21

SUMMER 1987

MICRO SCOPE

Newman College with MAPE

Contents

MAPE '87 1
Letters 2
Let's make a book with *Writer* *Sarah Earl* 3
The use of a network system in the primary school *Anne Liddle* 8
Electronic mail and local databases: their contribution to primary education in Derbyshire *Pamela Winn* 10
Prestel comes to school *K. Whiting* 13

Coloured centre pages:
Junior Mike Crow *Charles Bake and Di Wailing*
with Prize Competition (sponsored by Tedimen Software)

Educational uses of video recorders and video cameras with computers *Dr Mike Wald* 19
A Turtle Map of the Crystal Forest *Les Watson* 21
Encouraging music making in the Primary Classroom *Andy Pierson* 24
Software reviews 27
Items received for review 30
MAPE news 31

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MICRO-SCOPE 21

MAPE '87

This year's MAPE Course/Conference has now taken place and as no-one else has written anything for *MICRO-SCOPE* here are my comments. We tried out a new organisational system. Each delegate could either attend six one-and-a-half hour presentations, or spend all the time following a specific theme. Theme A was 'Presenting the news', led by Mike Rumble and Brian Richardson, which involved reporting the events of the conference and allowed participants to dip into the presentations. Theme B was 'Managing Change', led by Ray Shostak, Ken Dyson and Stan Norman. Theme C was 'Control Technology', led by Roy Richardson and Christine Robson. Theme D was 'LOGO Masterclass' with Ken Johnson, Ros Penny, and a Nimbus network kindly loaned by Research Machines. Theme E was 'Fantasivac' with Mike Matson and Judith Barthorpe. This involved running a hotel for very demanding (and sometimes unexpected) guests. The demand for places on the themes was higher than we could accommodate; some people (who booked late!) failed to get either of their choices.

The presentations focussed on a wide range of issues relating to micros and education. Each presentation took place only once.

There were three keynote lectures presented by Steve Bacon, Jon Coupland and Chris Schenk respectively. Steve Bacon described an advisor's view of IT and education. If effective use of micros is to be promoted then he believes that attention must be paid to every item in the package, which involves hardware, software, LEA support, in-service training and curriculum resources and support materials. Collectors of interesting bits of information were fascinated to learn that under GRIST (Grant Related In-Service Training) the amount of training each teacher is entitled to, per annum, is seventy-one minutes! (That's either one keynote lecture, or one presentation, or one meal at MAPE next year.) Jon Coupland was allocated the Saturday evening slot and he rose to the challenge. It's impossible to give a resume of his lecture because it was based upon pictorial analogies which will lurk in people's minds for years to come. The main idea related to each school being given one pair of pumps with each teacher then being invited to don the pumps and to climb the Matterhorn. Another strand linked the invitation to press Shift and Break with the launching of an (uncontrollable) space rocket. The central message was that micros make heavy demands. Chris Schenk's lecture drew the conference to a close as he presented an overview of the ways in which microcomputers can enhance and enrich the curriculum. All we need is resources. Which brings us back to seventy-one minutes!

As one of the conference organisers, it's impossible for me to present an unbiased evaluation of the event. However I was given a few hints about what people would really like. . . . Delegates would like to be able to attend everything that is happening simultaneously. They do not wish to miss anything. Those who attended themes wanted to see the presentations as well. Those who attended presentations would have liked to know more about the themes. Those who attended presentations would have liked to be able to attend two at once (no repeats meant that some difficult decisions had to be made). In order to accommodate these requests the conference would have to last eighteen days! Next year's event is at Durham, March 25th to 27th. Write to Anne Liddle and tell her what you would like.

Entertainment was provided by the now traditional barn dance band. Late night entertainment was provided by the accidental setting off of the fire alarms. Middle-of-the-night

entertainment was provided when a delegate's path crossed with that of the security guard and his extremely aggressive german shepherd dog. At meal times we continued the practice, inaugurated here at Newman and developed at Cheltenham and Manchester, of fostering the development of new friendships via a queuing situation. Here's a problem for a spreadsheet: if there are 220 people coming through the door at a rate of one every 15 seconds and it takes 8 seconds to put the milk in a cup, 13 seconds to put the coffee in, 11 seconds to put the cup on the saucer, 51 seconds for each person to choose a biscuit (that's when they are all the same) and 4 minutes to drink the coffee, how long should the coffee break be? What happens if you change some of the variables? For example, what will result from a request for very weak, with water not milk please?

The range of activities on offer meant that we needed lots of helpers. This isn't an Academy Award presentation but I would like to thank everyone who helped in whatever capacity, especially those who thought they were coming for a mentally stimulating weekend and discovered that physical stimulation was also available. (In the space provided on the booking form for special requests one delegate asked for a jacuzzi and a Swedish au pair; we just provided the opportunity to move heavy equipment!)

What would you like to know about the conference if you are not able to attend? Do you want conference papers? Would you read them? Write now.

Make new friends with MAPE. Save up your seventy-one minutes, persuade 16.056338 colleagues (spreadsheet again) that they don't need any in-service training, and come to Durham next year. You'll go away relaxed, refreshed and well-informed!

Letters

I read with interest Janet Broom's article on computers in the nursery school (*MICRO-SCOPE 20*).

I have responsibility for our computers and, although our school is not a nursery, we do have a number of pre-school children. In response to Janet Broom's article I will try to set down the position as I see it. (As I have no experience of turtles, or speech programs, I will confine my observations to her two other questions.)

Does a program, where all the child does is press the spacebar to see a picture or a pattern unfold, have any value at all?

My immediate reaction to this is: 'We've all got to start somewhere!' Having said that I would add two more things. The problem that most adults face with respect to new technology is caused by fear which breeds inactivity and incompetence. Familiarity with the machine in a safe environment can work wonders.

Moreover, if this can be achieved when the person is a child then the fear is that much more easily conquered. One of the children's favourite programs is *House* from Database Publications. All the children do is press the spacebar, I admit, but they have, at the age of three, conquered that mind-numbing fear that paralyses their parents when faced with the same machine. Having run classes for both parties, I have seen this at first hand. I know which group I'd rather take! (No! Not the parents!)

More fundamentally, Janet Broom questions the value of such programs as learning aids. In my experience this is something which stands or falls on the quality of the teacher. The younger classes come up to me with their teachers, and often we use *Granny's Garden* (Thank you for many peaceful hours, Mr. Matson). Good though it is, I have seen the program milked of every useful idea within it (and some that weren't), and I have also seen it cruelly abused. A good teacher can make anything interesting.

Turning to another of Janet's questions: Does it confuse children to see upper case letters on the keyboard and lower case letters on the screen?

My reply would be an unreserved 'Yes'. After much searching for a suitable concept keyboard (Can't someone out there make a lower case overlay?) we stuck sticky labels over our keyboard and the children do seem to find life a lot easier.

My final comment would be that it's surprising how little software we have needed. Children are creatures of habit. As soon as they come through the door one of three cries go up, 'Make a nellyphant!' (*Jumbo*), 'Make a house!' (*House*) or 'Mr. Podd!' (*Podd*). Such is the quality of these programs that others rarely get an airing.

And we all know you can't beat quality, don't we?

Mr. Chris Price
Merton Court School
Knoll Road, Sidcup, Kent

Next, we had a session looking at the new Picture Puffins. We looked through a group of books specifically chosen for the variation they displayed in layout, design and style. Although we had used some of the words before, I made sure that I used the vocabulary 'author', 'title', 'cover', 'title page' and 'illustration' so that they had a better chance of getting their ideas across in the design stage. I was a little apprehensive about this as I was not sure how much of this part they would be able to take in. We guessed, reasoned and discussed why sometimes there was a lot of writing on a page, sometimes only one line of writing on a page, and sometimes the writing came out of the mouths of the characters. Speech marks were noticed in some stories and one child later asked to have these put in her story. That sparked others off to want the same thing. I did not think that this was a bad thing as it showed the children were keen to be as realistic as possible. (Later, one child even made a library ticket pocket for his book!)

The children then had the opportunity to decide how much text they wanted on each page of their book. They indicated this to me by drawing rectangles round each block of writing on the print-outs and noting where whole pages were to be left blank for illustrations.

For the next part I had to give the main body of the class work that they could attempt fairly independently whilst each child sat at the computer with me, read through their work aloud and then put in any changes they wanted to make. The work could be divided up into 'page loads' simply by pressing the Return key about eight times. I sometimes questioned the use of a word such as 'went' or 'nice' but always allowed the individual to keep their original choice if they wanted to, even if they had been able to come up with an alternative.

I had to position the computer so that I could scan the rest of the class, but the whole thing was really only akin to hearing reading and I felt it to be easily justifiable later when I saw how worthwhile it had been. I must have spent about ten minutes on each child. The children really enjoyed this part. It made them feel that their work was very important. I always try to spend time with each member of the class when we have done some creative writing, but when some of them begin to produce more than a page I find that sometimes I have to rotate the third to two-thirds I actually get round to.

The next evening I printed out the stories with gaps inserted so that the children could cut them up. In fact I had to do a few the next day and much excitement was generated in children seeing their own work coming 'hot off the press'.

I had some large plain exercise books (about A4 size) in my stock cupboard and these lent themselves well to having their staples and centre pages removed to provide the appropriate number of pages for each book. There was more practical maths involved in this than I had anticipated!

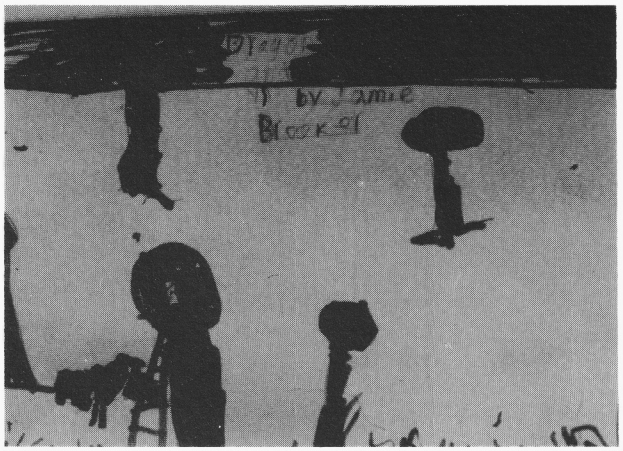
The children worked out how many sides of paper they would need, removed any spare sheets from the middle of the books and cut up their individual print-outs. It was then that I realised that we had a real life ordering exercise on our hands. They each had up to a dozen snippets of their own story to re-order and mount on the pages. The super-organised might mutter that we could have cut them out one at a time, but it would have been much less fun for the children – even if it would have been less nerve-wracking for me.

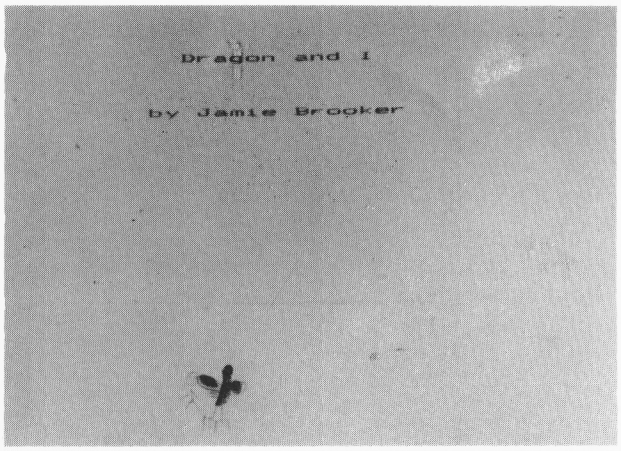
Then there was the serious business of illustration. Perhaps, in retrospect, it might have been fun to use a picture generating program such as *Picture Builder* but you can have too much of a good thing. We discussed whether full colour or pencil sketches were what they wanted, and whether pictures should have frames or not, or form borders round the words, as they had done in some of the books that we had looked at.

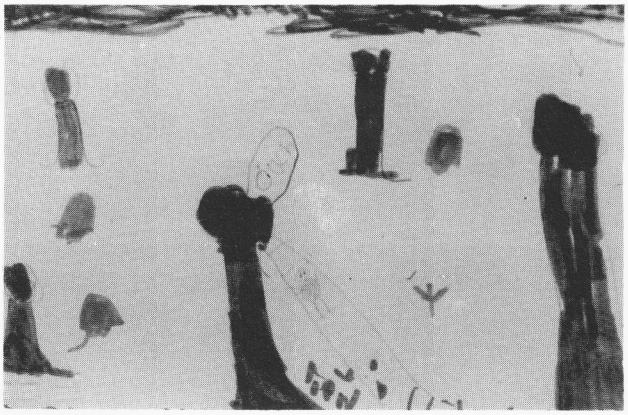
Finally we sewed the books together. I have often found this form of binding more effective than staples with class books and because I was hoping that the children would be motivated to do lots of book-swapping, I knew that (to avoid tears) the books themselves would have to be able to stand up to a fair amount of hard use. They were and they did. The children were very proud of their achievements and there has even been the occasional reappearance at school of the odd one which proves that they have not been quickly forgotten.

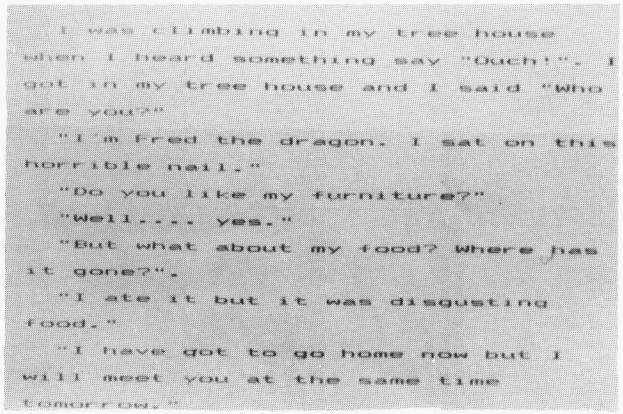
Program details

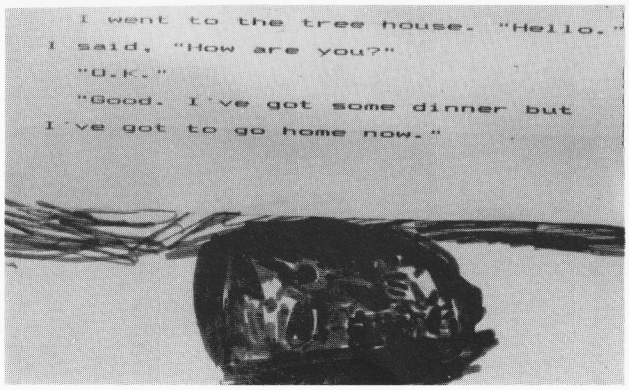
Writer, MEP Primary Project Infant Pack.
Picture Builder, Collinsoft, 8 Grafton Street, London W1X 3LA, or (RML only) MAPE Tape III.

