

# PMLD LINK

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Do you sometimes wonder, as I do, how other people working with pupils with PMLD are getting on now that the National Curriculum is really with us? Are you racing ahead with your schemes of work bulging with attainment targets which are incorporated into your classroom work, and with sheafs of recording sheets rapidly filling up with statements of attainment which have been worked on, if not quite achieved? Perhaps you are slowly, and with some trepidation looking at what you are doing in the classroom and finding out just how much of the core subjects you are already covering, and how much you could include without altering your way of working too much. Are you still searching for some means of recording which is economical in terms of time, but which is clear and gives the information you need for future planning and accountability. If you have found a format which you think is useful, why not send us a copy to put into the next issue, so that we can all share in each other's bright ideas. However, if you are feeling less than confident, there is information on publications which will be useful, and the articles on the National Curriculum in this issue should also be helpful.

This term's newsletter also focusses on the use of technology in very different ways, and I hope that all the articles will spark off some new ideas for you.

Once again, thank you to everyone who has contributed articles, information and letters for this issue, and don't forget that we need material for the next issue just as soon as you can put pen to paper next term.

Please could all of you who intend to subscribe for the current year, but have not yet sent in your subscription, do so as soon as possible so that we can get the records up-to-date.

Carol Ouvry

## THE WORK OF THE NATIONAL CURRICULUM DEVELOPMENT TEAM (SEVERE LEARNING DIFFICULTIES).

### Aims and Objectives

The aim of the project is defined as developing access to the National Curriculum for all pupils particularly those with severe and profound learning difficulties.

The work of the team falls into four main areas:-

- \* Collating and disseminating examples of good practice
- \* Drawing out implications of the documentation for pupils with special needs
- \* Developing and evaluating classroom-based and training material
- \* School based development work

There is a great deal of overlap between these areas of work, all of it being aimed at helping teachers implement the National Curriculum with pupils with severe learning difficulties. Hence, the interpretation of documents, collating of information or ideas and development of material is all passed on to teachers in schools on a continual basis.

### School based development work

The school based development work has taken place through 2-4 team members spending a two week period in a school addressing the issues identified by that particular group of staff. Hence, it is closely related to the school development planning process which is currently the official vehicle for school self-review and improvement. The self review process identifies priorities for the following year and the staff negotiate with the team about how one or two of these priorities might begin to be addressed during the two weeks the team are to spend in school.

To date, six such school blocks have been completed although our involvement with the school does not come to an abrupt end after the two week period. The first six schools asked the team to address issues of curricular auditing, broadening and balancing the curriculum in specific subject areas eg. Maths, Technology, etc., developing 'topics' or what we have termed 'Integrated Schemes of Work', planning and record-keeping and access to the curriculum for pupils with profound and multiple learning difficulties.

### Curricular Audit

Initial activity in schools in preparation for the introduction of the National Curriculum mainly involved mapping of the current curriculum on to the National Curriculum in order to identify areas currently not covered or not viewed by staff as appropriate to the needs of these particular pupils. When approached to become involved in this activity we noted that merely mapping curricular documents onto the National Curriculum was insufficient since the relationship between documents and actual practice was not direct. We therefore identified the first step as involving an honest evaluation of what a sample of children are actually receiving, as opposed to what appears on the timetable.

This was done by selecting a small number of pupils or one activity involving a small group and carrying out a detailed observation of the activity, noting down exactly what happened, what the teacher did and any responses by the pupil. The activities observed are then referenced to the programmes of study legally specified in the National Curriculum. We called this process 'shadowing'. This type of information can be used by the class teacher to identify gaps or imbalances in curriculum coverage and match or mismatch between the timetable and practice. In addition, shadowing could provide a basis for two teachers working together to observe one another and discuss their work. The data collected from shadowing could provide an input to assessment. However, we are only referencing the National Curriculum areas covered by the activity, not suggesting which statements of attainment, through which the National Curriculum is assessed, have been reached.

Another method of auditing we have initiated in some schools at their request is to provide record sheets for a child over a week for the teacher to complete. These record broadly which subject areas that child has covered in the perceptions of that teacher. It is important to note that no attempt has been made by the team to indicate which activities should be attributed to which subject areas. This approach cannot and should not be used as an external monitoring device, but to provide the basis for staff to self review and discuss their shared definitions of subject labels as well as possible gaps or imbalances of coverage. It is however, interesting to note that even these data collected on one child by the teacher, reflect the same imbalances as identified in the national surveys by HMI i.e. lack of Science, Technology, History and Geography, etc.

### Broadening and Balancing the Curriculum

The process of auditing described above has been undertaken in many schools recently and those with which the team have been working have requested assistance with specific subject areas as a direct result of these audits. The team has been working on a broadening of mathematical skills, activities designed to promote technology and introduce geographical or historical skills.

### Developing Integrated Schemes of Work

The dilemma facing the special needs community about how to deal with the scepticism in relation to behavioural approaches yet maintain some structure, led the team, and our colleague Richard Byers (1990) in particular, to develop the approach we have termed 'Integrated Schemes of Work'. What appeared to be required was an attempt to retrieve the most appropriate elements of behavioural approaches and synthesise these with the best aspects of traditional primary school 'topic' work. This may provide the most helpful and positive way to meet the needs of the National Curriculum while meeting the needs of every individual pupil.

Integrated schemes of work start, like so many planned topics, with a topic web in which an area is identified eg. 'Colour'. Staff brainstorm every activity they can think of that might fit into this theme. In a traditional primary or elementary school context the ideas may come mainly from the pupils. In a school for pupils with severe learning difficulties they are more likely to be teacher generated. Traditionally, teaching has then gone ahead based on the activities identified and any straying from the initial plan is often regarded as spontaneous and useful. This raises difficulties in relation to manageable record-keeping.

The team's approach has been to suggest that themes are selected which are specific enough to cover in a defined period of time eg. two weeks, half a term, etc. The brainstorming is done with a planning sheet for each subject area in front of them, on which the activities can be noted against the legally specified programmes of study. Hence, at the planning stage, there is a real attempt to identify which areas of each subject are likely to get coverage. A record sheet for planning and recording group work and individual activities related to the theme can then be used for each session. Objectives for individual pupils within group work can thereby be planned and recorded.

