## **PROBLEM 7: Lack of confidence**

#### SOLUTION:

\* The intention is that the 'core' tasks can be tackled by all the students, irrespective of their attainment level. Thus the lower attaining pupils should gain a sence of achievement from being able to tackle and complete sections of work which hitherto was beyond their capabilities.

# STAGE 3 EVALUATION

The differentiated module on 'Settlement' was produced during October and November, and delivered to all ten Year 7 groups in the Humanities Faculty during December and January.

Since my concern in this first cycle is how to improve the learning of lower attaining pupils, I focused my evaluation primarily on the less able students in my class and mainly on Mark who had such severe learning problems during the first module. However, if the material was to be truly differentiated, I also had to establish its suitability for pupils at all attainment levels.

I evaluated the newly designed material on a lesson by lesson basis, using both formative and summative methods:-

\* pupil reaction through informal discussion (written in a journal)

- \* consultation of 'Reflection Sheets'
- \* examination of work
- \* observation of behaviour and attitude in class
- \* exercise marks
- \* test results
- \* consultation with other teachers delivering the same module

# \* PUPIL REACTION AND TEACHER OBSERVATION

I had regular informal chats withJohn where I encouraged him to talk about the new material. I made it very clear that I wanted his honest opinions (good or bad) about the booklet and I wrote his replies in my journal. I also observed him at work. I also encouraged the rest of the class to tell me what they thought about the work.

He said that he liked the opportunity to be creative and 'do his own thing' at times, for example in the settlement siting exercise where the aim was to design your own base map for the settlement game. His comment was:

'It was good because you can make your own things up.'

He particularly liked the groupwork approach to many of the tasks. He said he liked **groupwork** because:

'You can help each other and then you're not held up.'

He was obviously much happier to turn to colleagues for assistance than constantly asking me for help. He felt that he was able to work at the same pace as the others in his group and not constantly feel a 'failure' in the way he often did when working on his own. I observed that John made important contributions during groupwork activities which seemed to boost his confidence. However, probably for John, the greatest advantage of groupwork is collecting ideas from others to help him complete a given task.

He made several comments about the **learning methods.** He obviously felt that he was able to learn more effectively when using active learning methods. He said that the card sort and the settlement siting game were:

'exciting and interesting and much better than doing a load of exercises on a worksheet.'

Sam made the point that the card sort was fun and added:

'I learnt more because I enjoyed it'.

Paul thought that:

It is much better to find out for yourself because it sticks in the mind better. Anyway the teacher might not be right!'

I certainly felt that the enquiring approach to much of the work created a busy working atmosphere in the classroom. There were lots of positive comments such as 'this is is ace' as the work progressed.

When I asked John what he thought about the **layout** of the booklet, he said:

'The symbols help a lot because I know straight away whether to work on my own, in pairs or in groups without having to read it.... The tasks are clear and it's easy to know what to do'.

The use of symbols has thus proved very useful for children like John who have problems with reading lengthy written instructions.

Many of the comments from John and others in the class referred to other improvements in the **'readability'** of the material. John thought that:

'It was all easier to read because the writing was broken up into bits.'

Joyce also made an interesting point about the way in which much of the new material is intended to allow for supported self study. She said:

'Symbols are great because you know what to do without too much teacher help. It's much better to get down to work straight away. When the teacher talks for a long time it's boring!'

Certainly it appeared that John spent less time daydreaming and uncertain what to do and more class time actively involved. However his concentration level is still relatively low compared with many others in the class.

# \* EXAMINATION OF WORK & CONSULTATION OF REFLECTION SHEETS

An examination of John's work shows that the first task 'What are Settlements?' (Appendix 2 pp 3-5), was not tackled well. After the first piece of writing, he had left two blank pages which is John's way of showing that he knows that he had not completed the exercise. It appears that at this stage he had not fully understood the new symbols and the procedures for tackling the work. It is obvious therefore, that I should have spent more time explaining how to use the booklets.

But these teething problems were soon overcome and everyone, including John soon got into the swing of organising themselves into the relevant size group as defined in the task instruction and working through the tasks with the minimum of teacher assistance.

The second task 'Choosing the most suitable site for a settlement' was a great achievement for John because he actually completed a piece of work and one can tell by reading the report that he has understood the

concept that the site chosen for a settlement is influenced by certain factors e.g. proximity to water. (Appendix 2 pp 8-9). The last time that he attempted to write a report was in the Mark Pullen ,use of evidence exercise where he only managed to write the heading! He wrote on his reflection sheet:

'I enjoyed the Saxon game. There was a lot of thinking and not too much difficult writing. Working in groups helped. Using the grid to find out the best site was good because you had to use numbers rather than writing.'