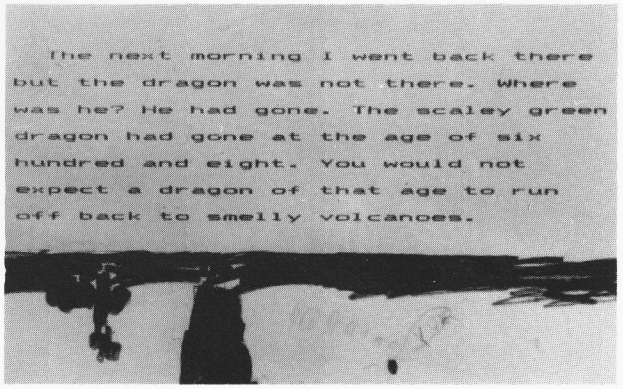


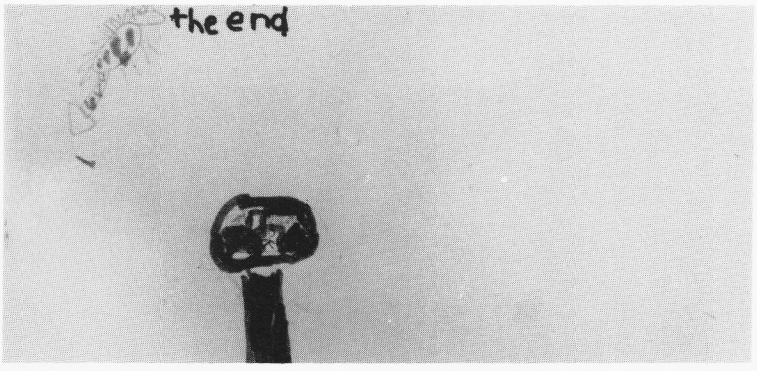

Dragon and I
by Jamie Brooker

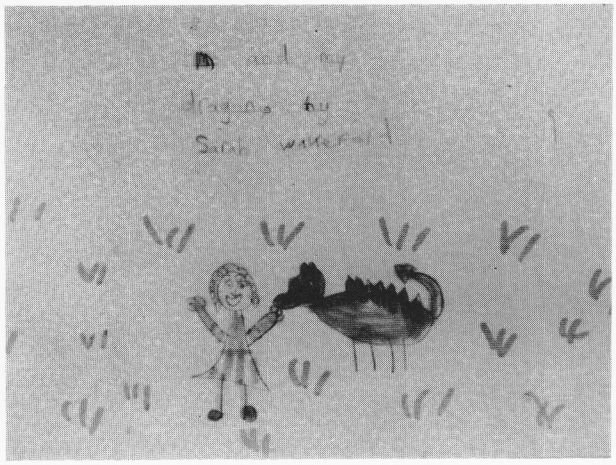


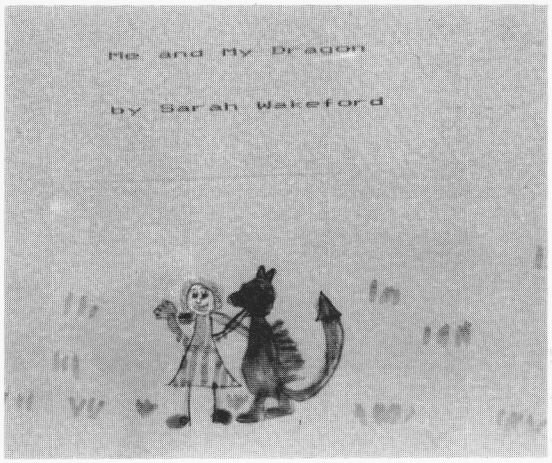

I was climbing in my tree house when I heard something say "Ouch!". I got in my tree house and I said "Who are you?"
"I'm Fred the dragon. I sat on this horrible nail."
"Do you like my furniture?"
"Well.... yes."
"But what about my food? Where has it gone?".
"I ate it but it was disgusting food."
"I have got to go home now but I will meet you at the same time tomorrow."

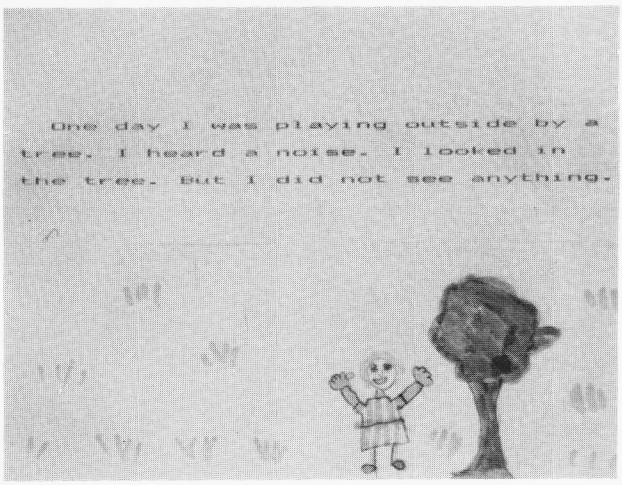

I went to the tree house. "Hello." I said, "How are you?"
"O.K."
"Good. I've got some dinner but I've got to go home now."

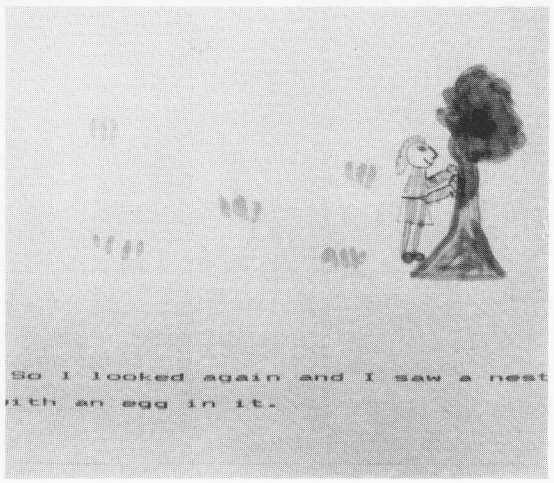

The next morning I went back there but the dragon was not there. Where was he? He had gone. The scaley green dragon had gone at the age of six hundred and eight. You would not expect a dragon of that age to run off back to smelly volcanoes.

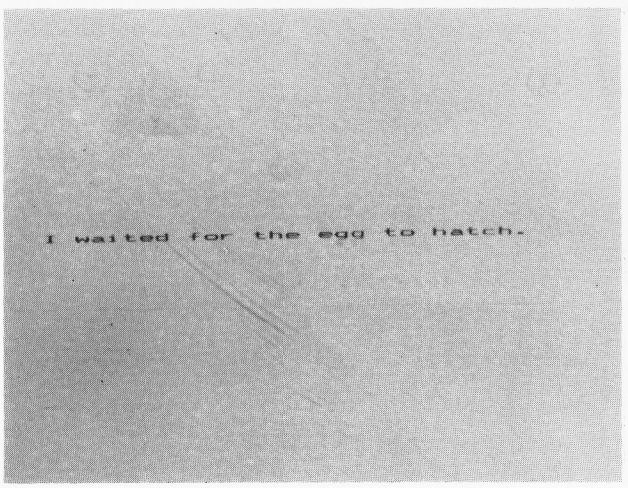

the end

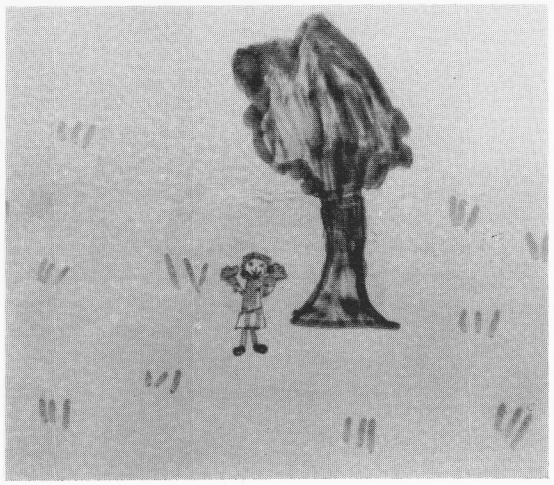


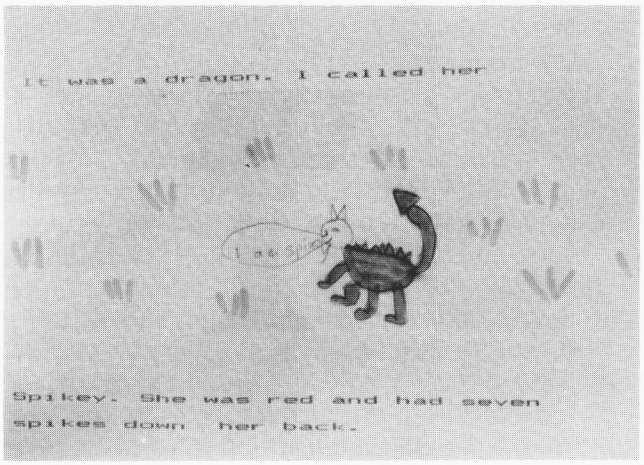

Me and My Dragon
by Sarah Wakeford

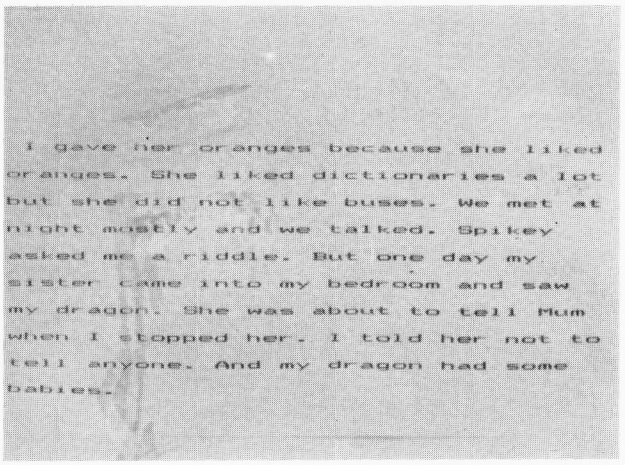

One day I was playing outside by a tree. I heard a noise. I looked in the tree. But I did not see anything.

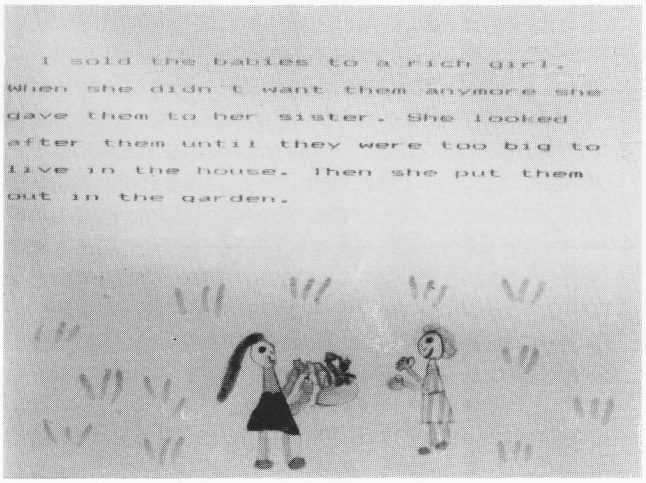

So I looked again and I saw a nest with an egg in it.

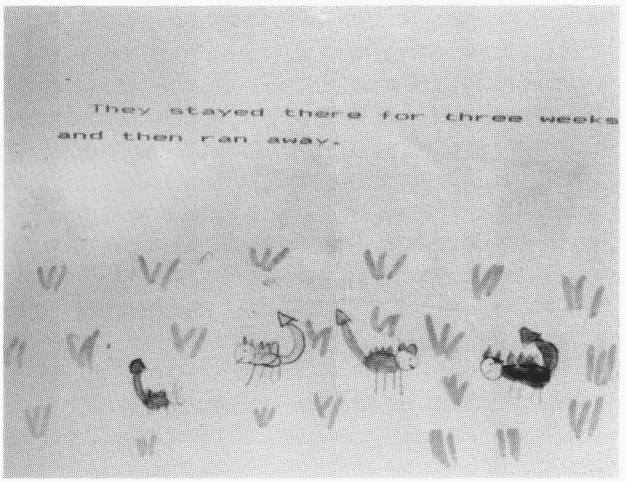

I waited for the egg to hatch.

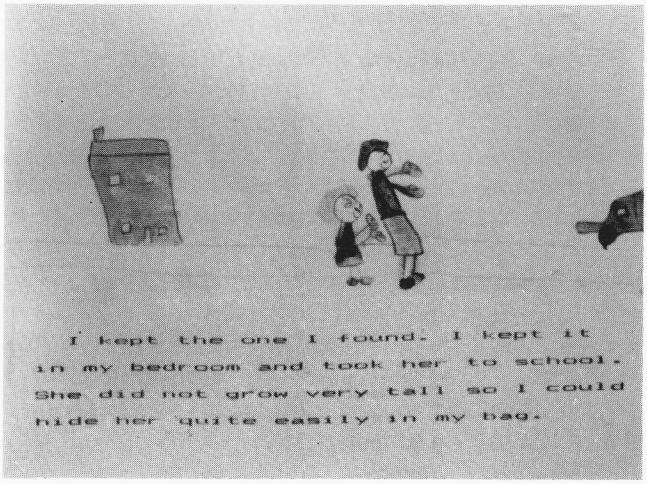


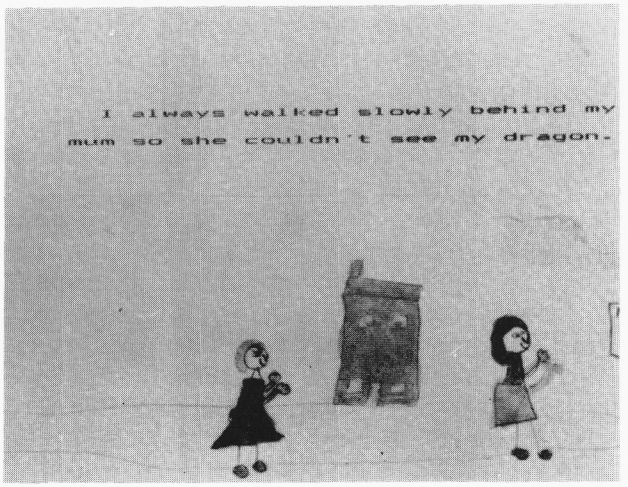

It was a dragon. I called her
Spikey. She was red and had seven
spikes down her back.