We have noted that this approach can assist teachers to plan and record both individual objectives and National Curriculum programmes of study for one activity for a group of six to eight children. Information would need to be transferred to additional sheets for recording of the specific attainments. This seems to meet some of the criticisms of traditional 'topic' work by being more rigorous, systematic and recording essential information. However, we have also used this framework to encourage teachers, who previously have based their work mainly on behavioural, individualised sessions, to explore teaching a more coherent overall programme within which activities are related. This is seen as preferable to teaching a series of individualised, unrelated objectives. In addition, the need to teach relevant skills in context is emphasised.

In particular, this approach is being used to promote more group activities without losing rigour, to establish a better balance between group and individual sessions and to encourage more collaboration and cooperation between pupils however limited their skills may be to do this. The principles of 'Jigsawing' in which tasks are set up to structure positive interdependence among group members have yet to be applied to groups of pupils in which all or some are seen as having severe learning difficulties. This work is still to be further developed.

#### Planning and Record-keeping

In describing the Integrated Schemes of Work some examples of planning and recording have been given. This is the area in which the team's help is most frequently requested. The National Curriculum is seen by most schools as making excessive demands on record-keeping. In special schools in which the emphasis on recording individual programmes, annual review reports to parents and subsequent revision to children's statements of special educational needs extensive record-keeping systems are relatively well established. In many cases, the schools are looking for ways of streamlining their record keeping without losing valuable information.

The team have tried the strategies described above for recording group sessions. We have encouraged teachers to select routine sessions such as swimming, movement, drinks time, cookery, etc. and to record these in order to note the current coverage of programmes of study and possible areas for further development. One example is given in Figure 1 below.

Greater use of pupil self-assessment and recording has also been introduced in the schools in which we have worked so far. Many National Curriculum documents encourage and indeed specify through the programmes of study that pupils should be encouraged to describe and record their own work. Clearly, for pupils with limited communication skills, special schools will need imaginative ways of tackling this.

### Access for all pupils

A major theme running through all the work described above has been access to the curriculum for pupils with profound and multiple learning difficulties. The comments made above about the limited coverage of certain curricular areas, predominance of individual work and difficulties of developing realistic recording systems particularly with any self-recording involved, are even more applicable to pupils with profound and multiple learning difficulties. We have addressed the needs of these pupils as a matter of priority in all of our work. In addition, the work of the Manchester Teacher Fellows also includes specific examples addressing the needs of these pupils.

### Concluding Comment

Many people working specifically with pupils with profound and multiple learning difficulties consider it in the interests of these children to be disappplied from the National Curriculum. It can be argued that since children with severe learning difficulties have only been included in the education system in England and Wales since 1970, it might be somewhat regressive to exclude them at this stage. If the National Curriculum is not appropriate for these pupils as it stands, then it may be necessary to suggest ways in which it could be revised to meet the needs of all pupils rather than taking pupils out of the system. This is surely implied by an entitlement curriculum.

Byers, R. (1990) Topics: From Myths to Objectives British Journal of Special Education, 17, 109-112.

Judy Sebba, Ann Fergusson, Dave Banes, Lorraine Cooper, Jan Tyne, Sandra Galloway, Richard Byers, Richard Rose, Hazel Lawson, Caroline Coles.

Project Administrator: Angie Ashton

National Curriculum Development Team,  
Cambridge Institute of Education,  
Shaftesbury Rd.,  
Cambridge CB2 2BX

## ACTIVITY PLAN: PAINTING WITH HANDS, SPONGES, ETC.

TEACHING STRATEGIES	REFERENCES TO CURRICULUM	OUTCOME/DEVELOPMENT
<ol style="list-style-type: none"> <li>1. Putting on overalls.</li> <li>2. Squeezing paint out of bottles.</li> <li>3. Putting hand/sponge onto paint.</li> <li>4. Dabbing paint onto paper. Stroking paint across paper.</li> <li>5. Putting sponge back into tray.</li> <li>6. Washing hands.</li> <li>7. Wiping table with cloth.</li> <li>8. Looking at each pupil's painting and evaluating it.</li> </ol>	<p><u>Science</u> Promote at first hand exploration of objects and events. Find similarities &amp; differences in everyday material. Work with and change this material by dissolving, squashing, pouring, &amp; treating surfaces.</p> <p><u>Technology</u> Explore &amp; use a variety of materials to design and make things. Evaluate their finished work.</p> <p><u>English</u> Discussion of their work with other pupils and the teacher. Receiving simple explanations, information and instructions.</p>	<p>Explore use of different thicknesses of paint.</p> <p>Introduce language relating to colour.</p> <p>Vary temperature of water for hand washing to introduce hot, warm and cold.</p>

Thanks are due to the staff of Sutcliffe School, Grimsby for furthering our thinking in this area.

8/6-9

## The Hillside School Multisensory Environment

The multisensory environment was built in a storage room adjoining the 14-19 years class of the PMLD unit at Hillside School. The room measures approximately 10ft x 10 ft.

We have a large number of PMLD pupils at Hillside School, several of whom have severe visual disabilities. The storage room that eventually became the multisensory environment was already being used as a darkroom for a variety of visual activities, but we felt we could do much more with this space to meet our pupils' needs.

With the aid of £800 from Children in Need, we purchased a variety of lighting equipment from a local Disco supplier, which I will list later.

The first step was to paint the room black, so that lights could be seen against a contrasting background. However, we also wished to project images and patterns onto the walls. In order to do this, we suspended washing line around three walls of the room, and on this, using shower curtain hooks, hung white fabric that could be furled or unfurled at will. This meant that we effectively had two kinds of multisensory environment at once, as most of the examples we were aware of had either light or dark walls. We are able to change the colour of the walls to suit the activity.

The Equipment This consists of the following.

1 x Optikinetics Solar 250 effects projector. 2 x pinspotlights (These items mounted by means of adjustable brackets to a rail suspended from the ceiling across the back of the room). 1 x mirror ball (suspended in the middle of the ceiling). 1 x 30 ft light rope (attached to the top of three walls) and controller. 2 x scanners (motorised pinspotlights).

To this, we later added a Coomber Multisound Hi-fi unit and an Aroma Disc player. We also built a "Sputnik", which is a large beach-ball covered with diffraction foil, and suspended it from the ceiling on elastic. Small chimes are attached to the elastic.

The pinspotlights and scanners can have different colour gels inserted to change their lighting effect, and can either be directed at the mirror ball to create hundreds of coloured blobs moving around the walls, or positioned to illuminate other objects within the room, including the Sputnik.