It would be presumptuous to claim that John's ability to understand the concepts in this exercise was simply due to the redesigning of the learning materials. However, when I asked him why he was able to write a concluding report in this settlement exercise and not in the Mark Pullen exercise, he said:

'It was because there wasn't too much reading which was confusing before, the tasks were clear and it was more like a game - it was fun.'

Perhaps therefore, use of D.A.R.T.S techniques to break up lengthy texts, a clear organisation of tasks and use of child-centred learning methods all help to overcome the conceptual problems experienced by some pupils.

The next exercise (classification of settlements) (Appendix 2 pp 13-17), showed further improvements in John's work. He completed the task; it was accurately done; presentation was much better; there were only four spelling errors. He told me that having 'hard' words explained in the word bank helped him a lot with his spelling problem. He used words like 'classification' and 'amenity' in the correct context and he spelt them correctly. He commented that the card sort (used as a method of classifying the settlements) was:

#### 'interesting because it was different and I hadn't done that before. It was like a game, but you learnt at the same time.'

The final exercise in the 'classification of settlements' section was an 'understanding check', a close text exercise which precised all the concepts introduced in this module. (Appendix 2 p21). John was able to complete the task since he simply filled in the blanks with words chosen from the word bank. He gained 9/17 marks which was a reasonable achievement and at least showed a certain level of understanding for a boy who in the first module struggled to understand even the basic concepts. The use of the close technique proved to be a successful way of differentiating the understanding check task. I simply suggested that those in the class who knew that they were slow writers could write on the sheet and stick that in their books, and that the rest could write it all out. In this way everyone was able to complete the task and the slow writers could concentrate on the task in hand rather than laboriously copying out the whole text.

The penultimate piece of work in his book on 'building types' was also satisfactorily completed in that he was able to match pictures of buildings with their building period. (Appendix 2 pp 18-19). However, this exercise also involved field-sketching in Wootton Bassett and John found this skill quite difficult to achieve and the finished sketches were inaccurate, incomplete and ultimately lost. I believe that John and some others in the class produced unsatisfactory work on that particular task for two reasons. Firstly, field-sketching is a skill that needs teaching and I think that to accurately sketch a house and also annotate those features which are indicative of a certain building period demands some 'practice' sketching. Wootton Bassett High Street isn't a very satisfactory location for teaching such skills to 25 pupils!

The last task was an 'on your own' excercise and was poorly tackled. It was a series of data response questions which was intended as extension work for the higher attaining pupils. John realised it was beyond his capabilities after question four and simply stopped mid- question.

#### \* TEST & EXERCISE MARKS

Marks received for the various tasks are also a reflection of achievement and effort. John's exercise marks improved in this module, both for attainment and for effort. In the previous module, his marks were 3C, 4B, 4B, 4C. (See appendix 3 for explanation of marking scheme). His marks for the tasks in the differentiated work have been 3B, 2A, 3B.

His end of module test mark also improved from 27% for 'Home, School and Beyond' to 54% for 'Settlement'. The 'Settlements test' had been designed so that all pupils should be able to attempt all questions and two of the questions were marked according to 4 levels of response. By differentiating the text in this way I felt that we were able to test their knowledge and understanding, rather than test what they didn't know. (Appendix 2 pp 23-26)

In the S.E.C. Working Paper 1 Differentiated Assessment in G.C.S.E pages 4 - 5, it is pointed out that:

'For the lowest grade candidates, the answering of structured questions should

a) be a worthwhile experience

b) allow the whole question to be answered

c) engage such candidates for the duration of the examination

d) allow a cohesive set of ideas and other skills to be demonstrated.'

I believe that the redesigned test goes a long way towards satisfying these requirements and certainly for John, it certainly was a worthwhile experience doing the test **and** receiving the mark. In order to establish whether or not his test mark represented an improvement in real terms, I worked out the average mark and John's position in class:

Mark's mark		Class mean	No. sitting Class		
	%	mark %	the test	position	
Module 1	27	59.8	19	19	
Module 2	54	66.1	21	16	
(differentiated)					

This shows that even allowing for an increase in the average mark in module 2, John's mark did increase in real terms by a considerable amount and his sense of achievement was even greater when he realised that for the first time since starting at Wootton Bassett School, he hadn't received the lowest marks in a test.

