Fitting the Pieces Together
Living with the National Curriculum

Written at the time soon after the National Curriculum had been introduced, this paper argues that the principles and practices underpinning effective learning in the classroom need not be aborted.

Peter Lacey
October 1991
FITTING THE PIECES TOGETHER

Peter Lacey
1991

Dedicated to all those with vision but without the
time to bring it into focus.
"What I would like to do is use the time that is coming now to talk about some of the things that have come to mind. We're in such a hurry most of the time we never get much chance to talk. The result is a kind of endless day-to-day shallowness, a monotony that leaves a person wondering years later where all the time went and sorry that it's all gone. Now that we do have some time, and know it, I would like to use the time to talk in depth about things that seem important."

(Zen and the Art of Motorcycle Maintenance. Firsig R. M. 1974)
INTRODUCTION

It is approaching two years since I was appointed as General Adviser by Humberside LEA with an assigned responsibility for the schools in Cleethorpes.

Over that time I have observed and monitored. It appears that schools have been receiving a constant stream of documentation from DES, NCC, SEAC and the LEA and that my advice has, for the most part, related to the immediate solution of immediate problems.

If only there was some remission from this "bombardment" so, together, we could take stock, make sense of it all and plan for the future in a considered way. I cannot ever see such an opportunity presenting itself so I opted for a "second best solution". During August, when all appeared quiet (is it the month of rearmament?) I looked back at all my scribbled notes - all the things you have been saying to me - all the things I have taken from you, and tried to make
sense of it all.

Rightly or wrongly I still regard myself as part of the profession and, as an adviser, I feel obliged to put back into the profession at least as much as I am taking out. Whether I have achieved that balance is for you to decide but the following writing is an honest attempt.

Peter Lacey

October 1991.
ESSAY

I can remember a time that my daughter had a craze on doing jigsaws. We would have timed races to see who could put the pieces together most quickly. To make the competition "fair" I would be given a handicap. I can remember not being allowed to see the whole picture on the cover and also being given the pieces one at a time. That was hard! Trying to put small parts of an unknown whole into the right place first time. How much easier it was when I had all the pieces and I could shuffle them around until some overall sense emerged; and easier still if I could see the complete cover picture.

As I reflect on and write about the developments in my assigned schools that seventeen year old memory re-emerges as a useful metaphor describing the state of affairs. National Curriculum programmes of study, attainment targets and non-statutory guidance, SEAC assessment requirements, LEA policies and guidance on planning, assessment and records of achievement, advice on learning styles and
classroom management and buzz phrases like "child-centred" and "independent learning" are all offered to schools as a stream of separate jigsaw pieces.

In fact, on reflection, that memory is too weak a metaphor. I should have been given an additional handicap of say, trying to eat my dinner at the same time, for you in schools are attempting this whole exercise whilst, at the same time, doing the job you were trained to do and elected to carry out - teaching.

In my assigned role I consider how best to advise. The metaphor leads me to the view that I could try to show you the completed cover picture and allow you to shuffle all the pieces accordingly. It could be that we discover one or two pieces belong to a different set but most pieces, I am sure, have their place in the overall picture.

Before I start let me tell you that no-one "up there" or "locked away in there" has given me the whole picture. I have a privileged position in that I have observed carefully groups of teachers and, in some cases groups of schools, who have managed to put some of these pieces together. I have seen some parts of the picture assembled and these different
parts have given me some strong clues to the picture's composition.

My opening is to tell you what the picture is about and then to describe in more detail some of the features. As in a jigsaw some pieces fit in a set of others and I will attempt to indicate these relationships.

The whole picture is about promoting learning.

"Promoting children's learning is a primary aim of schools."

(TGAT 1987)

There is nothing radical in this overview but sometimes, in our consideration of one piece, we lose sight of the whole picture. I hope that all readers will agree with the reasonableness of this general description.

Before moving on it is necessary to make more explicit what is meant by learning so that its primacy is preserved throughout all our subsequent considerations. I list below a set of statements which have come from practising teachers - not from people who have quit the classroom in order to tell others!
(i) Learning is to do with making sense of experience. The converse throws this statement into sharper relief: No experience (if this is at all possible); no learning.