The Lightrope can be attached, via its controller, to the Hi-fi so that it flashes in time to music.

The Activities These are numerous, and we are constantly devising new ones, but some of the most frequently used are outlined below.

a) Visual Attention and Tracking. This can be done in a variety of ways, either using the room as a normal darkroom and using penlights etc, or by using the spotlights to illuminate objects placed on the child's tray or held or suspended in front of him or her. We have a variety of effects cassettes for the projector, and the images can be projected anywhere in the room that is suitable for the pupil. The light rope can be set so that the lights in it are stationary, or can be made to slowly (or quickly) move from left to right or vice-versa

b) Encouraging physical interaction with the environment.

i) The Sputnik is suspended in front of the pupil and illuminated by a spotlight. (This is excellent for pupils with impaired vision.) Any contact made by the pupil causes the Sputnik to bounce around and the chimes to tinkle. This activity provides strong visual, auditory and tactile feedback to a pupil's exploration.

ii) The pupil is placed in a giant box full of shredded survival blanket, and the box illuminated by a spotlight. This again provides visual, auditory and tactile feedback to any movement made by the pupil. It encourages gross bodily movements as well as manual exploration of the material.

iii) A microphone is connected to the Hi-fi and then placed either on the pupil's tray or on a drum (preferably a snare drum) on a table in front of the pupil. Even if the pupil is unable to lift his or her hand and drop it on the tray or drum to make a noise, lateral movements on the surface of the drum or tray produce loud swooshing sounds through the Hi-fi. This activity encourages exploration of a surface.

c) Encouraging vocalisation.

By connecting a microphone to the Hi-fi and switching on the Light-rope, any vocalisation made into the microphone causes the sound to be greatly amplified through the Hi-fi and also makes the lights race round the light-rope.

This activity has proved extremely successful with a number of pupils with different handicaps. It has encouraged purposeful vocalisation in a number of pupils who had previously not exhibited it. The enhanced auditory feedback appeals to pupils with even severe hearing loss and the visual feedback appeals to pupils with visual loss.

By sharing a microphone with a pupil, or using two microphones so a member of staff can vocalise alongside the pupil, we have been able to encourage vocal turn-taking with a number of pupils. This activity has also provided many pupils with their first experience of control over the environment, by allowing them to use their voices to make the lights move.

d) Drama. We use the room to stage "Galaxies" (a Multisensory Drama package produced by The Consortium at Jack Tizard School). We have been able to greatly enhance this already excellent activity by making use of the lighting, sound and smell effects available in the room to emphasise sections of the story.

In Conclusion Although a project on this scale may be beyond the scope (and financial means) of many teachers of PMLD pupils, perhaps elements of the work we have done could be adapted to make use of existing equipment (for example, using a projector instead of spotlights).

Although the project probably cost us close to £1000, this was a fraction of what it would have cost us if we had had the room constructed for us. The project was carried out under the supervision of the County Electrician, who fitted Earth Leakage Circuit Breakers for us to plug the equipment into. This is an essential safety precaution when using mains electrical equipment with pupils, as the current is shut off instantly if anything should malfunction.

The room has proved to be a valuable resource to the whole school, and has been of immeasurable benefit to many pupils.

It cannot be over-emphasised that the purpose of the room is to encourage interaction and exploration on the part of our pupils, not to provide so-called "stimulation" (thank you for that bit of advice, Carol). Although we also use the room as a recreational facility for our pupils, this was not a reason for its construction. Its purpose is educational.

Similar facilities have been built on a much larger scale on the continent and are being used as an alternative to structured teaching programmes for people with profound learning difficulties. If a client (these facilities are being used with adults as well as children) chooses to spend much of the day looking at a light rope or other piece of equipment, they are allowed to do so. There are difficult ethical issues to be addressed here about how much we allow people in our care to remain in situations they find pleasurable, and how much we place them in situations which may be slightly stressful, but ultimately encourage them to develop new skills. I personally feel that to allow a person to spend an inordinate amount of time in what is, after all, an artificial and enhanced environment is to encourage them to opt out of the real world.



I prefer to see our facility as a gateway to a more "normal" environment, by allowing our pupils to develop skills in a tightly controlled environment that they would have difficulty learning in any other way. However, it is very much hoped that these skills will then be transferred to a more natural environment, and great emphasis is placed on this. This approach has in fact proved successful with many of our pupils.

I feel very strongly that to decide that our pupils or clients can only function in, and benefit from, an artificial environment is doing them an enormous injustice, by depriving them of a wealth of "normal" experience. There are times I would love to remain in bed in the morning or in the bath-tub of an evening. However I do not do so (admittedly for mainly financial reasons). I may well find the alternatives to staying in bed ( or the bath ) stressful, and at times distressing, but those alternative experiences allow me to grow and develop as a person in a way that would never occur if I were to remain where I felt comfortable.