# \* EVALUATION OF THE CLASS REFLECTION SHEETS

Because of the magnitude of the task, the evaluation of the new learning materials has almost totally focused on John's work, comments and reflection sheet views. However, I tried at all times to observe the appropriateness of the work for all my students at all levels of ability. The reflection sheets gave me a good insight into their views on the material that had been produced. By using 'closed' questions, I was able to classify their opinions numerically and tabulate the results. This allowed me to compare what the they thought about the tasks in the two modules in terms of effort, interest, presentation and difficulty. The results are shown in appendix 4.

## 1. Difficulty of task (Table 1):

It is quite clear that an unsatisfactorily high percentage (38% in task 1 and 45% in task 2) thought that the tasks in the undifferentiated module 1 were difficult. However, in the differentiated Settlements module, only 16% in task 1 and 5% in task 2, thought they were difficult. This would suggest that the activities in the new material can be successfully completed by the majority of the class. It is very important that all pupils are allowed to achieve success and this can't be realised if the tasks are too difficult.

#### 2. Interest in task (Table 2)

The results in this section were very pleasing, since they showed that a very large majority of the class thought that the activities in Module 2 were either interesting or very interesting. In fact, everyone in 'the Settlement Game' gave a positive response. They were very definitely negative in their attitudes to two of the tasks in Module 1 ('the plan of the classroom' and the 'Avebury follow-up'). However, interestingly, 95% thought that 'the Mark Pullen' exercise was either interesting or very interesting and yet many had thought that it was 'difficult'. So, the students are making it quite clear that the easy tasks are not necessarily the most interesting. The intention is to learn from this discovery and use a similar 'use of evidence' activity in the next differentiated module on 'Romans', but attempt to overcome the 'difficulty' problem through the use of D.A.R.T.S. techniques when using long pieces of text.

#### 3. Effort put into task (Table 3)

The results show that the students felt that they had put slightly more effort into Module 2 than Module 1, although again the Mark Pullen exercise (Module 1) evoked a strong positive response.

#### 4. Presentation of work (Table 4)

There are no significant differences between their opinions on presentation in Modules 1 and 2., although fewer thought that the presentation of their work was poor in the Module 2 tasks.

# **CONCLUSIONS**

The redesigning and differentiating of the learning materials in the 'settlement' module appears to have evoked a fairly positive response from the year 7 students who have used it and from the other teachers who have delivered it for six weeks. Has it improved the learning of lower attaining pupils? I believe that the evidence shows that learning during the module was worthwhile and satisfying. However, there are areas where improvements can be made:

1. More time should be spent introducing the booklets and explaining the procedure for approaching the tasks e.g. learning the symbols.

2. Although study is intended to be self-supported with the teacher acting in a subsidiary supportive role, there are some occasions when more didactic class teaching would be advantageous in order to explain a particular skill which can then be applied to a task within the unit of work.

3. My main concern with the new material is that there is evidence that it is insufficiently challenging for the higher attaining students. In response to the questions 'Which parts of the work did you find easy/difficult?' and Which parts of the work did you find most interesting/boring?, almost all of the negative comments came from the more able pupils. Daniel made the comment:

'Most of the work was easy. It wasn't very interesting because it was easy. I knew it already.'

Philip held a similar view:

'I found the card sort was very, very easy. The only thing I learnt was the sphere of influence.'

He said that he liked the card sort, but after that the exercises were not stretching enough. I observed that this group of students rarely ticked the 'very interesting' box and on two occasions opted for 'boring'. I noticed that many of the more able pupils completed the extension exercises with consumate ease. They became rather mechanical in their approach to their work and gave the impression that they were not intellectually stimulated by the material. I came to the conclusion that the learning materials need to contain more challenging extension work where the tasks demand skills of a higher order and also encourage the individual to carry out extra individual research.

This will be my challenge for the second action research cycle - to ensure that the learning potential of higher attaining students is fully realised in mixed ability groupings by adapting the differentiated material in Module 4: 'Romans'.

## APPENDICES

(Kept at Wootton Bassett School)

- Appendix 1 The Mark Pullen exercise
- Appendix 2 The Settlement Module
- Appendix 3 Marking Scheme : Lower School Humanities
- Appendix 4 Reflection Sheets: Results
- Appendix 5 A Reflection Sheet