(ii) Learning is to do with creating, extending and recreating my mental map of the world in the light of my on-going experiences.

(iii) We all create different mental maps.

(iv) I learn what I choose to learn. This optional nature of learning needs to be recognised by teachers and I will return to it later because there are some pieces which fit in here. But just think about some of the things you do not know or cannot do and consider why. We sometimes become secure with our current mental map and redrafting it in the light of some new experience not only requires an effort which we may not think worthwhile but it may upset the confidence we have in our understanding of other things. When the Pythagoreans at Alexander University discovered a whole new set of numbers they kept it quiet. One wonders why the translation of the "Dead Sea Scrolls" is taking so long. At a personal level I must admit to discounting, sometimes, other people's
views because of the effort required in fitting them into my mental map – and the horrifying possibility that I might have to redraft (again). I think I am choosy in my learning and it relates to my stamina.

(v) Learning is idiosyncratic.
Not only do we all create different mental maps but the way we extend and redraft those maps is different. When a pupil, struggling to make sense of some experience, says "I see", then they have made a connection onto their mental map, but another pupil who says "I see" may have made a different connection – or they may even see something different.

(vi) I can learn only for myself.
Perhaps, put another way, "I cannot learn for anyone else", the significance of this self evident statement is reinforced. Whatever a teacher can do she cannot learn for her pupils.

These six truths, then, place the picture of learning in the real world. To ignore these truths when trying to fit in the piece about planning or teaching or assessing, will lead to confusion and frustration. Comments such as "I'm so busy assessing I have no time to teach" are indicative of such
THE SIX TRUTHS OF LEARNING

1. LEARNING IS TO DO WITH MAKING SENSE OF EXPERIENCE

2. LEARNING IS TO DO WITH CREATING, EXTENDING AND RECREATING MY MENTAL MAP OF THE WORLD IN THE LIGHT OF MY ON GOING EXPERIENCES

3. WE ALL CREATE DIFFERENT MENTAL MAPS

4. I LEARN WHAT I CHOOSE TO LEARN

5. LEARNING IS IDIOSYNCRATIC

6. I CAN LEARN ONLY FOR MYSELF
frustrations and are usually rooted in a failure to accept the six truths.

Already it is possible to see how the notion of "independent learning" may fit in. By considering the six truths, then, the reader can draw her own inferences but I would suggest by implication, learning is necessarily independent in that for each individual unique understandings are created. Other pieces which describe learning may be looked at in a similar way; individualized learning, flexible learning to name but two. Their self evident nature can be appreciated by asking whether or not inflexible learning or non-individualized learning have any meaning. The six truths would suggest not. These "adjective learning" pieces then are a way of ensuring that the six truths are integrated into the picture of learning.

Now some of you, if you have read this far, will be throwing up your hands in horror. At the centre of the school, you will be saying, is the child. Others will be saying that I should be writing about teaching because the teacher is the school's most valuable resource. I agree with both these views and I would contend that already I have taken them into account. I have been looking at learning because
schools exist to ensure the continued growth of the learner. If you search through your jigsaw pieces you will probably find some which refer to child centredness or child-centred approaches, but carry on searching and you will find some pieces which look quite different - they are about staff development, probationers induction etc. etc. Believe it or not these pieces fit together. Teachers and learners are not exclusive sets. The set of teachers is included in the set of learners. (And so is the set of advisers). A "child-centred" school is fine but a "learner-centred" school will have secured better growth.

"The notion of child or student centred learning excludes the teacher from the process. It may be helpful to consider the possibility of learning centredness and even the learner centred school".

(PL Notes & Observations)

Let us agree, then, that in considering learning I have the child and the teacher at the top of the agenda.