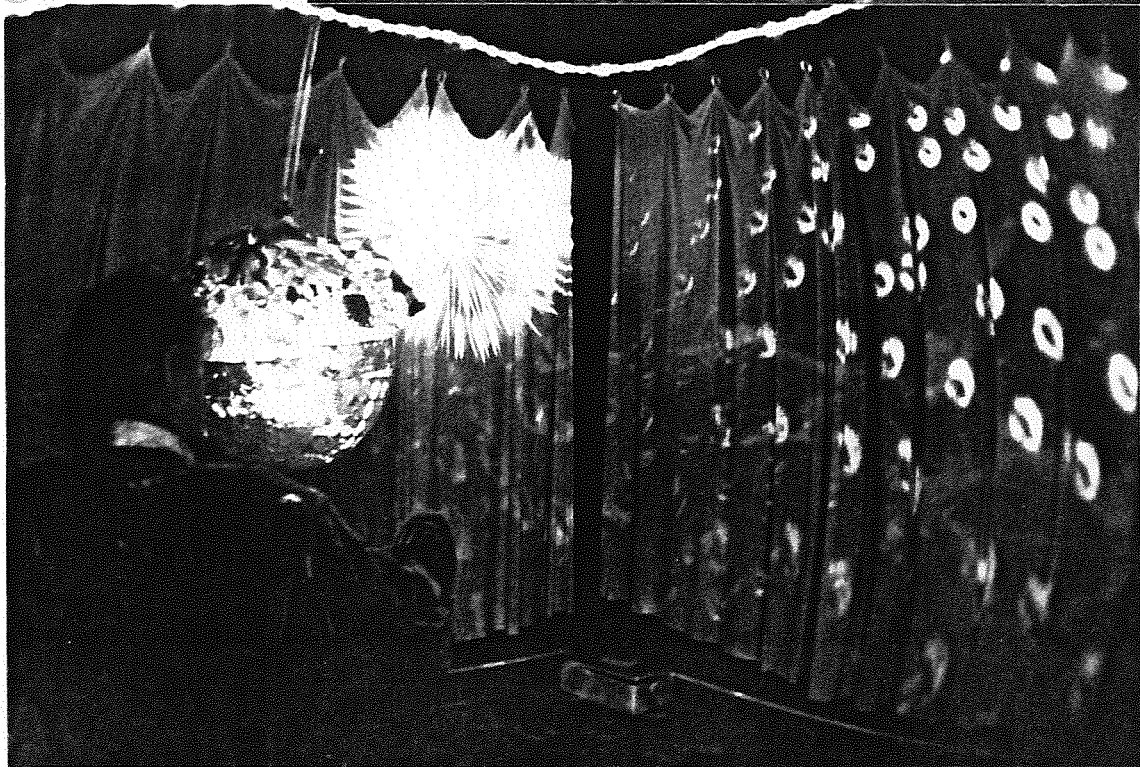
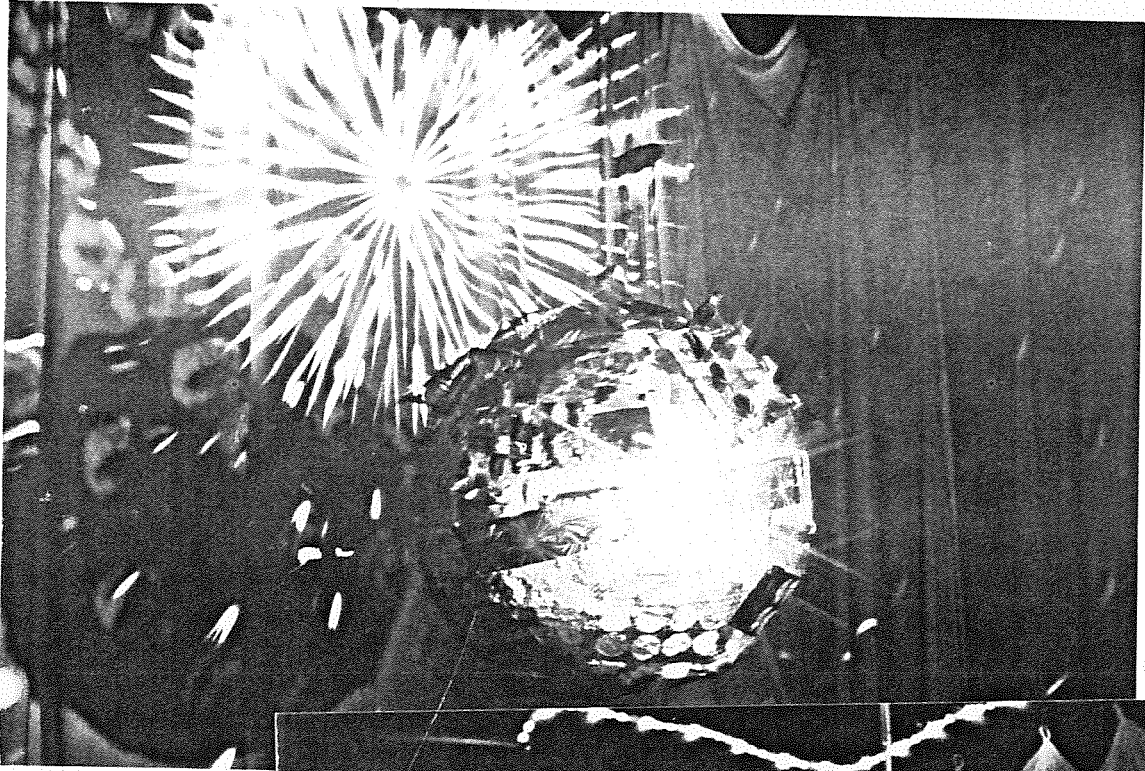
Surely the same applies for people with profound learning difficulties. The problem is that these people are unable to take the same long-term view of their situation. How right is it for us to say "I know what is best for you"? This happens every day in education, but the situation is very different in adult placements (and rightly so). I think the bed analogy can be stretched a little further. If a person in our care looked happy in bed first thing in the morning, would we allow them to remain there? If not, then why allow them to remain for much of the day in a multi-sensory environment, particularly if it is not being used for educational purposes, but for entertainment? How much would our perception of the situation change if we were to substitute the word "containment"?

All this discussion evolved out of an article discussing the use of a learning environment which I helped create. I don't think there are any easy answers but feel there are much wider implications for our work with PMLD pupils which need addressing. Of all the population, our client group has the most limited opportunity for self-advocacy. We have almost total control over what happens to our pupils on a day to day basis. Often their signals are going to indicate wishes which are contrary to our judgement as professionals. We have all had pupils or clients who have objected to physiotherapy. We "know" it is in their best interests that we continue with it. But would we continue if our pupils or clients were physically but not mentally handicapped, and were able to say "Stop! It's hurting. I don't want it any more." We might then be able to discuss with them the long term benefits of what we were doing. I feel then that we would reach some sort of compromise.

Unfortunately, with our pupils or clients, our wishes or judgements remain paramount. We retain almost total power over the people we are working with. If I were to become overnight totally dependent on others, I would not wish to remain in bed all day, nor to be wheeled from one passive activity to another that I found distressing and to be physically manipulated in a way I found acutely painful, but unable to stop. These may be extreme examples, but are not so far from actual practice.