I gave her oranges because she liked
oranges. She liked dictionaries a lot
but she did not like buses. We met at
night mostly and we talked. Spikey
asked me a riddle. But one day my
sister came into my bedroom and saw
my dragon. She was about to tell Mum
when I stopped her. I told her not to
tell anyone. And my dragon had some
babies.


I sold the babies to a rich girl.
When she didn't want them anymore she
gave them to her sister. She looked
after them until they were too big to
live in the house. Then she put them
out in the garden.


They stayed there for three weeks
and then ran away.


I kept the one I found. I kept it
in my bedroom and took her to school.
She did not grow very tall so I could
hide her quite easily in my bag.


I always walked slowly behind my
mum so she couldn't see my dragon.

The use of a network system in the primary school

Anne Liddle
Pentland Primary School, Cleveland

During the last 18 months two primary schools in Cleveland have been piloting the use of an Econet system. Pentland Primary School, Billingham is one of the schools taking part in the project and the following is a report reflecting aspects of the development so far, and some of our responses.

It is acknowledged by most primary school teachers, who regularly use microcomputers as a resource, that successful use means a great deal more than being able to control the hardware and allowing children to occasionally try different programs in a designated area at the back of the classroom. Over the last few years teachers have identified a number of microcomputer activities which provide exciting learning situations to facilitate the development of children's communication, thinking, and problem solving skills. Teachers have begun to realise that curriculum provision covering a wide range of areas can be greatly enhanced. The microcomputer can be seen as a powerful resource to aid teaching and learning.

In recent months, as schools have been acquiring additional microcomputers, there has been an increasing awareness of the need to structure the use of the microcomputer and develop school policies for curriculum integration and management. Ultimately, if microcomputers are to be generally accepted as a resource for learning and teaching with its full potential being implemented, schools will have to consider the implications in respect of the existing curriculum provision, classroom management, structure and strategies, staff awareness and expertise, and school development.

Our school has been using microcomputers for the last six years. We received our first one in 1980 and since then, as the number has increased, we have gradually developed many ideas, techniques and principles. Initially all of the micros we used were tape based machines, but, as money from fund raising became available, most were converted to disc or network based machines. The disc machines are used in the lower school area with children aged from 4 to 7+. The rest of the school have the network machines which are controlled through a networked system. There is a micro centrally based in a 'computer' room and the classrooms in the upper school are wired so that a micro can be joined to the network from a point in the classroom. In each classroom the micro can be used as an independently managed system so that teacher and child needs can be met as required. Thus the micro can be identified as a resource which is used on a daily basis, and it is accepted as a tool which supports the classroom teaching provision and children's learning opportunities.

Any resource which is to be frequently used must be reliable, readily accessible, easy and quick to handle, sturdy and safe. Teachers find the loading of programs from disc simple and quick, but discs have to be stored and handled and are very vulnerable and easily spoilt in busy, dusty classrooms. The network system operates with one disc containing a vast range of programs being fed into the main computer. Teachers and children can then select programs via a screen menu shown in their classrooms. Although disc systems are easily operated by many children and most teachers, the classroom network systems are operated by ALL children and teachers. Teachers can confidently encourage children to operate the system. The children can be independent and manage their own resources.

Although disc systems are relatively easy to use they still present problems such as inconsistency of commands to operate programs, use of multi blocks and extensions, leads and disc storage, wear and tear on leads, discs and drives. The network system cuts down on the 'bits and pieces' the teacher has to manage and this can mean fewer breakdowns, easier maintenance, and less frustration. In the classroom the network machine is confidently operated by all teachers, even the nervous and least technically minded, and this positive attitude is reflected in the amount and range of micro experiences given to the children.

Each teacher in the school takes the responsibility for the management of his/her allocated computer. However, out of the total staff of eighteen only two have any real expertise when it comes to helping with technical problems. When the staff were using tape based

machines the problems with program loading and breakdowns were horrific. Machines were out of action for a great deal of the time and staff 'experts' were frequently busy at lunch and mid-morning breaks. Even with the disc based machines technical expertise is in demand, for example, for compiling sets of programs onto discs, setting up menus, standardising loading procedures, checking drives and loading errors. Although the network system is technically more sophisticated, once the main disc of programs has been made, and the system has been made to function, then the daily running is managed mainly by the children (aged 10+ to 11). Any problems are confined mainly to the one computer area, making less demands on the 'experts'.

If there is a real breakdown in the system then help is called in from the LEA's Computer Centre. Although this means that all computers on the network are out of action it does mean that the teachers are not spending vital teaching time trying to find and diagnose the problem.

Although access and reliability are important aspects in the use of the micro, genuine effectiveness is undeniably linked to educational effectiveness. Teachers must assess the educational value of what is being used on the micro; and how it relates to the general educational curriculum provision in the school; where the micro opportunities fit in the identified development framework; and when particular experiences are relevant for each child. To develop teachers' awareness in all of these areas is quite a task, but in our school we have found the use of the network supportive in most of these areas.

Through staff discussion and decisions the programs were categorised. When a teacher switches on the micro he/she sees a menu of three main curriculum areas eg mathematics, language, environmental studies. After a further selection, a menu of learning areas is given, eg (mathematics) . . . investigations, simulations, problem solving etc. When a selection has been made again a new menu of programs is displayed. The adaptability of some programs is evident when they appear in several categories.

The selection process encourages the teacher to consider the following: curriculum support; cross-curriculum approaches and integration; the educational purpose of programs; the balance and relevance of a variety of learning experiences; the suitability and match to needs.

Many of the teachers indentify a core set of programs which they use more frequently than others, but nevertheless the range they have access to means that appropriateness and need can be given real consideration. The range also stimulates the teachers' curiosity and promotes enquiries and consequently the interchange of ideas between staff, which in turn contributes to the breaking down of classroom barriers. It helps to establish programs within a recognisable framework and encourages follow up work which extends the computer experiences.

Teamwork is essential if progression and structure is to be established in a school. Through the use of the network system some uses have been explored which have promoted real team cohesion. The creation of common databases helps children and teachers to sense the power of true communication. 'Weather' and 'Lunch menu' datafiles have been formed and each class takes daily turns to add to them. (This involves taking weather readings and visiting the cook in the kitchen.) The files can then be used by each class for information, discussion, comparison, or as part of a project etc. Other files related to environmental topics are also usefully shared.

The next database we intend to establish will relate to the school library. At the moment the children have great difficulty in selecting the most appropriate books to support their work, especially if they have not quite developed such advanced reading techniques as skimming and scanning etc. We hope to classify the books according to selected topics/headings. The children can then access the lists and choose a topic, the names of the most appropriate books will be shown with relevant chapter/page numbers, and the shelf number. Using this information the children will then go to the library to get the books.

Most of the development through the network has been directed to the curriculum provision, but an area we are beginning to explore, and where there appears to be great potential, is in curriculum management.

Most teachers find that to be constantly aware of the range and structure of learning experiences and to be monitoring the experiences is very challenging. The difficulties revolve around the storing and accessing of the information. Through the network, files relating to curriculum policies, structures and resource materials can be created, giving staff quick and easy access to a common core of valuable information whenever support is needed. Over the last two years our school has been exploring the use of the network for assessment/monitoring purposes. We have focussed on areas in which teachers felt they needed support. Through the network we have a range of programs which help the teachers to monitor children's conceptual development in a range of mathematical and language areas. This facility for closer monitoring has encouraged teachers to scrutinise aims and objectives more clearly and has, in many cases, lead to more

effective teaching.

In essence, the value of the network system can be quantified within the total educational benefit that the computer provides. The network enhances the educational benefits of ordinary computer systems but in addition it can focus on classroom management aspects which would be very difficult to pursue and achieve with other systems. Although our developments have been over a relatively short period of time we have received sufficient results and observed a number of effects which encourage us to continue with the work. The indications are that such developments could result in enhancement of existing curriculum practices, and even bring entirely new and exciting opportunities for Primary teachers and their children.

Electronic Mail and Local Databases: their contribution to Primary Education in Derbyshire.

Pamela Winn
Head of Derbyshire Educational Software Centre

Graham Atkinson (Merlin)
Advisory Teacher for Computers in Primary Schools

Ian Webster
Advisory Teacher for Computers in Primary Schools

From the outset, SJ Bacon (the adviser for Computers in Education in Derbyshire) and we (his advisory teachers) saw the education potential of an electronic mail system for schools which included the facility for a local database. All the secondary schools in Derbyshire were encouraged to take out a subscription to the Times Network and a modem was supplied by the authority. When, after eighteen months of encouraging work, the Department of Trade and Industry offered modems to LEAs free of charge it opened the way for a number of primary and special schools to join in the project. Eighty such schools have taken up the option to date.

The possibility of a hundred or more primary schools joining the secondary users of the system prompted much heart searching from the advisory team. How could our general aims for the use of computers in the primary classroom be applied to the use of an electronic mail system? Using the system would certainly encourage children to see computers as every day devices and develop an awareness of what the technology of today can do both inside and outside the classroom. The local database was seen as a way of extending the children's opportunities for problem solving, investigating situations, communicating with other children or personalities, and applying and practising skills. The six primary schools which constituted a project group recommended that a separate section of the database was needed for primary schools but as with the secondary section *Datum*, it should not be labelled as the primary database as this might restrict secondary pupils from using it and so *Keyhole* was born.

Keyhole

Keyhole has developed as an interactive, cross-curricular database/magazine aimed mainly at primary school children. However, no limits or conditions have been imposed on its content, so that *Keyhole* is appropriate for a much wider audience.

All the contributions in *Keyhole* are from children and there are no items from teachers at all; the motto has become 'For the children by the children'. The items received from the children are not edited by the *Keyhole* managers in any way, as the emphasis is firmly upon motivating the children to be creative, and upon stimulating problem solving and investigative activities, rather than on spelling, punctuation and correct grammar. In any case, as the contributors are well aware of the fact that their work will be on show to a truly international audience, they are fairly keen to re-draft and edit it themselves and this encourages the use of word processors such as *Writer*.

One of the main considerations, and a large part of the philosophy behind *Keyhole*, is that very little of the work involved should actually be

done 'on line'. In many of the sections, children are guided towards an activity away from the computer altogether. Such an activity may well be part of the normal primary curriculum or perhaps a new idea which is particularly suited to this new form of communication. In most areas, the work will usually involve the children in creating a word processed document, either as individuals or groups, which is then sent to *Keyhole* via the county's contributions box. On other occasions, the end product would be a forty column viewdata type screen.

The idea of interactivity is also strongly encouraged, communications with schools in other parts of the county, the country and the world! To meet this aim many of the activities in *Keyhole* are set up so that the contributions associated with the activity will not be sent directly to *Keyhole* but will be sent to another school as a response to a problem, task or idea suggested by that school. The network of contacts which are generated by such activities usually grows at a smart pace! These links have led to the exchange of information between schools and children in very different environments.

Keyhole now contains fifteen major categories, ranging from book reviews, a poetry corner and a picture gallery, to environmental enquiry work, mathematical puzzles, school visit reports and stimuli for problem solving and setting. The project is still in its infancy but continues to evolve rapidly, and will undoubtedly adapt to the ever-changing needs of the users.

Resources

Early in the development of the Derbyshire local database indications were that a number of resources were needed to make it easy for the county's schools to contribute. Children needed to be able to write their letters, stories, or articles away from the machine at their own pace, the teachers needed to be able to collect the contributions from the children and send them quickly and easily saving time and telephone charges. Viewdata screens needed to be designed and edited with ease and transmitted without an intimate knowledge of the network commands. To meet this need a booklet and two items of software, *Off-line Letter Writer* and *Octave*, a viewdata editor, were developed.

The *Introducing Electronic Mail* booklet has proved its worth over and over again, in schools and colleges both in Derbyshire and throughout the country. It covers all aspects of electronic mail with precise instructions and clear examples.

Off Line Letter Writer allows children to prepare mail for transmission via electronic mail when off line. The software duplicates the prompts as if they were on line and saves the mail item to a text file on the disc. Mail items can be written at varying times, the software adds items to the test file until you have a batch ready to transmit. The software transfers the batched mail items to a Post file prior to transmission, and leaves the text file ready to accept new mail items. All the commands needed in file transmission are embedded in the software making the operation extremely simple.

Octave is a Viewdata editor written especially for use with Derbyshire's local databases and it contains many useful features not normally found in programs of this type. For example moving lines, duplicating right and down, loading and saving windows and many more facilities. The program handles the up-loading of viewdata screens to the local database making the process extremely simple by adding all the commands necessary for transmission. It also allows you to download an existing screen, edit it and then retransmit the new version.

Without these tools and many others the development of *Keyhole* and the use of electronic mail would have been that much more difficult and perhaps impossible for the children and teachers of Derbyshire. Many of the facilities have evolved with the needs of the users, *Octave*, for instance, proved difficult for the younger child to use and this necessitated the inclusion of a concept keyboard option. Many of our schools use *Writer* as a word processor and this necessitated the development of a utility to convert *Writer* files to an easily transmitted format. Undoubtedly there will be many more developments needed as teachers and children alike conceive more and more ways of participating in the use of *Keyhole* and the Electronic Mail facility.