I am now going to move the focus from learning to the learner and ask you, from your experience as both teacher and learner, what it is that the learner does in order to learn? Or put it another way, you look at a class of pupils with their teacher. In the light of your experience you are
able to say whether or not learning is taking place. I have asked over three thousand teachers, up and down this country, and abroad, to tell me what it is pupils are doing when they are learning. The list which different groups of teachers have given me (and I contend that they are the people who really do know) is remarkable in its consistency. Out of the composite list of about 150 words there is a core of about forty words which is common to all the groups with whom I have worked:

reflecting, experimenting, hypothesising, testing,
explaining, questioning, planning, collaborating,
discovering, inventing, assessing, listening, relating,
experiencing, puzzling, organising, practising

are a sample from this "top forty". Why is it that these thousands of teachers in separate groups produce the same list? Did they all read the same book for their training? I think not. These thousands of teachers have amongst them tens of thousands of years of classroom experience. This list is based on tens of thousands of years of classroom observation. Because of its pedigree I say that this list is non-negotiable.
What is even more fascinating is that this list has evolved from teachers in all phases of education, from teachers who work in all, and from those who work in only one area of the curriculum, it has come from teachers who work with other teachers and it has come from teachers reflecting on their own learning.

Where does this fit into the jigsaw? A French philosopher, and teacher wrote:

"To teach is to cause to learn".

(Jacotot 1822)

"Bites donc" as they would say in France, how well said; I can now put some more pieces together. The teacher’s main task is to plan and work in such a way that her pupils have opportunities to reflect, experiment, hypothesise, test, explain ..... etc. The simplicity of the statement belies the complexity of the task. Teachers need to consider each word on the list and to assess how they can make it happen. It may be helpful to ascertain firstly those things we do as teachers which actually stop the actions taking place – and then to see how we can prevent this inhibiting strategy. Let me give you an example: take the first word on the list: "Reflecting". The number of times I have noticed pupils
staring into space or even with their eyes closed — apparently doing nothing. As a teacher I have interrupted this apparent inactivity and admonished them, telling them to get on with their writing, or their calculating. "Come on, get on with your work", I say, and yet, in writing this essay I am aware that over nine tenths of my time is spent in such apparent inactivity; performing mental gymnastics and struggling for words in order to make sense of experience. How crucial is that time to reflect, that time to extend and modify my mental map. Moreover, how angry I become when someone interrupts my train of thought. I become uncomfortable when I think how many trains of thought I have uncoupled in the classroom. And how many other "ings" have I closed down? I leave the rest of this sobering exercise to you the reader.

I have no doubt that the list of strategies which enable these "ings" to take place, which you individually or, better still, as a school, devise will serve as a working description of what constitutes good practice in the craft of teaching.

Again I am beginning to sense a disquiet amongst some of you. This is all about process: what about outcome? Well
this brings us to consider all those pieces related to planning, assessing and the National Curriculum. It is against outcomes that our effectiveness is gauged and I would say quite rightly so. However, I have already been quite clear about this in my description of the whole picture: The outcome must be learning and the development of the learner. Though fundamentally important, the picture is actually more detailed: The National Curriculum, and indeed a general consensus in society before this, gives explicit indications of what should be learnt.

On first sighting there appears to be a tension between this expectation and the six truths of learning. I think the reality of this tension was well expressed by a teacher who said

"I can plan for learning, but I cannot plan for precisely what is learnt".

(PL Notes & Observations)

After much careful thought and observation I now find myself in total agreement with this teacher. The apparent precision of all those statements in the attainment targets cannot be planned for in the same precise way. Some of you may have found a jigsaw piece related to "precision teaching". May I suggest you put it into a different box for the time being.
These attainment target statements are desired learning outcomes and we know what the six truths say about learning. How can pupils be at one time free (independent) to learn and also be expected to arrive at predetermined end points? It would appear that the "independent learning" pieces and the "attainment target" pieces belong to different jigsaws; let me assure you they do not. I have noticed schools trying to fit all these attainment target pieces into their long and medium term planning pieces and it does not seem to work. If some of you detect an implied criticism of certain "commercially" prepared packages related to this sort of planning then you are right.