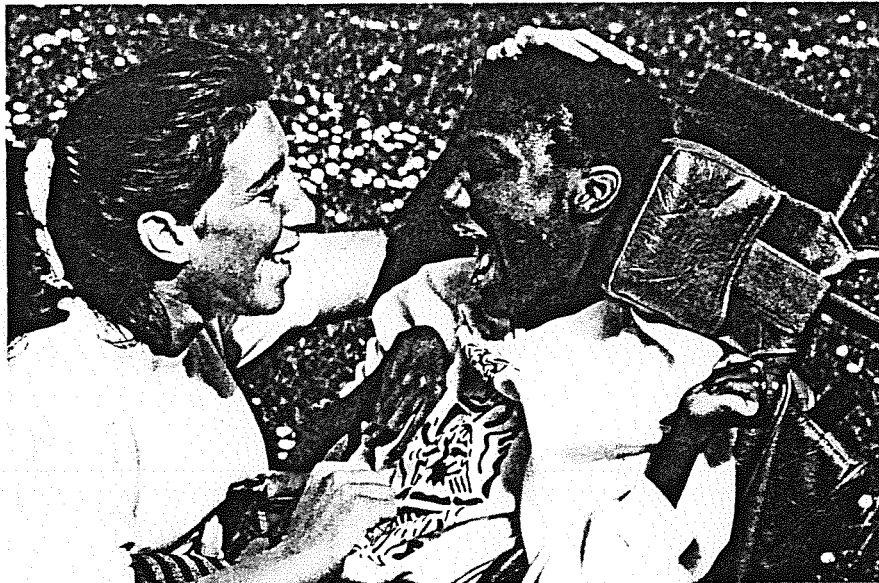
These issues, I feel, are never going to be resolved in our field of work. What we need to do is to be constantly aware of the power we hold over our pupils and clients, and question what we are doing, and why. We need to be able to put ourselves in the shoes of the people we are working with and to be as far as is possible empathic with them, whilst retaining a more objective overview of what we are doing. However, we are still going to have to make some extremely hard decisions, when our personal feelings and professional judgement are at variance.

Nick Howard  
October 1990



# Profound Retardation and Multiple Impairment

*James Hogg, Judy Sebba and Loretto Lambe*



Volume 3

Medical and physical care and management



CHAPMAN AND HALL

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Toni Russell of John F. Kennedy School asks whether readers have any ideas for sponsorship, or other sources of funding for specialised equipment. If you do, please let Toni know at:

John F. Kennedy School, 30 Spratt Hall Road, Wanstead, London E11 2RQ  
and also let us know to publish them in our next issue of PMLD Link if you don't mind everyone knowing!

7 Meadoway,  
Longton.  
14-7-90

Dear Editor,

I read Brian Frew's article in issue number 7 of PMLD LINK. His conclusion that pupils with P.M.L.D. are excused from the National Curriculum rests on the fact that there is no documentation of what a pre-level 1 course ought to contain. In my opinion here is the good news. The fact that how we work towards Level 1 has not been prescribed means that the excellent curriculum now in place in many schools holds fast.

All children are working to achieve their own potential. All will make progress during their school life. This ought to be recorded on a National standard. In this way children with P.M.L.D. will be seen as part of the national group 'school children'. In the past some pupils placed in units for children with P.M.L.D. have made enormous progress and in my own school there are pupils who are not working towards level 1 of the National Curriculum - they have passed that stage. They still have profound and multiple learning difficulties BUT they are able to achieve. If the National Curriculum were to be disappplied for all such pupils many of them would be denied the chance of success.

Mr Frew seems to be putting forward a view that pupils with P.M.L.D. do not fit into a National Education System. Does he want to see the return of hospital schools and care centres for the ineducable? That is where his philosophy is leading us. As teachers we are first and foremost educators; children with P.M.L.D. ought to be first and foremost children. If Mr Frew does not want to see children with P.M.L.D. marginalised then he must not disapply them from the National Curriculum. It is a difficult task to see how such children might work towards a distant goal and to put together documentation of their progress and it will take the imagination and skill of some very good teachers to make it work. Pamphlets like the P.M.L.D. LINK can be most useful in allowing an interplay of expertise and I hope it will act as a facilitator in this way.

I do not know if any research has been published as to how parents of children with P.M.L.D. wish their children to be educated. Parents I have spoken to want to see their children achieve their best and be happy. This ought to be possible inside or outside the National Curriculum. I would want it to happen within the bounds of the National Curriculum because I want to acknowledge that children with P.M.L.D. are as much part of the group 'school children' as any other children; so that their curriculum and experiences are not unduly limited and because disapplication would inhibit integration.

Let's have the courage of our convictions and confidence in our abilities (as Mr Frew asks us) and show that we can work within the National Curriculum and tell the world that our children are as much part of the Education system as any.

*Elizabeth Bateson*

## MICROTECHNOLOGY AT MELDRETH MANOR SCHOOL

One of the major problems in using microtechnology with students who have profound and multiple learning difficulties is trying to chart a progression so that the student can follow some kind of development and the teacher or therapist has some idea of 'what to do next.' In a large school easy access to information about hardware and software and a consistent recording of pupils' use of computers is essential.

Meldreth Manor is a residential school for approximately 100 young people aged between 11 and 19 years. All the pupils have cerebral palsy with severe or profound and multiple learning difficulties. The students all have various physical and motor disabilities including major sensory impairments, epilepsy, cardio-vascular and respiratory problems, scoliosis, dislocated and malformed bones and severe muscular spasms.

### Hardware and Switches

Because of these physical difficulties access to the computer is of primary importance; finding a reliable, repeatable and comfortable switch is fundamental. We have about 15 computers at Meldreth, all of them BBC Masters or the original BBC 'B's and all of them on moveable trolleys. Every computer has a switch interface box (analogue and user port, for up to 4 switches) and a numerous supply of different sized and different sensitivity press switches. We have 5 touchscreen, about 10 concept keyboards and various special switches: joysticks, wobble switches, proximity switches, touch switches, pressure switches, voice activated switches, tongue switches, eye switches, tilt switches, head switches and several purpose built switches for particular students.

Simply informing all the teachers/therapists about the different switches is a major exercise. In addition to regular teachers meetings we have produced a file with a full page of description on each switch (size, sensitivity, operation etc.) and a photograph so that they can easily check on what kind of switch is available. This is kept in a central computer bay. We have followed the categories in the ACE catalogue as to switch type.

### Recording

A method of recording each pupil's use of the computer is important to avoid endless repetition of the same or of an unsuccessful program. We have devised a recording sheet that is kept for every student and is filled in every time he/she uses the computer. This is very quick and easy, the sheet simply records the disc number and name of the particular program, the type of access (e.g. press switch, joystick, touchscreen etc.) the time and any relevant comments or observations the teacher might have. This produces a cumulative record of each pupil's use of the computer, the access device and a short note on any success (what worked and what didn't).