Unexpected Successes

The introduction of TTNS in one Derbyshire school happened to coincide with a class project on King Arthur and the Arthurian legend. A week earlier the class teacher had sent a message to the school mailbox for her class:-

> 'Greetings: Knights Of The Round Table
> The mystical power of the round table has filtered through to our inner sanctuary where the keepers of the pledge of Arthur still rest. We hear of your grand performance in keeping alive our story and wish you well. Remember, no-one knows what happened to Arthur, but perhaps one day he may find it necessary to return. In the meantime each of

you is entrusted with the responsibility of keeping alive the promises made by the knights in the fellowship.
Yours in the fellowship,
Merlin'

The surprise of receiving such a letter was enormous and immediately threw up a lively discussion. At the end of much how, where, when, why, the children asked if it was possible to write back. The need for meaningful and exciting written work was established!

An advisory teacher from the Derbyshire Software Centre was roped in to the plot and quickly sent:-

'Dear Children,
I have now placed a spell on the computer. When you wish to write to me, simply type your letters and send them to Merlin. I am anxious to hear from you. . . . Make great haste, Little Ones!
Merlin'

This second letter served as another stimulus and demonstrated the immediacy of electronic mail. The deception about Merlin was continued over the next couple of weeks and led to a deluge of mail for the Merlin of the Software Centre. The time arrived when the questions became too specific that Merlin ran out of answers and made a visit to the school, heavily disguised as an advisory teacher! After seeing the displays of children's work and checking on what material was available, the next item from Merlin read: –

'In answer to your questions. . .
When problems puzzle and confuse
I have to use a book.
If you want the answers
You too must read and look.
Merlin'

That evening the book corner was empty. Merlin and TTNS had struck again! A huge amount of work which spanned many areas of the curriculum was generated by the use of TTNS and Merlin.

The story continued when the class visited Derby Industrial Museum and Merlin received the following lovely letter:-

'Dear Merlin,
We went to the industrial museum and saw your engine. On the front of the engine there was a gold thing and I rubbed it because it was dusty.'

The reply had a similar effect on the book corner:-

'How nice to hear your news. I have to admit that the engine is not really mine. It was used in Spitfires and made by Rolls Royce. . .'

This led to conventional letters being sent to Rolls Royce, and much to the childrens delight, an information pack being sent back.

The culmination of this particular story came after about two and a half months with all the children standing in the playground, eyes skyward, awaiting the flypast of a Spitfire (part of the recent celebration of the Spitfire's 50th birthday). It is not difficult to imagine the delight of the children, the staff and Merlin (still disguised) when the aircraft arrived and swept low over the school.

The Anthony Bek Experience

Anthony Bek Primary School is located in the very north-east corner of the county. It has approximately 180 children on roll and has a 30 place nursery unit attached. The headteacher, Brian Richards, has developed a most interesting and exciting use of electronic mail, with the help of his very good friend, Mike Matson (the brains behind 4Mation software). Mike has his own mailbox on the system, and actually lives in another part of the country altogether, although distance is, of course, quite irrelevant to any use of electronic mail.

Whilst tossing ideas at each other, the notion that electronic mail was the perfect medium for a 'live' adventure game began to take shape. With Mike's amazingly fertile imagination and Brian's expertise in using microcomputers to best advantage in the primary classroom, the notion quickly blossomed into a working model.

Briefly, the idea was for Mike to be a person who, together with some friends, found himself in a somewhat uncomfortable situation deep within a system of caves and caverns, and needed help from elsewhere to get out of that situation. That help was to come from a class of upper juniors at Anthony Bek.

This description of the adventure game is necessarily ambiguous, since the whole essence of using electronic mail is that the situations in which the explorers find themselves can change from day to day, depending upon the reactions and advice from the participating children. For example, the characters in the adventure may come up against a problem which can be solved using skills the children have recently developed in other work, rather than using skills specifically developed for solving the problem. A nice demonstration of this was when the children had completed some work connected with a local stream. Pond skaters had been examined, and it was discovered that in order to move across the surface of the water the factors of surface tension and the spreading of a weight over a wide area were utilised. Once this piece of work had been

relayed to Mike by Brian, a similar problem cropped up in the adventure. The adventurers had to cross a large pit filled with warm snow, but they found that if they attempted to walk over the snow, they would quickly sink. Eventually, it was discovered that a number of large flat objects were lying close by. Might these help to spread the load over a large area? Once this scenario had been given to the class, they set about working out how to use the flat objects. This soon led to them experimenting with PE mats in the hall!

Daily communication buzzes between Mike and the class, and it is fair to say that Mike doesn't really know how the adventure is going to develop until the latest message is received from the school. Between them, Brian, Mike and Brian's deputy head, whose class is the one involved in the project, were quite prepared for the children to become tired of the whole idea, but at the time of writing, the adventure is still moving on apace. It is planned for Brian to document the entire experience so that others may model similar work upon it.

Clearly, not every teacher has a 'Mike Matson' as a friend! Brian and Mike would no doubt agree that an awful lot of time is necessary for the 'adventurer' to produce all the different scenarios and set the problems to be solved, and how many teachers have that much time to spare? But what if Mike's part was taken by a class in another school? Or if the somewhat difficult task of setting the problems was too hard for a primary class, how about setting up links with a secondary school? If this happened, then both sets of participants would be heavily involved in some pretty exciting and imaginative work.

If you were able to see the superb displays of work decorating Anthony Bek's corridors, and hear the children discuss the current thorny problem, you would be in no doubt whatsoever that electronic mail has added a huge new dimension to the 'adventure game'. Quite simply, the new dimension is that of direct communication between the characters in the adventure and the 'players', which is virtually impossible, on this scale, in any other way.

The future

What the future holds for the use of Electronic Communication we cannot say but in Derbyshire we are sure of the educational value and the, as yet unexploited, potential of the medium.

Prestel comes to School

K. Whiting
Robinsons End Middle School, Warwickshire

In this article I shall attempt to outline the *use* that I have made of Prestel and the subsequent problems experienced, rather than *how* to use it. (Which is really the subject of a day's course.) A glossary is included at the end as terminology can be a disincentive for tackling the subject. It is worth remembering that having a modem implies commitment.

Initially, the use of Prestel and similar databases in primary schools must be put into perspective. They should be there as another resource from which children are able to 'find out', in the same way as we use books, newspaper, maps, people and television in our everyday teaching. Consequently, I chose the library as the base for our modem.

Last March my school received a letter informing us that, as a middle school, we were entitled to a modem under the DTI 'Modem for schools offer'. Although we only have one BBC computer, what teacher can refuse an offer worth £200? We could also have six months' unlimited use of Prestel for £40 i.e. the connection charge of 4p a minute was waived. The letter also described a modem, for the uninitiated, as follows:- 'A modulator/ demodulator is a device which enables communications between computers over the Public Switched Network.' Luckily, I had attended an MEP course and knew the jargon.

After accepting the offer, Telecom had to be booked for the installation of an additional telephone. Although this is ideal, it does incur a £90 fitting charge as well as a continuing quarterly rental payable by the school. We had no school fund money left and hopelessly inadequate capitation so a cheaper system was required. This was achieved by having a switch put in the secretary's room and an extension socket in the library, about 40m away (see diagram). This cost just £48 and has the advantages of no extra rental and additional

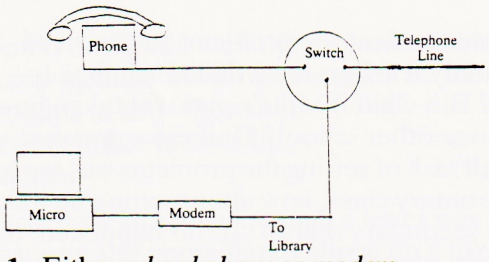


Fig. 1. Either *school phone* or *modem.*

phone expenses are paid for by the county as computer use of the phone is indistinguishable from ordinary use! As the phone cannot be used at the same time as the modem, it is important to have this switch in an easily accessible position in the event of emergencies.

Summary of events

10th March	Details of DTI offer received and accepted.
Late March	Telecom booked.
	Unlimited use of Prestel starts.
Mid April	Prestel application form received and completed.
Mid May	Telecom fit extension and switch.
	Day course and collection of modem.
	Apply for software to run modem.
Mid June	Software received and personalised.
	Sunday morning in school playing with a new toy!
	Use Prestel with children.
11th July	End of term.
September	Use Prestel again with children.
27th Sept	Prestel offer finishes.
Mid Oct	Prestel Directory received!

To summarise, during 26 weeks of unlimited use, it could only be used with children for seven weeks.

During the Summer Term eight children were to become roving reporters, with unlimited finance, and study a news item. The tasks were set out as below:

1. Use teletext to find an international news story. The bombs in Spain and the World Cup were their chosen stories. They split into two groups of four according to their interests. I was pleasantly surprised to find that both groups were mixed!
2. Air flights to be booked and airline, prices and times noted. International time difference must be considered.
3. Find out details of the country concerned – latest rate of exchange, medical information, capital, population, weather reports etc.
4. If special warm or cool clothing is required after checking the weather, then use shopping catalogues to find out prices.
5. Can you find out any details of internal travel. How will you travel from the airport? Can you find out details of car hire or train times?
6. Write a report on *Front Page.*

Time was very much against us, with Sports Day and secondary school visits, so that despite missing assemblies, they were unable to complete the final report. A variety of resources were used and I was delighted with the way in which the children divided the tasks amongst themselves without motivation from me. Yes, I was fortunate in having a good group. Teletext was used as much as Prestel so if you rent a TV without this facility it is worth investigating. As a matter of interest, our old piano key Radio Rentals video was a higher rental than a more modern version, perhaps the same is true for TVs. At the end of the Summer Term I was pleased to be able to send eight children to secondary schools with a reasonable expertise in using Prestel, even though *they* are not all using it yet!

During the Autumn Term I decided to change the emphasis from 'using Prestel for information' to 'the uses of Prestel'. This was inspired partly due to the fact that a number of these children had not used computers much in the previous year. The theme for my language group was 'Sources of Information' so we looked at the implications of such technology. There were only ten in this group but the work was more directed. With more time, before the Prestel subscription ran out, specific individual tasks could have been set. One child wrote a humorous letter asking the Prestel computer to spell the name of our school correctly which I must admit I had not bothered to do. This was corrected by the next week but the group took quite a bit of convincing that a secretary made the alteration and not THE COMPUTER. Maybe I failed somewhere!

To conclude, the children and I enjoyed using our computer for accessing Prestel but why on earth were we offered six months unlimited use so late and coinciding with the long holidays? We did not renew our subscription because I cannot, at the moment, justify the expense when we desperately need more computers. Where next with our modem? There are many free Bulletin Board type databases around the country of varying quality to try.

Should Prestel, or limited access of it, be free to schools? Should the Government be seeking sponsorship for such a scheme? Will NERIS fill this gap? The only information I have is that it stands for National Educational Resource Information Service, uses a Sperry mainframe at the Open University and was supposed to come on line in January 1987. A subsidised system using local phone costs is, I believe, urgently required if the smaller schools are to be able to use viewdata as a resource.

MIKE CROW NEWS

We're beginning this latest edition of Junior Mike Crow with some news sent to us about two of our competition winners down in Wales, Faye Watkins and Anna Whittle. So pleased were they with their *exclusive* MAPE T-shirts that they arranged for their local paper, the *South Wales Argus* to be there at the presentation. Lucky Faye also was given the day off from her new school, which she started last September, to go back to Raglan Junior to collect her prize.

Don't forget, if you or your school is involved in anything you think the readers of Junior Mike Crow might be interested in, just drop us a line (through the mail or by pigeon post!!). And if you send us pictures from your local newspaper, please can we have an original photo not a photocopy.

Photo: Faye Watkins (centre) and Anna Whittle, winners of a Junior MAPE competition, being presented with their prizes by Patrick Drewett. The girls were pupils at Raglan Junior School when they entered the competition.
(Photograph by courtesy of the South Wales Argus)

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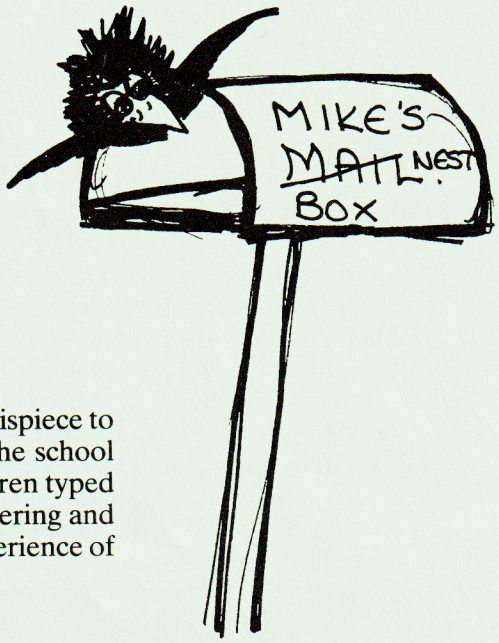
REMINDERREMINDERREMINDERREMINDERREMINDERREMINDERREMINDERREMINDER

Have you sent off your entries for our last competition yet???
We have extended the deadline for your entries to 1st JULY!!!

MIKE CROW HAS LANDED

Who is he? Where did he come from? What does he get up to when not appearing on our pages? (eg. Is it true his favourite spring flower is the 'crow-cus'?)

Can you create a full-page cartoon story of his adventures? Remember there are four fantastic prizes, donated by **Cambridge University Press**, for the lucky winners, *Image, Hunt, Tile Mosaic* and *Doodle*.



As we said before we always like to hear what you are getting up to at school and in Mike's Mail Box last term we received this letter from Mrs Susan Nye who teaches at Manor Field C.P. School, Burgess Hill, Sussex.

Dear Charles and Di,

My class were very interested in the article in 'Junior MAPE' (*MICRO-SCOPE 19*) regarding the Sylvan School first year brochure. They were so inspired that a group of them decided to produce a school brochure for our school and we had it ring bound professionally.

This article, on the history of the school, formed the frontispiece to the brochure and represents several weeks research into the school log books, plus interviews with teachers. The group of children typed it up themselves into the computer and spent some time altering and re-arranging the text before printing it. It was their first experience of using the *Wordwise Plus* program.

I do hope you enjoy reading it.