However my intention is to describe the whole picture, and it does not help much if I tell you only what it is not about! I intend to describe that part of the picture which is about planning - and its relationship with the National Curriculum. It is helpful to put those pieces together which relate to long run issues; key stage issues or issues related to macro teaching and separately construct those related to short run or micro teaching. They do join together - but as two sections.

Long run planning is best informed by the programmes of
study, over a key stage or perhaps by taking a broad view of all the attainment targets over a key stage. Topics may be planned to accommodate all these requirements — over the long run. A school may wish to plan topics which, over the long run, ensure the breadth and balance necessary to meet these requirements as well as provide "a healthy and varied diet". In a primary school the different topics may have different emphases say, a half term with an historical slant, another half term with a technology slant etc. In a secondary school it is likely that balance, over the long run, is achieved through collaboratively planning subjects in parallel rather than in series. I am not here setting out separate orthodoxies for primary and secondary schools — there is more than one way to crack an egg and the two phases would do well to share with each other how they do solve the problem of achieving breadth and balance whilst, at the same time, designing a coherent curriculum for their pupils. Primary schools will want to ensure some continuity of learning in all curriculum areas and if the topics focus on, say, geography they will want to ensure a continuing development in, say, technology. Not everything will emerge from every topic. I have seen schools attempt this with elaborate "web planning". Reading around the perimeter of some of these webs I have sometimes not been able to guess
the topic theme but the teacher has spent much time making clever connections from the inside out - all in the name of coherence. I return to the six truths and infer that coherence is what the learner constructs, not the teacher. I am sorry because I know I have destroyed some teachers' security now - but I am not underestimating their ability nor their motive.

I have seen an interesting example of medium run planning recently: In a primary school the topic (historical slant) was to be ships and seafarers. At the start of the term the pupils visited the Fishing Heritage Museum in Grimsby and, on their return to school, they planned those areas they wanted to research further. Their planning even included what resources they felt they may require. The teacher showed them the model of "web planning" and, using this idea, the pupils were able to plan a whole set of different lines of enquiry. The teacher envisages half a term's worth of pupil directed effort. I am beginning to understand that the six truths of learning imply pupil participation in planning. Suffice it to say that that particular teacher does not feel under-employed but is starting to understand what is meant by managing learning - she has put another piece in the jigsaw.
How is the same end achieved in secondary schools? With subjects running in parallel the same possibilities exist and I know of one school who is seriously exploring how they can exploit them.

Long run planning, then, is necessarily a whole school enterprise directed at ensuring learning opportunities across the whole curriculum. It has much to do with embedding entitlement into the school's way of working. The whole business is sharpened up for practice by teachers preparing for the next term: a medium run planning exercise.

Short run planning is a different matter. It is what teachers agonise over at home most weekends and evenings. It is about providing those sorts of experiences which will ensure a progression of learning for each and every one of the thirty or so pupils in the class. At this level the teacher is informed by where her pupils are now and where they should go next.

In considering the first question: "Where are they now?" then, for the first time in English educational history we have a universal device for plotting position...(see
The attainment target level statements give a reference framework against which we can locate and chart each and every pupil's position. This the target statements can do but they cannot tell teachers where their pupils should go next. There is a temptation to regard the levels of attainment as a precise sequence for planning learning but they are not.

"It is not necessary to presume that the progression defined (sic by the attainment target level statements) indicates some inescapable order in the way children learn, or some sequence of difficulty in the material to be learnt."

(TGAT para 93 1987)

What comes next may be aided by the target statements but there are other factors. In assessing where the pupil is on any particular programme of study the pupil herself will have an important contribution to make.

"Assessment is not something teachers do to pupils."

(PL Notes & Observations)

There will need to be some sort of dialogue between teacher and pupil. I have seen this process at work, where the teacher and pupil or, in many instances, group of pupils, talk about what has been found out or what they can now do.
Pupils are helped to formulate subsequent lines of enquiry and the teacher may suggest suitable resources or activities. She is constantly extending their experience. In some cases the teacher judges that extra practice is required to consolidate a particular emerging skill and she offers new contexts in which such a skill may be deployed. In other cases the teacher judges it appropriate to teach a new skill or to introduce some new facts. There are times when a total impasse is encountered and the teacher offers a new and different starting point. Whatever does come next it emerges from this dialogue. If you have a piece labelled "formative processes related to recording achievement" (it must be one of those odd shaped pieces!) then I think you will find it fits in here.