### Software Cataloguing

We have about 250 separate discs of programs, most purchased commercially, this is nearly 1000 programs all of which use a variety of input devices (switches, concept keyboards, touchscreens, joysticks etc.). Originally each disc was numbered simply when it arrived with the program description and input device entered onto a card filing system. Now we have all our software catalogued on database (Masterfile) on the BBC Master computer. The details on each disc include the hardware needed, input device, topic, sound, and a brief comment. This allows us to list all discs on particular topics with



particular input devices (e.g. all programs using the touchscreen, or all programs on colour matching using two switches etc.). This is a great advance on the previous card system in that it allows discs on specific topics and/or with specific input devices to be found easily. However most of our software is not topic based but is designed to develop auditory and visual attention and cause and effect. There is a world of difference between a program that simply responds to a switch press by drawing an object and making a 'suitable' noise and a program that requires the student to press a switch at a particular time to coincide with a particular screen event. Both these programs would have been classified as one switch programs under our original coding. Our new scheme is arranged into levels of access, that is, what the student has to do to use the program. This sorting into switch access is not strictly developmental and is not designed to pigeon hole students, but is useful as an aid to teachers to give the student relevant software, to go part of the way to solve the 'what next?' problem and hopefully to prevent students being given the same tasks for year after year.

### A Switch Progression

The 'switch progression' we have arrived at (after many revisions and much trial and error) looks very simple. All our software is grouped into 5 levels, these levels are further subdivided into stages corresponding to the input device.

The simplest level (1) contains the programs that respond to a single switch press with a complete action - usually bright and noisy. The screen is then cleared and the program waits for the next switch press.

Level 2 programs build up a picture on screen by progressive switch presses each one adding a bit more until the picture is finished when it is usually animated.

Level 3 programs the student has to respond to the action by switching at a particular time/event.

Level 4 is about decision making. This includes colour sequencing and matching. At this level the student is using the switches to choose the 'correct' answer.

Level 5 is scanning. We have put scanning in a separate level since it is a unique method of access requiring its own special skills and is so important for accessing speech machines, environmental control units and for word-processing.

The cognitive leap between levels 2 and 3 is perhaps the greatest. On level 2 the student can quite happily 'switch bang' without thinking or looking at the screen, but at level 3 he/she must judge when the moment to switch has arrived, it is usually transitory so the switch has to be pressed within strict time limits. Stage 3,3 is touchscreen accuracy, the touchscreen is particularly good at promoting cause and effect. The accuracy involved in using the touchscreen is usually under the control of the teacher/operator (touching anywhere, close or on target).

This scheme helps teachers/therapists firstly to assess the student's general level of computer access and secondly to choose appropriate software. It also gives structure and a direction for computer use with

pmld/sld students although it shouldn't need pointing out that it is not a fixed or developmental progression, and must not be used to pigeon-hole or label students.

We are thinking of putting together a resource pack on switch access to the computer for pmld students. For more information on switch progression please contact Meldreth Manor School, Meldreth, Nr. Royston, Herts SG8 6LG.

Richard Walters

### Switch progression

#### Stage 1 (single switch)

1  
single input programs  
single switch press ----> single action

	<u>Stage 2.1</u>	<u>Stage 2.2</u>	<u>Stage 2.3</u>
2	1 switch building /animation	2 switch building /animation	Touchscreen building

	<u>Stage 3.1</u>	<u>Stage 3.2</u>	<u>Stage 3.3</u>	<u>Stage 3.4</u>
3	1 switch accuracy /targetting	2 switch accuracy /targetting Joystick 2 directions	Touchscreen accuracy	Joystick 4 directions

	<u>Stage 4.1</u>	<u>Stage 4.2</u>	<u>Stage 4.3</u>
4	1 switch decision making,choosing, sequencing,matching	2 switch decision making,choosing, sequencing,matching	Touchscreen choosing, matching

	<u>Stage 5.1</u>	<u>Stage 5.2</u>
5	1 switch scanning	2 switch scanning



David Fulton Publishers

## NEW BOOK NEWS

### Special Education and the National Curriculum

From September 1990 all special schools, including those for pupils with severe and complex learning difficulties, are required by law to implement the National Curriculum. Manchester Education Committee seconded four special teachers to Manchester University to prepare a detailed study of the implications of recent legislation on these children.

These four books are the result of this study and are designed to support teachers who are faced with this challenge.

#### The Contributors

Sue Fagg, B.Ed., Deputy Headteacher, Piper Hill School (SLD) Manchester, Pam Aherne B.Ed., Deputy Headteacher, Leacroft School, Manchester, Sue Skelton, Cert.Ed., Diploma in Special Educational Needs, Deputy Headteacher, Grange School, Manchester, Ann Thornber, B.Ed., Deputy Headteacher, Melland School, Manchester

#### Entitlement for All in Practice.

A Broad Balanced and Relevant Curriculum for Pupils with Severe and Complex Learning Difficulties in the 1990s.

Uses three case studies to illustrate the need for this broad and balanced curriculum

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#### Mathematics for All

An Interactive Approach within level 1

Attainment targets 1 and 9, the process of using and applying mathematics, are focused on as a vehicle for teaching all other attainment targets at level 1.

*1-85346-166-0 September 1990 32pp £4.95 paper*

#### Science for All

Scientists in the Making from the Earliest Experiences

Addresses all the attainment targets at level 1 and 2 and the associated programmes of study. Also acts as a resource for planning schemes of work and topics.

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#### Communication for All

A cross curricular skill involving interactions between "Speaker and Listener"

Considers the process of functional communication, incorporating speaking and listening, throughout the whole curriculum. Includes a cyclical model of extended interactions, with corresponding programmes of study at different stages of development.

*1-85346-168-7 September 1990 48pp £5.95 paper*

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## INTRODUCING SCIENCE

During the Autumn term of 1990 the school began to look more closely at its Science Curriculum with the knowledge that the National Curriculum was to take effect from the Autumn term of 1991. We asked ourselves what was the purpose of teaching science and four broad aims very clearly encompassed the all age PMLD department:

- to widen the pupils' range of experience in order to give them a greater understanding and awareness of the world around them,
- to promote curiosity and encourage problem solving,
- to provide an opportunity to learn through practical experience,
- to develop sensory perception.

### **What did we want our pupils to learn?**

It was to question rather than just to accept, and to initiate their own activities and explorations. We wanted them to learn to observe, predict, explore, compare and classify, be aware of cause and effect relationships, communicate by interpreting the results of their activities and recording their conclusions. For PMLD pupils these skills were appropriate - to 'observe,' feel, hear, to 'predict,' - anticipate, explore, compare, be aware of cause and effect, communicate by their responses, and the staff to record.