Yours sincerely
Mrs S Nye

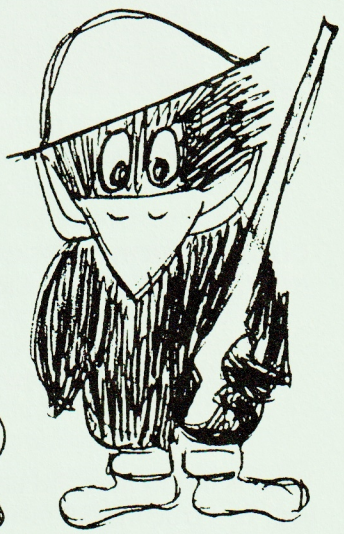
Well, we very much enjoyed reading it and we also had a few good laughs at some of the things the pupils got up to in the 90 years the school has been open. The article is five pages long, much too long to print in the pages of Junior Mike Crow, so we have selected just a few of the fascinating facts our young researchers have unearthed. And those researchers were:

Gary Newman	aged 11	Jenni Austin	aged 10
Glen Wanless	aged 11	Alison McKnespiey	aged 10
Andrew Gasson	aged 11	Michelle Steers	aged 10

T-shirts and badges are on their way to them.

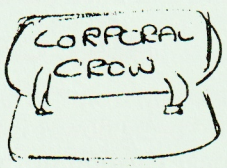
THE HISTORY OF MANOR ROAD C.P. SCHOOL

'The London Road Evening School was opened in 1897 on October 6th, for evening classes. There were 40 pupils attending at this point. They sometimes had lantern lectures, which was an early form of film projection. The subjects studied were: drawing, arithmetic handwriting, composition, history, reading, geography and book-keeping.



'The buildings were lit with gas lamps. We know this, as it is mentioned that a gas meter froze on January 15th 1903 so the classrooms could not be lighted.'

'During the years from 1900–1920, the school was shut down on many occasions, due to the outbreak of illnesses amongst the pupils, such as: Diptheria, Ringworm, Scabies, Measles, Mumps, Whooping Cough, Scarlet Fever, Chicken Pox and Influenza.'



'On November 9th 1914, Mr John Platt, a former pupil who had emigrated to Fort William in Canada, returned to visit the school on his way to the front line to join the Canadian troops in the First World War.'

'September 13th 1918, the whole school went blackberrying and collected 146 lbs.'

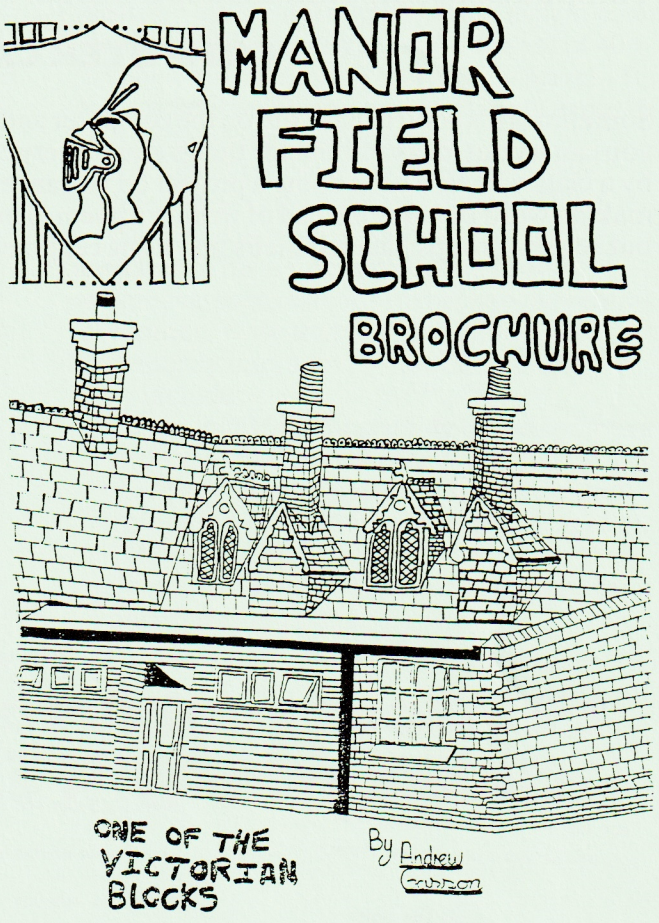
'On February 14th 1929, the entire school heating system exploded, and the school was shut down until March 4th for repair work.'

'On November 24th 1929, milk for children was introduced in school for the first time. From December 2nd hot cocoa was supplied to those who stayed for lunch.'

'On September 4th 1940 air raid alarms began in earnest, causing much destruction to school lessons until December 20th.'

'The punishment for bad behaviour in those days (1920s) was to be beaten across the hand. One incident is recorded where a boy who had cut his own hair, refused to hold his hand out for the punishment, and then fell to the floor and lay there kicking his legs. For this he received a beating across the backside instead. Another boy had his ears 'boxed'.

'On September 26th 1950 a boy stuck a skewer through his hand trying to make a hole through a conker to put it on a string.'



Some things never change!! There were many other entries too, about school outings, school plays, teachers coming and going, new P.E. apparatus, new buildings and lots, lots more.

All this gave us an idea for our next competition/assignment.

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OUR SCHOOL PAST AND PRESENT

We would like you to do some research on your school; it could be about the history of your school or an article about what it is like today. It could be an article, a brochure (for parents or new pupils), a newspaper, interviews with past pupils, dinner ladies, caretakers . . . or the sort of things you think the young researchers of 2010 might want to know about the daily life of your school.

rewardsrewardsrewardsrewardsREWARDSrewardsrewardsrewardsrewards

To make all that effort even more worthwhile, **Tedimen Software** have very generously donated several copies of their highly successful wordprocessing package *Folio*.

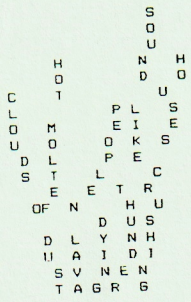
Rules

1 *Schools can send in as many entries as they wish.*
2 *All entries* must *be printed in BLACK, drawings in black felt-tip pen.*
3 *All entries must have clearly written on them* in capitals *the name of your class, the name of your teacher, the name and address of your school, and the school's MAPE membership number (if known).*
4 *Sorry — NO ENTRIES CAN BE RETURNED.*
5 *Entries for the competition must arrive no later than 1st August 1987 and should be addressed to:*
MAPE Competitions, Diane Wailing,
Sylvan High School, Maberley Road, London SE19 2JL.

competitioncompetitioncompCOMPETITIONcompetitioncompetitioncomp

COMPUTER CALLIGRAMS

Sometimes it's good to have fun on the computer and do something different. Using a wordprocessor you can try out ideas and change things around very easily. These computer calligrams were created by a class who had been doing a project on volcanoes and thought they might like to have a go at making word pictures instead of writing a poem. The first ones were typed straight on to the screen but several groups planned theirs first using centimeter square paper.



IT ERUPTS

LAVA FLOWING

DESTROYING HOUSES

THE VOLCANOES GLOWING

MOLTEN LAVA KILLING THINGS

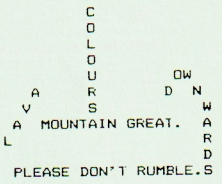
HE IS PROVING WHO'S TO BE KING

BUT NOW HE'S DYING.CRYING.DYING

AND NOW HE HAS DIED OUT DEFINITELY

BY

JULIAN JONES



PLEASE DON'T RUMBLE.S

PEOPLE SCREAM FOR HELP.

EUERYTHINGS COMING DOWN.

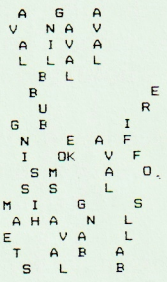
TORRENTS OF RED HOT LAUA.

THE LAUA IS GETTING FASTER.

SLOWLY THE STREAMS GROW AND SPREAD AROUND.

THE LAVA TURNS TO GREY ROCK AND COOLS DOWN.

BY GENINE BRANCH.



MOLTEN ROCK

LAVA FLOWING

OUT OF A VOLCANO

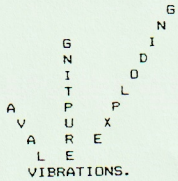
AND KILLING AND DYING

BURNING THINGS THAT ARE IN SIGHT

AND KNOCKING DOWN WITH ALL ITS MIGHT

SMALL QUIET VILLAGES LOSE THIER HOMES

SO PEOPLE DIE AND ALL THATS LEFT ARE BONES



VIBRATIONS.

GETTING STRONGER.

STARTING TO RUMBLE.

RUMBLING VERY LOUD.

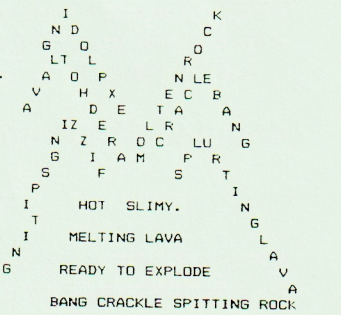
GETTING LOUDER AND LOUDER.

ITS GOING TO BURST OPEN.

THE VOLCANO HAS ERUPTED NOW.

RED HOT LAVA SPILLS FROM THE VOLCANO.

BY ANDREW SMITH.



HOT SLIMY.

MELTING LAVA

READY TO EXPLODE

BANG CRACKLE SPITTING ROCK

SPLURTING OUT SPITTING UP WHOSH

BOILING HOT LAVA POURING OUT

PEOPLE WORSHIPPING A VOLCANO

NOW ITS SILENT AS QUIET AS CAN BE.

BY

LOUISE SALVI.

Now what can you come up with?? We have several more copies of *Folio* (once again donated by **Tedimen Software**) to award to the most imaginative or the most unusual computer calligrams which reach us by 1st August (full competition rules on page 3).

That's it for this year. We look forward to hearing from you, so please keep the letters and the entries coming.

Oh yes, from us, Charles and Di – not of course forgetting Mike Crow – enjoy your summer holidays and see you next year.

GLOSSARY

Modem The abbreviation for modulator which encodes your computer data for transmission along telephone lines to a central computer and demodulator which decodes incoming data to be displayed on screen.

Communication Technology The modern methods of transmission of computer data.

Information Handling The collection, storage and retrieval of information.

Information Transformation The manipulation of information and putting it into simpler form.

Information Technology The generation, storage, organisation, retrieval and communication of information and its subsequent use. This also includes word processing, robotics and computer literacy.

Videotex This is information from distant computers, displayed in a standard format of 40 x 26 lines with 7 colours, on your TV screen. It has updatable information and is easy to use. It can be telecommunicated by:–

TV signal (teletext) eg. Ceefax, Oracle
telephone (viewdata) eg. Prestel, TTNS
cable (cabletex) eg. Skytex.

Viewdata This is interactive, like Prestel, where messages can be sent back to the central computer. Note that not all databases are necessarily interactive. Viewdata facilities may include:–

Electronic Mail; for sending to and receiving messages from other users,
Gateway; communication, via the central computer, with other computers such as the OU computer,
Teletransactions; where one can shop, bank and make bookings.

Educational uses of video recorders and video cameras with computers

Dr Mike Wald
Senior Lecturer in Educational Computing, La Saint Union College of HE, Southampton

There has been much written about the 'interactive' video disc in education, particularly in connection with the Domesday project. Without doubt this will be an important and costly educational resource but it will *not* be possible for children to record their own information and pictures on discs.

For this, the 'old' technology of video recorders and cameras are the only option. All schools have video recorders and access to video cameras and so no further expense is required. Although it is possible to interface video recorders with computers to make them 'interactive' this is not necessary in order to make good use of videos. All that is required is to plug the TV output lead from the computer into the aerial input socket of the video. (A better quality picture can be obtained by using the video output of the computer but a link must be made inside the BBC computer to obtain a colour output.) Anything that the computer can dislay on a TV screen can then be recorded on a video recorder.

It is possible to make up videos with a mixture of computer screens, camera input, and input from off-air TV programs. Any domestic video recorder will suffice, but insert and dubbing facilities give a more professional result. The use of a 'SLOMO' to freeze frames or slow down the screen motion gives even more flexibility and makes videoing computer animation easier.

Once an understanding of these simple techniques is acquired, the possible uses are only limited by the teachers' and childrens' imaginations!

Some tried and tested examples (demonstrated at the Easter '86 MAPE conference) are . . .

Making up animated video stories using computer animation (e.g. *Podd, Pazazz, Magic Mushrooms, Cartoon* or screens from arcade games, adventure games or even off-air T.V. programs).These can include 'subtitles' as in silent movies using word processed screens, a dubbed in commentary as well as inserts of children, pictures or places using a camera. Children can therefore 'interact' with computer characters; for example they could dance with Podd and tell him what to do or even (for those 'poddophobes' among you) where to go! Therefore, the video recorder allows complete multi-media productions which integrate conventional creative activities with computer based work. This encourages both children and teachers to view the computer as another media or resource for creative work. It's worth a particular project being evaluated on merit

rather than novelty value. (For example; although computer graphics provide many creative possibilities they cannot compete with the range of subtlety of colour of conventional art media).

Video digitisers

The addition of a video digitiser to convert any TV or video image into computer screens allows for much scope in image processing. Programs such as *Image* or *Pagemaker* allow the integration of pictures and text for illustrated stories and articles. These can range from simple pictures to go with infant children's writing to the production of newspapers or manipulated graphic images (eg adverts) for 'media studies' A 'lower tech' but simpler method, to integrate images and text, is just to glue printed out digitised pictures onto paper with the text written or printed on it and photocopy the results.

For those readers who have not seen a digitised video picture on a school micro it is important to point out that they are not 'high quality photos' as for instance in Mode 2 on the BBC micro, they can consist of up to only eight different 'grey levels' (shades from white to black). These shades appear as the eight 'colours' on a colour monitor but print out on a black and white printer (and show up on a black and white monitor TV) as a true black and white picture. The quality of these pictures can provide much discussion and food for thought on a wide range of Information Technology and Artificial Intelligence topics such as memory requirements of graphic images and human and machine recognition of visual images (how do we recognise people from cartoon or even silhouette outlines!)