"Assessment translates teaching and learning into teaching for learning."

(PL Notes & Observations)

This dialogue between teacher and pupil can be viewed from another angle. The pupil is being guided in her own creation and recreation of her own mental map.

"Guidance, supported by the construction of records of achievement, is that strategy which translates entitlement into access and subsequent progress."

(PL Notes & Observations)

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As I said before, I have seen this process working. The teacher approaches a group of pupils and listens to what they are saying. She then discusses with them and perhaps leaves them with the appropriate next question, thereby ensuring a progression of learning. The use of the word "appropriate" is chosen with thought - it is an honest recognition of the expertise that resides within the profession.

There are some people "out there" who think that this critical part of micro teaching can be circumvented. They are among the producers of the so-called "commercial schemes". They offer to teachers a presequenced set of activities and exercises and assume that the next step for any pupil will always be the same. Different abilities will simply work at different rates. Taken this way such devices are positively harmful. Not only do they disregard the six truths of learning but they also fail to recognise the crucial role of the teacher; they actually devalue the teacher. I heard once a teacher extol the virtue of his published scheme. "Even when the teacher is absent the pupils continue through the scheme", he said. Everything had been presequenced and the pupils ploughed through. At first
glance all looked well - the pupils were occupied, however,
on further examination that was all that was happening. The climate was occupational not purposeful. The very mechanism for ensuring progression had been taken out of the system. The spiral curriculum had been replaced with the circular.

Another ascribed virtue of some of these presequenced packages is that the pupils become independent learners. They do not. They may not depend on the teacher but they become completely dependent on the detailed instructions laid out on the sheets or pages.

"For this exercise you will need ..... First copy out the table below ..... Complete the exercise filling in the blanks ..... Using the method described above .... and so on"

(PL Notes & Observations)

There is nothing new in this distrust of presequenced activities.
"Our so-called perfect textbooks rank among the greatest evils to be found in our present system of instruction. The very completeness and so-called strictly logical arrangement of these books, are the great causes which render them unsuitable for the development of the juvenile mind. The system which these books pursue is not the system which nature lays down for the development of the human faculties."

(TATE 1853)

I have looked at assessment as that device which informs what comes next but assessment serves other purposes. (see diagram). It also allows us to inform parents and other teachers what it is a particular pupil knows and can do. We are talking here of what might be described as the extrinsic purposes of assessment. This brings us to that part of the picture to do with recording.

We all know that the attainment target statements are what we record pupil progress against but I detect a wariness about when to actually "put a tick in the box". Let me make a couple of suggestions. First of all let us take the pressure off.
offered to pupils.

* evaluate the effectiveness of the experiences they have

**progression**

* plan subsequent experiences for pupils in order to ensure

* report clearly on what individual pupils know and can do:

* diagnose particular learning difficulties:

* gain insights into how individual pupils learn:

* target level statements, allows teachers to

  assessment of pupils' progress, related to the attainment
MENTAL HEALTH WARNING

Trying to assess all of your pupils all of the time will seriously damage your teaching.

There will be some instances, perhaps many, when some pupil achievements will go unnoticed. But those interventions which I mentioned earlier are ideal opportunities to note what is happening. I have seen some teachers jot down what they have noticed and these notes are later transferred onto the records. There is no need to always devise specific activities solely for the purpose of assessment. On some occasions the teacher may choose not to intervene but to observe "from the outside". On other occasions the teacher may choose to manage a class discussion where pupils talk about what they have learnt and found out. Pupils may elect to write about what they have learnt.

I have been talking here of assessment strategies but these do need to be clarified before considering record keeping. Record keeping systems should reflect not determine assessment methods. I cannot emphasise this last point strongly enough.