### **How could this best be achieved?**

The rest of the school decided to take the topic 'light' but we felt that although this had a lot to offer, it was something already available in the classroom and used a great deal with sensory impaired pupils. We were looking for something we had not offered before to broaden the pupils' experience beyond the classroom, and decided to concentrate on Rural Science. The three teachers in the department visited the nearest piece of countryside, Richmond Park, and selected a small area beside a pond which we felt would give the most experiences. There was so much to explore that it was decided to have three 'subjects', 'Groundwork,' 'Water,' and 'Wood.' To provide structured learning for the pupils and a structure for staff, very simple worksheets were devised. They stated precisely the experiences we wanted the pupils to have i.e. 'collect three handfuls of wet leaves', but asked the staff to use their own good ideas as to how to access their pupil to the activity and to record the responses in positive terms. 'He enjoyed it' would tell us nothing. How do we know he enjoyed it? What actual response did he make and for how long? He 'stilled, smiled, leant forward, tolerated holding it in his hands for five seconds, threw it, ate it' would constitute curiosity (or apathy!) and would indicate the next step in his learning or highlight a need for further experience or perhaps a different approach to the activity on his next visit. The recording of accessing proved invaluable - pupils reacted very differently if they were in or out of wheelchairs, bent down to touch, or had something in their lap or were presented side on, or to the front, of an object.

The results have been interesting, definite preferences have come to light. One eighteen year old initiated endless responses to 'Wood' and employed his complete range of avoidance techniques for 'Groundwork.' A pupil with very little movement tensed her hand immediately on feeling the mud. The member of staff withdrew her hand, waited a while, tried again, and on the next attempt she relaxed it, pressed it in a little further, and smiled. It is important that the recording is done on the spot, it keeps it specific and precise. One cannot remember seconds, small arm/leg movements in retrospect and there very often is not the time on returning to the classroom. Many staff add general comments to the sheet later in the day if something has been particularly successful.

Some pupils became very animated during certain experiences, for example when surrounded by masses of Autumn leaves. They were obviously allowed to enjoy this fully which meant leaving out other things, but on the next visit that activity was presented last. Always we take the lead from the pupils to encourage them to communicate their own interests, the work sheets simply remove the temptation to give non contingent stimulation.

Each group was able to go twice during the term and we assessed the results and noted changes in reactions. During the afternoon following the mornings visit we mounted the samples with the pupils so that they could feel them all again and used them for display or sent them home. Follow up work arose naturally from the project. After 'wood' we made rubbings of wooden objects in the classroom, hall, outside the front of the hall and in the playground and during the summer all rubbed brasses at St Martins in Trafalgar Square. We really could have done the Rural Science sheets for a year and maybe that will prove the most effective in the future, the repetition providing better learning opportunities. Smaller units would be able to visit the site more often within a term and may not be restricted by the availability of a bus.

This term we have joined the rest of the school in studying a cluster of Attainment Targets 2, 4, (3), which incorporates living things. You will find a group of us each Friday morning in the the Contact Area at Battersea Zoo complete with our science work sheets. Two of the tactile defensive pupils have already overcome their fears and from immediate withdrawal, one can now stroke the rabbit unaided for one minute.

In conclusion, Dale F.J. (1990), "The Stimulation Guide," in his chapter on 'Locomotion' for young multiply handicapped children, "Do not overlook the pleasure of going out in a push chair. A breeze, noises, and smells etc. all help to stimulate the senses and promote awareness." This does appear to be true for most pupils, and science has certainly broadened our pupils' horizons. It has provided educational possibilities for increasing perception and has given opportunities for initiating and repeating responses, for comparing and for communicating. Perhaps most important of all, is that it has provided new ground for all those areas of

learning that we are constantly encouraging within the classroom.

C.Fuller Paddock School

The work sheets are paper clipped to stiff A4 card which has a hole punched in one corner with a pencil on a string attached. On the reverse side there is a list of what is needed for this particular activity, carrier bag, rope, polythene to sit on etc. And the whole is presented in a plastic wallet. As well as being practical and minimising the fuss of the science group departing, it also feels scientific. Below is an example of a work sheet

1			
Name	SCIENCE WORKSHEET		Date
Staff	"Wood"		
Activity	Experienced ✓ or X	How did you access pupil to activity	Pupil's Response
1. Take bark rubbing from 2 different trees			
2. Feel tree stump Sit on tree stump			
3. Collect 3 twigs			
4. Pick bark from fallen tree/log			
5. (i) take weight of branch in hands or in lap (ii) feel texture (iii) tie rope around branch, with pupil. Help him/her to lower to ground. Tow back to bus.			

## FOCUS ON PERSONAL AND SOCIAL SKILLS

Barrs Court School

Price £3.95

Publishers: Nottingham Rehab 1990 (cat.R51 478/7)

FOCUS is a set of checklists designed to help in planning the curriculum for Personal and Social Education - now included in the National Curriculum - in schools where there are students with learning difficulties.

Although FOCUS was developed primarily for Barrs Court pupils, all of whom have special needs, it can easily be adapted for use in mainstream education. Lambert Bignell, former H.M.I. with responsibility for Special Educational Needs, urged the school to have it published. It will be particularly helpful to staff in Special Schools, Child Development Centres, Social Education Centres, and residential establishments for the mentally handicapped. The subjects dealt with range from toilet training to temperament and social behaviour, and the cost of a copy is £3.95.

Dr. A. Butterfill, Consultant Paediatrician at Hereford County Hospital, says of FOCUS: "Although FOCUS is modestly described as a series of checklists, it is rather more than that. The introduction, comments and bibliography give a brief and valuable insight into the subject for the newcomer and a starting point for deeper study for the professional."

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### CHANGE OF ADDRESS

LITEWORK have moved and are now at Unit 2, Woodgate Park, Whitelund  
Industrial Estate, Morecambe, Lancs LA3 3PS  
Telephone: 0524 844808

Essex County Council

# Tye Green School

Tendring Road Harlow Essex CM18 6RN



Headteacher: Mrs. S. M. Wheeldon

Telephone: Harlow (0279) 23670

## SCHOOL AIMS

"We hold that education has certain long term goals, that it has a general point or purpose, which can be definitely, though generally stated. The goals are twofold, different from each other, but by no means incompatible. They are, first, to enlarge a child's knowledge, experience and imaginative understanding, and thus his/her awareness of moral values and capacity for enjoyment; and secondly, to enable him/her to enter the world after formal education is over as an active contributor to it, capable of achieving as much independence as possible."