Technical Information and addresses

(Contact Suppliers for current prices)

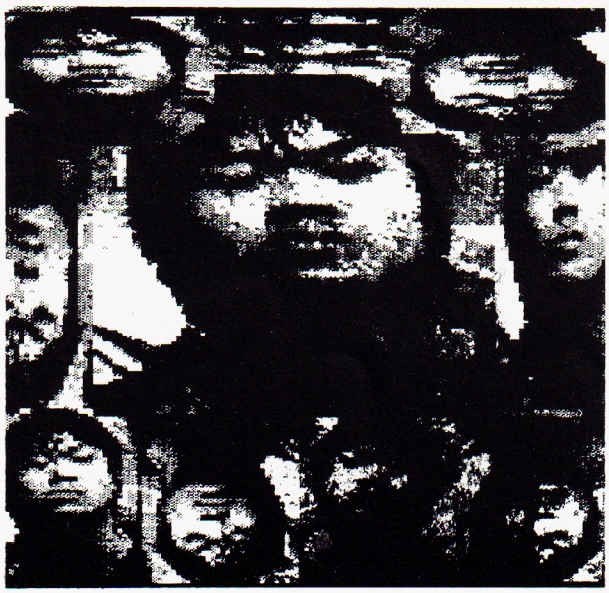
SLOMO micro speed controller
Nidd Valley Micro Products Ltd
Stepping Stones House, Thistle Hill
Knaresborough, North Yorkshire HG5 8JW

Video digitisers
Watford Electronics (cheapest but ROM based)
Jessa House, 250 Lower High Street, Watford
Educational Electronics (no ROM required)
28 Lake Street, Leighton Buzzard,
Beds LU7 8RX

Text and Image processing software (BBC)
AMX *Pagemaker*
Advanced Memory Systems Ltd
Green Lane, Appleton, Warrington WA4 5NG
A 'two ROM' based complex text and image processing package using the BBC micro's high resolution black and white Mode 0; video images must be served using software provided by the digitiser manufacturer and then loaded into *Pagemaker*.

Image
Cambridge Micro Software
Cambridge University Press
The Edinburgh Building, Shaftesbury Road,
Cambridge CB2 2RU
A simple to use but flexible disc based text and image processing package which uses the BBC micro's 8 colour medium resolution Mode 2 and can be used with most input devices and all ages and abilities. Video images can be captured, manipulated and printed directly from within the program.

Below: Pictures produced using the program *Image* and a video digitiser.



A Turtle Map of the Crystal Forest

Les Watson
College of St Paul and St Mary, Cheltenham

The work described in this article took place with a class of 19 eight-year-old children at Randwick Primary school near Stroud, Glos. The children had been working on a 'space' project with their class teacher (and Headmaster) Bill Tocknell. I had visited the class on several occasions as part of an investigation into the use of micros in the primary school, and one of the activities that I had observed was the use of the adventure program *Flowers of Crystal*. The children had been working on the program in small groups (mainly in threes) and they had followed this up with some of the art activities suggested in the teacher's book accompanying the program. I usually observed the class on a Friday and Bill asked if I had any ideas for maths work based on the program, as Friday had some time allocated to maths. I had a vague idea that something might be done concerning the Forest in the adventure using co-ordinates as a basis, and this could have a double benefit as the children were having some difficulty with this part of the program (they had not yet been given the forest grid provided in the adventure package). The idea to use the turtle came to me whilst out jogging at the weekend!

The Plan

My idea was to use the turtle to explore the forest for us by moving it North, South, East and West. I prepared the following simple programs in *Dart*:–

```
BUILD NORTH
FORWARD 90

BUILD SOUTH
BACKWARD 90    (90 is about the diameter
  of the turtle)

BUILD EAST
RIGHT 90
FORWARD 90
LEFT 90    (both east & west allow the turtle
  to reset to north each time)

BUILD WEST
LEFT 90
FORWARD 90
RIGHT 90
```

I also made sure that I knew my way around the Crystal Forest by consulting the teacher's guide!

Location of Forest Hazards

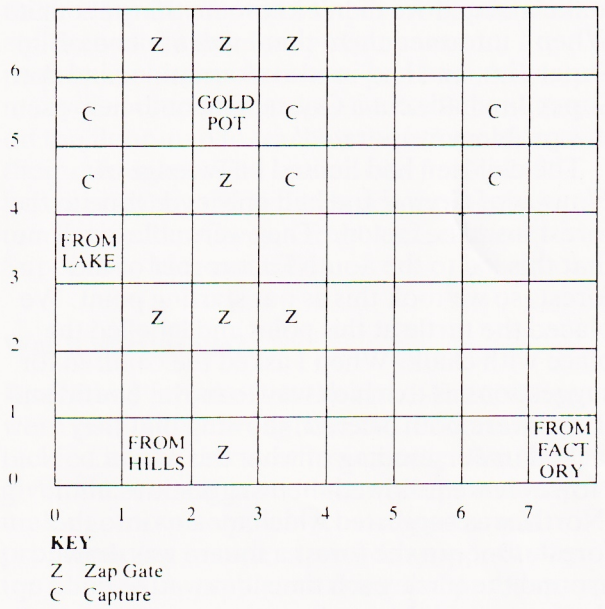


Fig. 1. *Location of Forest Hazards (from* Flowers of Crystal *documentation booklet).*

The Session

I arrived at the school armed with a Jessop turtle, *Dart*, and my direction routines. I asked Bill if he could supply a map, which we could use as a starting point for the lesson. He had several of these, one large scale covering the area around the school was particularly useful as it had an aerial photograph to go with it.

The classroom had been cleared in anticipation and the children obviously expected something special! We talked at first about the adventure, and it became clear that the forest was a problem area, their progress being based mainly on chance. They decided that 'getting lost' was something to do with the nature of a forest, i.e. in towns there are landmarks and street names to help you find your way, in a forest there are only trees which look much the same. I asked how people who go walking in the countryside manage to find their way, and some of the cub scouts knew then the answer was something to do with a map and a compass. They

were not sure how to use these and Bill took over the questioning here to draw out the main points. We referred to the maps available and identified various items such as woods, rivers and roads, but when we looked at the large scale local map the children could not explain what the grid lines were. We had some ingenious suggestions e.g. fences and underground water pipes. After some discussion we established that these were only present on the map and not on the ground, and were for references.

Eventually the class decided that to make a map of the crystal forest would be a good idea, but that this had a major problem — we couldn't make a map if we didn't know anything about it! When I informed them that I was a friend of Super Jim, and had inside information, and that Super Jim had sent a Crystal Robot to help us, this problem evaporated!

The children had limited knowledge of *Flowers of Crystal* and had only ever gone to the forest from the factory. They were able to tell me that this led to the South East corner of the forest, so we took this as our starting point. We placed the turtle at this point and labelled the place with chalk. When I asked the children for suggestions as to which way to move 'South' and 'East' were both offered, showing that they lacked understanding of what this meant. However we followed their suggestions until 'North' was suggested which took us into the forest. Once in the forest a square was drawn around the turtle each time it moved to build up the forest grid. Most of our early exploration revealed nothing (except trees!).

As the grid developed I kept an eye on my forest crib sheet ready to do a Grubble's Grabber capture or Zap the turtle. I had decided that a capture would result in placing the turtle back at the starting place of my choice on the known part of the map. The children found the progress of the turtle very exciting predicting capture or zapping with each move. By lunchtime (after about one hour) we had discovered one third of the forest.

Fig. 2. *The turtle is programmed to return to an unknown area after hitting a Zap Gate.*

Fig. 3. *Donna paces out her program.*

We continued the exercise after lunch. Bill had taken over the drawing on the floor part of the exploration and enhanced the appearance of the map with bright blue Zap Gates, nasty green Grubble's Grabbers and a yellow perimeter.

At this point a new activity was introduced — when the turtle was moved, by capture or by zapping, I asked the children to direct it back to its previous position by giving me a list of directions rather than giving them one at a time. The children enjoyed this activity, and it presented a challenge to them judging by the expressions on their faces as they worked out an answer. The first attempts at this were lists such as North, North, North, West, West, North but after a while this developed into a compass based programming language with suggestions such as 4North3West1North, and eventually became 4N3W1N. This activity was extremely successful and became a challenge each time it cropped up — who could return the turtle to its old position by producing a program with the least number of moves? Children had the large floor map at their disposal to aid their thinking, and used it to debug their attempts at programming. We discovered the hidden treasure with only three squares left to investigate. This we marked with a question mark for them to discover the next time they use the adventure.

When the map was 'finished' we discussed how useful it might be and the children (with some guidance) decided to label the grid. Bill and I had expected them to label the squares rather than the lines of the grid. This could have been a problem as the map supplied with the adventure has the grid lines labelled. Without our prompting the children decided to label the grid lines, so our anticipated problem did not arise! The idea was to number the grid lines along both the bottom and the side; the children decided to do this after having to find squares by counting each time. We then moved on to talking about

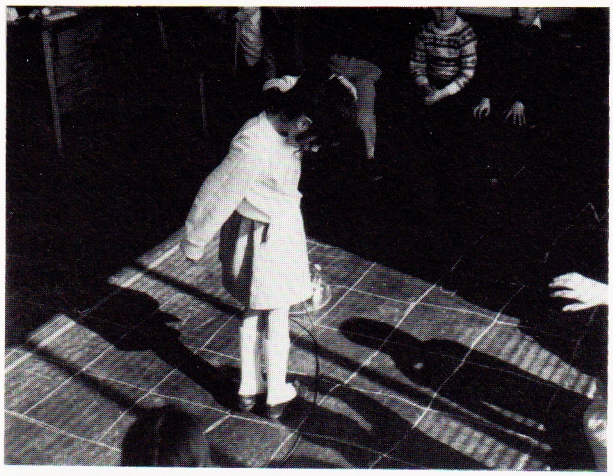


Fig. 4. *Lori debugging her program.*

how you might 'find' a particular square. We asked children to stand on particular squares. Squares like 5,5 & 4,4 presented no problem to the children. However, square 6,5 was a different matter! We found that we had two of them depending on which axis you read first. There was a suggestion from the class that one edge should be labelled with letters, but they decided that although this might be a good idea it would not really solve the problem. They decided that a 'system' was needed and opted to read the bottom axis first (i.e. the 'easting' as in map reading). Now that this had been established we could pose problems for the children by asking them to stand on particular squares. This activity was also very successful and the incidence of 'wrong' answers soon declined. It also developed into a question setting exercise for the children, one child asking another to stand on a particular square. This provoked much discussion and gentle argument amongst the children!

Finally it was decided that the map would be useful for exploring the adventure only if the children could make their own copy. Bill had run off the grid from the *Flowers of Crystal* pack and these were distributed one per group and the children made their copy. There was no prompting here as to how to go about this, but many members of the class 'walked' the squares on the floor map to transfer the information to their own maps. The session was finished (3 hours in all) by the children decorating their maps with Zap Gates, Grubbles Grabbers, Super Jim, Me, and Bill!

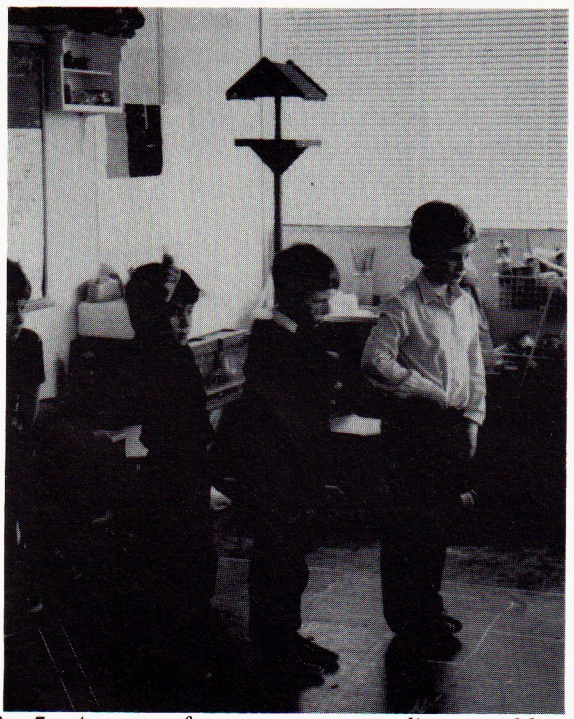


Fig. 5. *A range of answers to a co-ordinate problem.*

Was it worthwhile?

It certainly felt like it at the time! The children were enthralled throughout the session and tackled all the tasks enthusiastically. We had given them some experience of maps and map making, compass points, co-ordinates, and programming as well as providing opportunity for discussion, problem solving and problem setting, not to mention some creative art work as a finale!

Fig. 6. *Who has the correct co-ordinates?*

* * * * *

You can win a copy of *Folio*,
Look in Junior Mike Crow (coloured centre pages) for details of
a competition sponsored by **Tedimen Software.**

Encouraging music making in the Primary Classroom

Andy Pierson (author of *Compose*)
Shell Centre, University of Nottingham

We derive a great deal of pleasure from listening to music. Much of our social life revolves around listening to, or dancing to, or some other response, to music. As an art form it provides us with something of a universal language with which to communicate moods, feelings, ideas etc.

Although we all have the ability to participate in access to music at some level, for many that level remains very low. Some of the most exciting rewards from music come when you are able to perform a piece of music with other musicians and even more when you have written that piece of music yourself. So why don't we see more of this activity in our classrooms?

Music is difficult

The first barriers to music making are the technical skills required to play an instrument and to read some form of musical notation. The second is the mistaken idea that these skills are essential if creative music making is to take place. The lack of confidence and fear of music that follows puts an early stop to many children's musical development. That's not to say that there have not been any successful attempts to change this position, but in general music is left to the specialists.

What's happening in the pop world?

Its very interesting to take a look at what is happening to modern music. There are a growing number of relatively untrained musicians who are busy writing successful songs and performing these with the aid of technology. Often now you read "Drum machine programmed by . . ." on the back of an album cover. This is the music that our children are listening to now. The exciting thing is that we have the opportunity to use some of this technology to encourage music making in our classrooms in a very powerful way.

The power of the micro

The micro has the potential to give us powerful access into this technology. By building a supportive musical environment on the micro, both pupil and teacher can be given the freedom to experiment in music successfully and effectively without needing any technical music background.

First of all, we can ask the micro to take on the technical aspect of music making, i.e. the actual playing of the rhythms and sounds and the handling of any notation required to define these sounds. This means that the user need not have any traditional musical skills because the

'If I'd known I'd have to do some writing I'd have brought my word processor. . . .'

computer will take these on board. This immediately releases the user to listen to musical sounds and make judgements and decisions based on what they hear.