When evidence of achievement is noticed it needs to be
recorded and you may feel more confident if you note more than one piece of evidence before you are satisfied that a particular statement has been attained. As in law there is that notion of "necessary and sufficient evidence" on which a judgement can be made. There is no doubt in my mind that teachers are best placed to make these judgements; they know their pupils and they are there seeing it happen.

There still remains a recurring question: "How do you know when they know?" I refer to another teacher ....

"I feel I understand something if I can do some, at least, of the following:

(1) state it in my own words;
(2) give examples of it;
(3) recognize it in various guises and circumstances;
(4) see connections between it and other facts or ideas;
(5) make use of it in various ways;
(6) foresee some of its consequences;
(7) state its opposite or converse.

This list is only a beginning; but it may help us in the future to find out what our students really know .... "

(JOHN HOLT 1965)

To the best of their ability teachers record what their pupils know and can do, and these records facilitate the planning for progression of learning, not only within the
school, but also as the pupil moves through the various phases. Because the assessment has been a joint venture between pupil and teacher I strongly feel that pupils should be aware of these records. Pupils should become ever more competent at being able to identify what they themselves have learnt.

"The more aware I become of my own learning the more empowered I become as a learner."

(FL Notes & Observations)

Independence of learning must be connected with the pupil’s opportunity to assess and evaluate her own work - and then to plan subsequent lines of enquiry.

In this climate the record will not build up in a strictly ordered way and different pupil’s records will look different. There will be some evidence of achievement at a variety of levels and across a range of targets but, over the long run, there will be indications of progression.

Maybe the picture is too glossy here and, you might say, has become detached from reality. I think the picture at this point is more about where we are going to. It will take time for teachers to agree with each other (and their moderator)
about what some of the attainment target statements mean. It will take time for teachers to agree with each other (and their moderators) about what constitutes necessary evidence and it will take time for teachers to agree with each other (and their moderators) about what constitutes sufficient evidence. It takes time for teachers to regain confidence but, in the long run, these practices will become embedded in teachers' normal work. I suspect, if I am allowed to speculate, that one day a sensible compromise will be reached between the expected precision of record keeping and what is practicable and manageable.

In moving towards this reconciliation teachers will be drawn into improving and widening their assessment strategies and pupils will become more involved in the process, and this will lead to a raising of awareness of learning on the part of the teacher and the learner, and this will lead to a consequent raising of achievement. Permit me one anecdote:

A pupil showed a teacher a calculation he had done .....  
\[ \frac{2}{7} + \frac{3}{5} = \frac{5}{12} \]

What would you say to this pupil? The teacher concerned started the discussion by asking the pupil to explain what he had done. "Well", said the pupil,
"On Tuesday I did seven calculations and got two right, which means I got two sevenths right: Right? On Thursday I did five calculations and got three right, so I got three fifths right: Right? So, over the whole week I got five out of twelve right, which means I got five twelfths right ... Right?"

Now what would you say to this pupil?

Apocryphal or not the anecdote illustrates the importance of dialogue in getting inside the thinking of our pupils so that we may, together, make a proper assessment.

Before I move on I need to draw attention to two bits of the jigsaw which appear to be the same but they are not. Many teachers, quite rightly keep a record of those activities they have offered to pupils and those things they have taught. Quite often they try to relate these to the attainment target level statements. In some cases this teacher record becomes confused with the pupil records and the latter do not then serve the purpose for which they were designed. Words like "covered", "done" and "visited" creep into the vocabulary of pupil achievement rather than the harder words such as "can do" and "learnt". But, again, I am describing what the picture is not about.
Back to the picture. Whilst pupil records give an indication of what individuals know and can do, the teacher is able, from time to time, to scan through these records and draw overall inferences. For example, it will be possible to identify those targets which stand out as being "emptier" than others. It maybe that such deficits are budgeted for in the sense that long run planning will, before the end of the key stage, serve to redress the balance. However, it may be that such deficits were not anticipated, and short run planning will need to be directed to making good.

Earlier I referred to the teacher who said she could plan for learning but could not plan for precisely what would be learnt ..... and that this view reflected the six truths of learning. In the light of the previous paragraph there appears to be a dilemma. The resolving of this dilemma comes about by working in general rather than in precise terms.