- Warnock (1978)

At Tye Green School we share Warnock's views and believe that the overall aims of education must be the same for all children. The starting points for children with severe learning difficulties are diverse and their direction and speed of learning varies but the educational needs of each child can be determined in relation to their individual starting point and the goals described above.

We are not, however, aiming for "normality" but at a degree of PERSONAL AUTONOMY\* for each of our pupils. We interpret Warnock's goals in terms of autonomy: for example being an "active participant" for one child may mean vocalising "me" in response to the question "Who would like a drink?". For another child it may mean learning to propel herself in a wheelchair rather than being pushed by an adult helper. "Awareness of moral values" could mean a child learning to share an adult's attention with another, or for a different child it might be learning to take turns within a small group.

Guided by our principle aim of a degree of personal autonomy, the education we offer is focused on giving individuals a (socially acceptable) means of control - to the best of their ability - over their immediate environment through developing skills in the following areas:

RELATIONSHIPS  
COMMUNICATION  
MOBILITY  
SELF CARE  
OCCUPATION

Each of these areas give rise to sub-aims: to make successful relationships, to communicate, to achieve a degree of mobility, to look after oneself and to occupy oneself in a fulfilling manner. Acquisition of such skills - even at a very basic level - improves quality of life. All children should have equal opportunity to reach their maximum potential.

\* "Personal autonomy" : self-government.

## The Curriculum at Tye Green School

(By "curriculum" we mean "all the learning opportunities provided by the school".)

We offer a special curriculum. It is not subject-based (as in mainstream schools) as this would be inappropriate for our pupils, but offers a wide range of activities, through which we teach precise and detailed learning objectives. At the centre of our curriculum are the "cross curriculum dimensions" of:

SOCIAL BEHAVIOUR  
COMMUNICATION  
COGNITIVE DEVELOPMENT  
MOTOR DEVELOPMENT  
SELF HELP.

Every child is assessed in each of these areas. Precise educational objectives are set in each area. These objectives are then taught through activities, in appropriate contexts wherever possible. Each child has their own individual program. The objectives are not standard but individually devised in relation to the child's educational needs.

## The National Curriculum

As professional educators we welcomed the introduction of a National Curriculum which claimed to offer the possibility of equality of opportunity in education to all children. However, it is obvious that in the initial concept of a National Curriculum children with severe learning difficulties were entirely overlooked. Subsequent development by government sponsored bodies has fallen far short of our children's requirements. The frantic "re-inventing of the wheel" taking place all around the country as special schools struggle to fit their pupils into the National Curriculum strikes us as educationally dishonest and morally wrong and saddens us.

Our pupils are in this school because the curriculum offered in mainstream schools does not meet their needs. We acknowledge that the aims of education are the same for all children but we do not accept that all children should have the same education. In order to learn, our pupils need a special curriculum. The curriculum we offer is based on normal development - but deals with knowledge, skills and understanding at a much more basic level than that covered by the National Curriculum. (Very many of the skills we have to **teach** our pupils have been **acquired** by most children by the age of two or three years.) Our curriculum is broader than that offered by mainstream schools, specifically **teaching** concepts and skills, behaviours and attitudes, which mainstream pupils, again, **acquire**. Our curriculum is strongly influenced by time: we have to consider what are the essential "survival" skills for students leaving school at nineteen years of age, who are unlikely to have the opportunity of further formal education.

The National Curriculum is subject-based and bound by bodies of knowledge and as such is just not relevant to the educational needs of our pupils. **Of course** it is every child's right to have access to a broad and balanced curriculum - but just as important is that the curriculum is **relevant** to the child's needs. It is educationally dishonest to maintain that the National Curriculum - as it stands - is relevant to our pupils' needs.

The National Curriculum assumes cognitive levels not typical of the majority of our pupils. We believe it is educationally unsound to say our pupils are "working within" Level 1 and then develop finer steps within Level 1 in order to give this statement credibility. It devalues the effort and progress made by our pupils to say that they are just "working within Level 1" for the whole of their educational career. Their very real achievements are not recognisable in National Curriculum terms. It is also returning to the unacceptable practice of fitting the child into the curriculum instead of designing a curriculum for the child.

It is relatively easy to extend the teaching programs of some of our more able pupils to include work on the National Curriculum programmes of study, where relevant and appropriate. However, giving consideration to the many children here who have to tolerate complex and profound learning difficulties, we feel it is professionally immoral to even attempt to match current teaching objectives and activities to attainment targets within the National Curriculum. How can the following be justified?:

"A child who shows awareness of having a dirty nappy can be said to be working towards Science Attainment Target 5: Human influences on the Earth (Level 1: know that human activities produce a wide range of waste products. Level 2: know that some waste products decay naturally)."

- heard on a course on the National Curriculum for pupils with severe learning difficulties, held in London, July 1990.

A child with profound and multiple learning difficulties who turns head towards a toy squeaked nearby and then, with a physical prompt, touches it, is described as working at (among a long list of National Curriculum areas) "Using and Applying Maths", "Handling Data", "Design and Technology Capability" and "Information Technology Capability".

- advisory documents distributed by the National Curriculum Development Team (S.L.D.) at Cambridge Institute of Education, June 1990.

This is misusing the ambiguity and flexibility of the targets to lend credibility to the effort of proving our children are included. Distortion such as this will also negate one of the stated aims of the national Curriculum, which was to promote understanding between schools and between schools and parents through providing a common language.

We welcome the programs of study purely as a resource bank of ideas: to help us provide a wider range of activities in order to enrich the educational experience of our pupils and achieve a curriculum that is broad and balanced - but most importantly **RELEVANT** for each child.

We are doing our pupils a disservice if the educational opportunities we offer them are inappropriate or mismatched to their needs. We will not teach towards National Curriculum attainment targets. This is wasting our pupils precious education and negating the educational philosophy of special education.

What we really need is a National Curriculum that builds on the existing good practise and expertise in S.L.D. schools around the country. Educationally sound guidance and relevant documentation from the National Curriculum Council is long overdue!

This document was jointly written by the teachers at Tye Green School, Harlow, in July and September 1990