Secondly, the computer can act as a memory. One of the difficult things about composing music is that, having found a good tune you need to find some way of keeping it. Writing it down in stave musical notation is often the hardest, and not always the best, method of describing your tune. The computer is good at handling data and so it can be used very effectively to help you remember and subsequently change your composition.

Thirdly, the computer can help to provide useful entry levels into music. Giving an untrained person a piano to compose on is unlikely to result in success, the scope is too wide, there are too many unknowns. We need some restrictions, both of rhythm and of melody. A computer program can be used to provide this supportive structure at the level where it allows a person to be creative without feeling lost.

The music program *Compose*

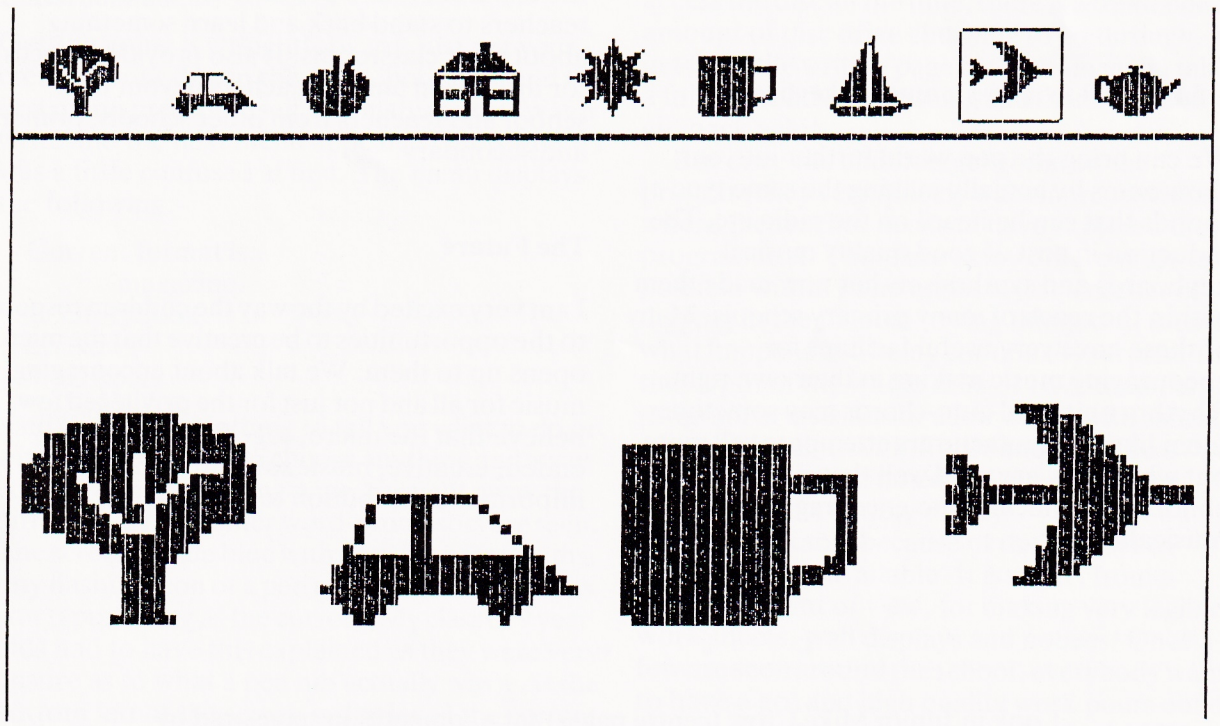
Compose was written in the hope of putting some of these computer roles into practice. The program represents short musical phrases in terms of simple pictures, such as a tree, a car, a house, etc. The activity begins by giving you 9 of these phrases. This provides you with a set of building blocks from which to compose a tune. You can choose any of the nine phrases, in any order and in any combination, to create a piece of music.

The nine pictures/phrases in the first set are carefully chosen to make it very easy to make a tune. In fact, you cannot fail to make a tune of some sort. The interesting thing is that children soon begin to listen very carefully to the individual building blocks and how they fit together. They then make very sensible decisions based on what they hear because their ears tell them something about what they have done.

> How can I make a tune with a good ending?
> Which picture do I like best to start with?
> How can I make a tune that starts slowly and gets quicker?
> What happens if I use two of the same pictures?
> How can I use the pictures to make a happy tune or a sad tune?

The children also find ways of describing what they have done and why they have done it. This descriptive language becomes very rich as groups of children work together round the micro and discuss their decisions with each other. Talking about a composition to someone else is something that the children will have had little experience of before. However, among those familiar with the program, a number of simple but perfectly meaningful conversations about the music take place, for example:

'I tried the mug/tree/mug/car but I think I want to swap the tree and the car over.'



In our experience in the classroom, this has a dynamic effect on childrens' attitudes to music making. They start to sing their compositions and maybe try to play them on other instruments. With a little encouragement they can often begin to write simple harmonies to their tune. Quite spontaneously they will add some words to help them remember and sing their melody. The richness of the activity grows as the pupils begin to experiment with developing their new found freedom to compose.

They may not be doing anything particularly new or previously unseen in music classrooms, but the exciting thing is that both the teacher and the pupil have found a new enthusiasm for music as previous frustrations and fears begin to disappear.

So far I have only mentioned the first set of nine pictures/phrases. There are eight of these sets on the *Compose* disc each looking at different musical structures and styles. The children will look through these finding good sets to use for different moods and themes, recognising different styles and rhythms. Art work, story writing, movement and drama and many other activities stem from the imagination of child and teacher.

The program also gives you the opportunity to make your own sets of pictures and phrases. The children might design a set of pictures that go with some project work or a story book. They can then choose suitable phrases to go with their pictures and use these to compose new tunes. All this makes the program a powerful creative tool.

Using MIDI to access a musical keyboard

We can bring the pop world further into our classrooms by actually making the same type of sounds that can be heard on the radio etc. The reduction in cost of good quality musical keyboards and synthesisers has now made them within the reach of many primary schools. Many of these have very useful facilities for encouraging music making in their own right. Rhythm units and auto-chords may sometimes seem like a manufacturers attempt to sell more but when they are used well they provide many children with facilities to encourage their musicality.

Not long ago the pop world invented a system called MIDI (Musical Instrument Digital Interface) because, among other reasons, they wanted a standard way of communicating music electronically. It was successful enough to mean that the sort of keyboards that are being bought for schools now have this 'MIDI Interface' fitted to them. This means that, with the help of an extra piece of electronics fitted to the BBC, (at the cost of about £60), we can play the tunes made using *Compose* on such a musical keyboard.

Teacher Support

One of the reasons for writing *Compose* was to help to encourage music where it was lacking due to the shortage of music specialists in the primary classroom. Where music is not happening at all the micro can help. Just as the child does not need any previous knowledge of music to work with *Compose*, neither does the teacher. But as the children's enthusiasm for music grows there is the need for some ideas about how to encourage the child to work with harmonies, to improvise on other instruments, to develop their understanding of rhythm etc. This may be provided by the music specialist in the school or from some in-service support. What is particularly interesting, though, about the process of the teacher taking on new skills is that the micro can provide some of the support required to encourage this to take place. Just as the micro provides a supportive environment for the children, it also provides an opportunity for teachers to stand back and learn something about their classrooms. It also provides a focus for discussion among teachers in your own school and teachers from other schools, primary and secondary.

The Future

I am very excited by the way the children respond to the opportunities to be creative that the micro opens up to them. We talk about encouraging music for all and not just for the privileged few. I believe that the micro, together with open ended, creative, music software can make an important contribution to this change.

* * * * *

Look in Junior Mike Crow (centre pages) for a competition sponsored by **Tedimen Software**, producers of *Folio*.

Software reviews

Title: **Folio**
Publisher: Tedimen Software, P.O. Box 23, Southampton, SO9 7BD Telephone (0703) 473774
Machine: Acorn BBC B
Price: Standard pack containing manual, keystrip and 40-track disc — £15.00 + VAT (£17.25). (A discount for bulk orders (over 4) is available, LEA licences also available, apply for details.)

Physical description

The *Folio* word-processor comes in a very attractive package containing the *Folio* disc, a spiral bound manual, a 'Getting Started' card and an unusual keystrip. The keystrip is plastic, therefore it is more durable than the usual flimsy card, and it is clear and easy to use. Compare it with the keystrip that comes with *View* and you will see what I mean. The keystrip is a major contribution to user-friendliness. The 40-track program disc is used as a 'master disc' from which other 'work discs' can be tailor made to suit whatever task is wanted. Many discs can be made each with its own distinct writing environment.

Classroom use

Getting going is straightforward; just put your created work disc in the drive, boot it up and the first menu presents itself. From this select 'W' for write and the next menu appears. This is where I was a little confused at first. The menu displays the following:-

Current format is:-
magazine.
1. Storybook
2. News
3. Display

And that is all. Nothing to tell you what to do or what to select. So you choose anything and away you go with the writing page. Straight away the differences from other word-processors are seen. The screen is pale blue with dark blue text, with a tiny flashing icon of a pen nib that moves along as you type, acting as the cursor. (My class of 9 year olds had to have this explained as they were very unsure as to what a pen nib actually was). At the bottom left of the screen is displayed the current page number, in the centre is a memory strip showing how much memory is remaining and on the right is a fascinating little block which shows in miniature the whole page format.

If you are a reasonably fast typist the little pen nib gets a bit left behind, and the same thing happens when you delete a piece of work, and things really get left behind when using the 'look up' or 'look down' function keys to re-read a section. But as a beginner this will not be any sort of handicap, because the speed of work is usually very slow with young children. Also excellent for the first time user is the Undo feature. If you have pressed a key that you shouldn't have, no matter what it does, by pressing fO this cancels whatever that key did and returns you to where you were before. It's a great confidence booster for anybody just starting or even the more expert user whose finger has slipped at the vital moment.

When the work is finished printing is just as simple as the writing — press Escape to take you back to the main menu and select 'P' for print. If all is not well in the printing department a rather attractive full-screen red error message appears telling you to do something. These error messages are sprinkled throughout the program, and are much appreciated by children. Because of the way that the program works, having to access the disc all the time, there is a tremendous amount of disc drive churning to go through. To get from the writing page to the main menu takes a full 3 seconds of rumbling and then the same to get back again.

But once the children get going on the program they very quickly want more, and this is where the teacher needs to have explored the program first. There are many different set-ups possible within *Folio* and it is just a matter of digging in the manual, trying things out, seeing what happens and being continually surprised by the depth of the whole thing. I have used the program in my class for a few weeks with children who are familiar with *Writer* and *Wordwise Plus*, and they have had no end of fun generating useful text in a variety of ways. The print-out is most remarkable because of the number of different fonts available. It is super, from a teacher's point of view, for making very legible work sheets, wall displays and notices. Once a few are seen around the school, everybody wants to have a go, and high quality work pours out of the printer. A great motivator for both children and staff alike.

The manual

The manual is split into two parts; one coloured blue and the other yellow. The colours serve to divide the book into the beginner's section, (blue) and yellow for those who want the advanced facilities that *Folio* has to offer, which are many. The blue section takes you, step by step through the basic operations of writing, printing, loading and saving in an easy to follow format with uncrowded pages and clear illustrations. It assumes no knowledge of word processing, is reasonably jargon-free and leads the beginner painlessly into its writing environment. What is needed by the first time user and is absent from the manual is a good index and a list of all the commands in one place. The commands are all there but they are scattered throughout the text and it takes a bit of finding if you have just for the moment forgotten how to search and replace. (The most complex bit of jiggery-pokery I've ever seen in a primary word-processor.)

Now onto the yellow section:- this is extensive, quite technical and describes many interesting and useful features that are accessed via the control menu. The control menu lists the following options:-

Text format
Options
Keyboard overlay
Animator
Disc management
Utilities.

The section on the keyboard overlay is especially comprehensive, and goes into great detail about how to adapt *Folio* for use with a concept keyboard. With the large fonts available in this package I could see that it will be of great use and benefit to anyone in special-needs education who is looking for a word-processor that is infinitely adaptable to their requirements.

The yellow section also explains the import and export of text files from other programs such as *Prompt*, *View* and *Wordwise*.

All in all a comprehensive manual but with the one glaring omission, in my view, that of having no alphabetic list to explain all the commands available.

Conclusion

After a few weeks in school and a period of my own use I would say that no school would go far wrong by purchasing *Folio*, even if they have other word-processors, because it has so much to offer in the way of adapting to the particular needs of the individual, group, class or school. It has excellent possibilities for special needs education via the concept keyboard.

To fully explore the *Folio* environment would take quite a while and I haven't even started to delve into the depths of the utility disc that accompanies the work disc. At £15.00 plus VAT this package must be a bargain.

Chris Hurrell
Shropshire LEA

Title: **Dinosaur Discovery**
Publisher: 4Mation Educational Resources, Linden Lea, Rock Park, Barnstaple EX32 9AU.
Machine: Acorn BBC B
Price: £18.40, including VAT and p&p.

The appeal of dinosaurs to children of junior age is something teachers have capitalised on for a good many years so it is hardly surprising that eventually a 'brontosaurus meets beeb' confrontation should occur. On the whole it was, and still is, a fairly civilised matter, but there were occasions on which lizards ruled and the 'fossil at the front' only sallied forth out of a well honed instinct for self preservation.

The cause of such turmoil was the latest release from 4Mation entitled *Dinosaur Discovery*, although there were times when alternative names did occur to me! In fact, the program was produced by Jacaranda Software in Australia and published here by 4Mation with the addition of their own Teachers' Manual. The aim of the program is to find and hatch a dinosaur egg. Would that life were so simple!

The said egg is buried somewhere beneath the earth and only the professor knows where the cache is hidden. Unfortunately he is dead so the special incubator in his laboratory on the island awaits the next intrepid explorer. There is, however, a diary of jottings which, with careful reading, will provide many of the clues necessary for a successful quest.

Explorers start their journey at a shed from which they are allowed to take certain pieces of equipment and to which they may return at any time to exchange or collect further items. As they leave they are given a section of map to which further portions are added as they progress.