In general terms, teachers know from their experience the sorts of outcomes which, in the past, have been associated with various activities in which pupils have been engaged and, with this in mind, they are able to plan for those activities whose outcomes are likely to fall onto those gaps
in the records. Of course there will be other outcomes which fall elsewhere but this is to be expected. Loosely put, I would say that there is less precision in the art of planning than there is in the art of assessing. I am not saying here that one is easier than the other, or even that one takes less time than the other. What I am saying is that attempting to devise activities with precisely determined learning outcomes will lead to a deterioration in the quality of the activity itself because it contradicts the truths of learning. Quality activities need to be open enough to allow pupils to make their own connection and to branch off following their own lines of enquiry.

In this light the activity itself cannot be ascribed an attainment target level but, the work pupils do related to that activity can. This is an important principle and recognition of it leaves the teacher free to focus on the production of quality learning activities. I have already alluded to what I mean by a quality activity but I need to be more explicit. The three crucial features are to do with accessibility, width and extendibility (see diagram). All pupils in the target group should be able to get into the activity (It should be designed and presented so that they can) and, once in there should be scope for them to follow
ENHANCING ENTITLEMENT

Activity

Accessible  Extendible
their own directions of investigation and enquiry. The greater the "opportunity space" within the activity the more likely it will meet the different needs and challenge the different abilities of those pupils engaged with it. (The piece labelled "differentiation by outcome" fits in here). From another point of view a quality activity will invite participants to engage in those "-ings" mentioned earlier. For example, it will encourage pupils to ask their own questions, to collaborate, to make their own decisions, to set up and test their own hypotheses, to invent, to explain .... etc. etc.

When pupils are working this way the teacher will be able to see the pupils' own work and thereby make and record her observations of the pupils' own achievements rather than a replication of what the teacher can do, or of what the text says. A good learning activity is, at one and the same time, a good assessment opportunity. As I have said before, assessment tasks and learning activities can be one and the same thing.

Observation and judicious intervention (there are times when the teacher can get in the way) while pupils are engaged in these quality activities allow assessing and teaching - and
learning to take place simultaneously, each informing and, indeed, enhancing the other; A sort of grand synthesis of what the essence of the craft of teaching is all about.

Fitted together this way not only do these pieces reflect the overall picture, they actually determine it. Fitted together this way these pieces guarantee the primacy of learning.
RETO SPECTIVE

As I draw back from the jigsaw puzzle I can now see sections fitting together. There are still gaps but the picture is clearly about learning.

As well as having some gaps I notice that the jigsaw has no edge bits; well, I suppose that would be too much to expect! It is meant to reflect reality after all. I have noticed another heap of pieces labelled LMS, Management Plans, Appraisal, Parental Involvement and so on and so on, and I sense another stream of pieces in the pipeline about to arrive in schools. The challenge is to fit them onto this same jigsaw so that the picture is made clearer and not distorted.

I need to restate something to make it quite clear: My success in putting parts of this picture together comes from my own observations of what I have seen happening in schools. Sure, it is a composite picture but I believe this
strengthens not weakens its validity. The picture is not of my own creation, it is that of the teaching profession, and this, again, certifies its worthiness.

I am in no doubt that part of my job must be to offer back to schools the composite picture that I am privileged to be able to put together. I only hope that I have been to some degree successful in discharging this part of my responsibilities.

I am left with the thought that how much clearer the picture would be if teachers themselves conducted a similar exercise. Maybe that is how time for curriculum and professional development may be used in the future. Who knows.
APPENDIX

A DIAGRAMMATIC GLOSSARY
"To teach is to cause to learn"

Learning is optional

Learning is didactic

Sense of experience

Connections in order to make

Learning is about making
It endorses progression
of where to go next
It allows an informed consideration
locate position and chart progress
in which teachers and pupils
Assessing is to do with the ways
across and throughout the landscape
the pupil to make connections
Progression is about enabling
Pupils are now free to learn...