Swamps, forests, mines and deserts are only a few of the hazards that are encountered before the explorers finally arrive at the point at which they can set sail for the island to hatch their egg. At each of the locations there is a problem to be solved or an obstacle to overcome before the journey can be continued. Even if they negotiate the sea crossing without being wrecked (no mean feat in itself) the successful incubation of an egg depends entirely on having acquired the correct information on their travels.

This information is gathered from the

professor's diary and various other locations en route and should be noted carefully. Much of it is available from more than one source but the museum contains some essential facts without which the quest is virtually impossible. Once in possession of all relevant details, and having successfully crossed to the island, the egg is hatched to reveal an appealing baby brontosaurus.

Throughout the program the graphics are clear and unambiguous. The two screens I particularly liked were the mine, where only a small section of the tunnel maze is revealed at any one time, and the sinking ship that signifies a failure to navigate Stegosaurus Straits in quite the correct fashion! There is a good deal of text included at many of the locations but it is sensibly spread over several screens and reading it never becomes a daunting prospect. There was one location, however, where the screen display was so brief that reading it was impossible. This happened on two different copies of the program and should be rectified by the publishers. Fortunately it seems to contain no vital information.

Part completed quests can be saved on to a separate disc with all data collected up to that point secured for the next visit to the micro. There is a rather long sequence of instructions when the program is started which is excellent for novice users but which becomes a little annoying after a while. An option to bypass this would be a welcome added feature.

The documentation is of the standard we have come to expect from 4Mation over recent years and is packed full of ideas, tips and suggestions to use or disregard as the teacher wishes. The diary that accompanies it is attractively produced and acted as a useful stimulus as well as a source of information. What I did find most useful was the adults' guided tour of the locations though trying the quest 'blind', as the children do, does highlight some of the problems they are likely to encounter.

The package is aimed at the ten to twelve year age range though none of the problems encountered on the quest proved too difficult for my class of eight year olds and personally I would like a utility program to incorporate words of my own choice into the puzzles. There are a few words that might cause some confusion or misunderstanding to children of this age but otherwise the vocabulary should present little difficulty to the average child at the upper end of the junior school. The words used in the puzzles are listed in the documentation which could help forestall such problems.

I introduced the program, over the course of a week, by reading and discussing short extracts from the diary and then asking the children to compile a list of the equipment that they would take on their own expedition. They were free to choose the environment they wished to explore and were allowed to take whatever they wanted — the only proviso was that whatever they took had to be carried on their own back and that of a donkey. Their suggestions for an equipment list were surprisingly mature for children of this age and no-one included anything frivolous. Even the few unusual items were quite sensibly justified by those that wanted to take them. At the end of the week we pooled resources and compiled a master list from their suggestions which in all honesty I would have been hard pressed to better. I finished the week by telling them of the planned visit to the Natural History Museum and giving them a preview of the program and what they were expected to do with it.

So far so good! They had an idea now of what they were to do and why the class library had had a sudden influx of dinosaur books. The following week started well, given that each of the seven groups needed an explanation of how to get through the opening sequence. Once that was out of the way I let them proceed however they wished and only interfered when the decibel level rose to excruciating! All in all they mastered the input techniques very well given their limited experience with a micro. What I hadn't anticipated was the length of time they needed to gather any worthwhile information. Even when they had, they quite often lost it in the early stages by making mistakes with the save routine. It is in fact quite simple even with an added data disc.

Two weeks later all the groups had spent at least two periods, each of one hour, on their attempts and a little none-too-subtle questioning confirmed what I had suspected for some days. They were all having a whale of a time getting in and out of trouble and the dinosaur egg could hatch itself for all they cared! By this time we also had several five foot dinosaur outlines draped from the walls.

A class session at the start of the following week served to put them back on the right track as far as moving around the locations was concerned and their next visits to the micro did in fact show some improvement. We carried on with our frieze during this week and it was on a wet Wednesday afternoon after playground duty, when I was up to my ears in spilled paint, swamp leaves and archaeopteryx feathers, that several colourful alternative names flashed vividly before my mind's eye!

The frieze was eventually finished and put on the walls just in time to be taken down for the holiday and despite the fact that no-one had actually reached the island to hatch an egg I decided to abandon the project until next term.

Virtually all of the problems I have encountered so far whilst using this package can be attributed to the age and inexperience of the children. Inputs at the keyboard are varied but simple and they soon got the hang of what was needed. Where their inexperience showed was in their inability to form any kind of strategy with regard to moving around the locations or to taking notes from the information given on screen and in the diary. What was pleasing though was that after the class session around the monitor and the ensuing discussion, strategic planning of moves was very much in evidence as was the noting of information from all sources. They have also matured considerably in their attitude to co-operation at the keyboard although one or two did need a push in the right direction!

Based on this experience I would say that the program is quite suitable for eight year olds provided they have had prior experience of adventure games and have acquired some of the skills necessary for their completion. If not, be prepared to spend a good deal of time in the early stages on class and group discussion in order to guide them to formulate a coherent strategy which will lead them to a successful outcome. The same is true, though to a lesser extent, with older children but hopefully their greater maturity will lead them to that conclusion anyway! Really if it's your first adventure with young children think carefully but if they're a bit older have a go — it's well worth a few years off the end of your life!

There's a great deal left for me to do with this program yet and even more that I won't be able to get round to with this particular class but then there's always next year.

Steve Sullivan
Silvermead Junior School
Wythall, Worcester

Items received for review

Software

Rompton Coombe (BBC)
Magnolia Soft, 24 Elliott Close, Exeter EX4 5ED
Price: £10.95 (disc)
This program simulates an excavation of a Roman Fortress and Villa. Designed for use by 8–12 year olds.

Computype (BBC)
Soft Centre, Renvyle Cottage, Okehurst Lane, Billingshurst, West Sussex RH14 9HR
Price: £15.00 + VAT (disc or cassette)
An introductory word processing program designed specifically for use in primary and middle schools.

Music 1, Compose (BBC)
'Teaching with a micro' series, The Shell Centre, University of Nottingham, NG7 2RD
Price: £12.00 (disc)
This program allows children with no previous musical experience to compose music easily and quickly. For all ages and ability levels.

Birdwatch (BBC)
Which Flower? (BBC)
Flower Search (BBC)
RESOURCE, Exeter Road, Off Coventry Grove, Doncaster DN2 4PY
Price: *Birdwatch* and *Flower Search* together £14.95, separately £19.95 each; *Which Flower* £9.95
Licences also available.
Primary databases.

Books

Pilot's Computer
Traffic Computer
'Computers in Action' series
by Pam Fiddy and Dick Fox-Davies
A & C Black, 35 Bedford Row, London WC1R 4JH
Price: £4.50 each

Robotix Challenges
MEU Cymru, Welsh Joint Education Committee, 245 Western Avenue, Cardiff CF5 2YX
Price: £10 including post & packing
Includes a disc of software to use in association with Milton Bradley's Robotix kits.

MAPE news

Report on the MAPE Day held at Bridgwater Teachers' Centre
Saturday 7 February

If enthusiasm is contagious, there must be quite an epidemic in the South West following the MAPE Day held at Bridgwater Teachers' Centre in February when over 60 teachers from as far afield as Birmingham and South Wales were entertained and enlightened by three speakers talking about 'Creative Arts in the Computer Age'. The aim of the occasion was to examine how the microcomputer had, or could, influence the ways in which the creative arts, particularly art and music, were taught in primary schools.

David Spence from Homerton College, Cambridge started the day by demonstrating how a graphics package like *Image* can be used to give all children the opportunity to design and create pleasing images on screen or in print regardless of their motor skills or hand/eye coordination. The options afforded by the program are easily selected using the arrow keys or a joystick and the only constraint seems to be the extent of the user's awareness of all that is possible. The many interesting features include the facility to move images around the screen, rotate images, change scale, combine and mix colours and add text. Furthermore, the program can also be used in conjunction with a video and a digitiser.

Image has been used most widely in the secondary sector but its implications for primary, particularly in mathematics and topic work, are considerable. A colour printer is a desirable if not strictly necessary extra requirement to obtain maximum benefit from the program but as one member of the audience suggested, the cost can partly be recouped through the printing of Christmas cards etc.

The next speaker was Mike Matson from 4MATion Educational Resources. Mike admitted that he cannot be really creative without a computer. He then gave the lie to this statement by giving a most amusing and original talk without touching a micro once. However his testimony that his imagination and ideas were blocked if he had to resort to traditional means of writing was recognised and endorsed by many in the audience. Too often, teachers expect children to be imaginative and inventive at predetermined times, using skills and techniques they haven't mastered and with little or no incentives. Mike put it more succinctly: 'We are still trying to teach children to dance with their backsides glued to their seats.'

Word-processing packages free the author from the constraints of illegible handwriting and the untidy evidence of spelling mistakes and changes of mind. They provide freedom to explore ideas and fantasies until a satisfying outcome is achieved.

After a pleasant interlude for lunch at the local hostelry, the final session of the day took the form of a congenial singsong, led by Andy Pierson of the Shell Centre, Nottingham University. Andy used *Compose* to enable the by now mellow audience to create their very own song. This light-hearted approach was welcome but we recognised the technique immediately. By involving us in our own learning and making the experience enjoyable and successful, Andy got his message across loud and clear. If you eradicate the unfamiliar terms and supply some prefabricated materials, even quite young children can create simple tunes. Once this has been achieved, the children can go on to formulate their own phrases and really begin to *Compose*.

At the end of the afternoon, David Woodward, the advisor for computing in Somerset thanked the speakers. As he said, the things we had seen and heard were a long way from Micro Primer but, given the resources, within the reach of us all. The micro through such programs as *Image* and *Compose*, which are menu driven and easy to use, makes areas of the curriculum which were accessible only to a few because of the specialised skills and knowledge needed, available to all.

We are grateful to David Woodward and Somerset Education Authority for the use of the Teachers' Centre at Bridgwater and to the organising committee for arranging such a worthwhile day.

Pat Fox

MAPE awakes in the South

Regional activities in MAPE Southern region have resumed after a fairly long period of inactivity.

The first MAPE gathering was held at Portsmouth Teachers' Centre on 7 March and in spite of heavy snow a large number of members and non-members attended. We were 'entertained' by Mike Matson who gave an interesting and somewhat oblique talk on the current place of the computer in primary education, during which one startled colleague was introduced to his mouse.

At this meeting a small group was formed with

the intention of establishing a local MAPE group; these enthusiastic members have since met and a Solent MAPE group has been formally set up. The Solent MAPE group intends to hold regular meetings and to arrange a travelling exhibition of children's work related to the computer. This can be seen from September onwards at various venues in the Solent area. If you are interested in finding out more about this group or would like to help, please contact me (Dave Kitching, Regional Representative) or:

Peter Aitchison, Chairman, Solent MAPE Group
40 Mendips Road
Fareham, Hants
Tel: 0329 237388.

The next meeting in the Southern Region will take place at Sussex University on Saturday 27 June (in the Computer Lab. of the Educational Development Building).

Hopefully this meeting will include some workshop sessions and the theme will be very broadly 'Control – encouraging children to use the computer to control. . . .' The guest speaker will be Christine Robson, lately of MESU. Details of this meeting will be circulated later, or contact me (SAE please).

Perhaps it may be possible to establish a MAPE group in the Sussex area. It is very likely that one will be established in Berkshire during the coming term; details later or contact me.

If you are interested in promoting MAPE, a MAPE group or meeting in your corner of the Southern Region, please contact me as soon as possible. There is much that we can do together in creating a higher profile for MAPE in our local areas and in bringing the members of MAPE closer together.

There are at the present time 358 members across the seven counties of the Southern Region (10% of the national membership). Within the region and the membership there is much expertise and enthusiasm: let us all work together.

David Kitching

South West

The first meeting of Dorset MAPE will be held on 20 June 1987, 10.00 a.m.–1.00 p.m., at St Mary's School, Dorchester. Peter Hunter will be talking about wordprocessing.

For further details contact:

June Gray
Kingsleigh First School
Hadow Road
Bournemouth BH10 5HS.
Tel: 528895

Reg Eyre

EUROLOG 87

The first European Conference on Logo in Education (EUROLOG 87) will be held at St. Patrick's College, Dublin, Ireland, from Friday, 4 September to Sunday, 6 September, 1987. Conference themes will be:

* The relationship of Logo to school curricula for primary, secondary, and third level education;
* New ways of using Logo, or computer languages similar to Logo, in schools;
* Extensions to or improvements in Logo;
* Classroom experience with Logo.

Activities at the conference will include keynote addresses, presentations, seminars, workshops, poster sessions (short presentations of an idea or product), and special interest group meetings.

Further details may be obtained from:

Frederick Klotz
EUROLOG 87
Mathematics Department
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Allan Martin
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COPYRIGHT STATEMENT

The following statement is an attempt to clarify the confusion over copyright issues concerning both MAPE and Newman Software programs. It represents a personal viewpoint and is not based upon legal precedent.

Any software from MAPE, whether sent individually to members or obtained on licence, is made available for use on the BBC micro or the RML480Z. Does this include the Master 128 or the Master Compact? MAPE regards this as being the case if, and only if, the programs run on these machines without alteration to the coding. Otherwise copyright is being breached unless the approval of the copyright holder has been sought previously. In the case of programs from MAPE or Newman Software permission will usually be granted, but only if the necessary changes made to the programs are those approved by the copyright holder. (For example, it is only permissible to run *Grass* on the Compact if the changes made are the ones Newman Software has published.) We must try to prevent a plethora of different versions of the programs appearing.

The next question involves running MAPE software on the Nimbus using BBC BASIC. This would appear to be a breach of copyright unless prior permission has been obtained, regardless of whether or not the program needs altering. Once again, permission will usually be granted for those programs that transfer to the Nimbus without any modifications to the coding. Where modifications are necessary permission must be sought from the copyright holder and only the approved modifications may be made. As yet MAPE has not received any requests seeking permission to run MAPE software on the Nimbus under BBC BASIC. Some programs will not transfer across, for example *Front Page Extra* and *News Bulletin* have been specially written for the Nimbus and are available from Newman Software.

Two further points. MAPE Tape 4 is copyright material and is only for the use of MAPE members. The earliest that it will be released on licence to LEAs is 1st September 1987. We are now thinking about MAPE Tape 5; please send any ideas or contributions to me as soon as possible.

Roger Keeling
Chairman

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