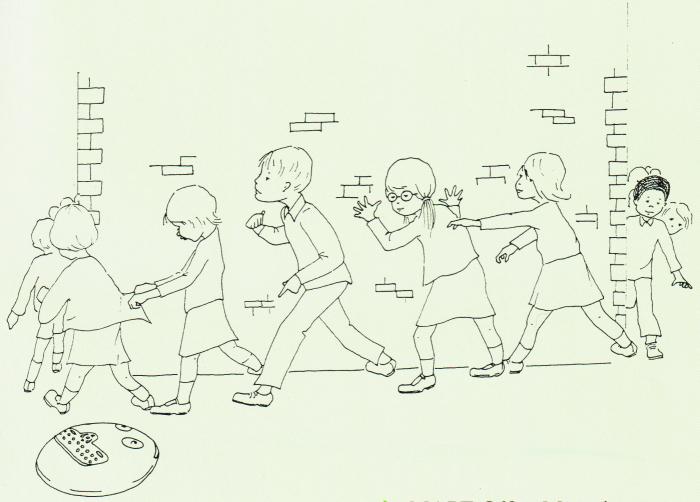
# SCOPE -

► Issue 34 ► Autumn 1991



- MAPE Office Memoirs
- Putting on the Agony
- ► Genesis: of the Frog
- Producing a Pupils' Booklet
- MAPE Software News

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# MICRO-SCOPE 34

**MICRO-SCOPE** matters

Firstly I would like to thank MAPE for the retirement present of an art deco style clock and the gardening vouchers which were presented to me at the national Conference. If only the retirement was real!

Secondly, on behalf of all MAPE members, I would like to thank Roger Keeling, who retired as MAPE chairman during the summer term, for all the hard work he has done to further the aims of MAPE. We are deeply indebted to Roger in all sorts of ways: he generates ideas, implements change, works round the clock and generally sets an example that is impossible to follow. He has been a powerful force in the production and dissemination of MAPE software, and we would like to pay tribute to him for that especially.

His retirement will, like mine, be more theoretical than practical; MAPE cannot afford to let him escape completely. He will be responsible for certain projects yet to be defined and, meanwhile, I will only have to say 'Right, let's make a start' and/or 'Sorry I'm late, I just had to . . .' and/or 'I'm looking for a volunteer to . . .' and everyone will believe that I am he!

Senga Whiteman Chairman, MAPE

### **Editorial**

It's not that I doubt the word of the previous Editor, now our illustrious Chairperson, but the problem I am facing seems to be the opposite to hers! The haunting cry always heard at National Council meetings in the past was 'Please, ask

your local members to write me an article,' or 'Do you think you could *possibly* write something about . . . ?' This issue is again 40 pages long and I must apologise to those people who sent me articles which I have been unable to include this time around, for reasons of space!

I don't think for a moment that this pleasing about-turn is because I am any better at soliciting articles - resisting Senga's pleas was virtually impossible! Rather, I think that it reflects the large numbers of teachers who are now using IT in their teaching, the excellent work which has developed as a result of the ESG IT in Schools' initiative and, dare I say it, the influence of the National Curriculum. The advances in technology are contributing to this healthy picture too; gone are the days when a primary teacher counted herself lucky to have not only a micro with a disc drive rather than a cassette player, but a printer and perhaps even a concept keyboard as well! We now have extremely powerful micros, many with their own hard discs, scanners and digitisers in use in some classrooms, colour printers, measurement and control equipment and laptop computers, and CD-ROM technology is beginning to make the breakthrough into some primary schools. To accompany these new pieces of hardware, we

are seeing the development of sophisticated software which is enabling primary children to produce professional publications, manipulate sounds and graphics, control robots and other devices and manipulate large quantities of data in ways we could not have dreamt of even three years ago. This issue reflects some of these new developments together with accounts from classroom teachers in the UK and abroad.

However, please don't interpret this as a request *not* to send me articles! I have one or two for the next issue, but by no means enough. We also have a Specials planned on the Humanities, Creative Arts and Logo, so whatever you are doing with IT in your classroom, there's space for you in *MICRO-SCOPE*. Drop me a line, or ring me any evening after 8.30 to discuss your contribution!

Chris Robson

PS This time my hard disc has survived unscathed!!

# **MAPE** office memoirs

**Dave Siviter** North Wales Regional Representative The scene The Moon shone serenely over 'Adsetheb', a little quarrying village in the heart of Snowdonia. A crystal clear December night sky enhanced the shaded silhouettes of the snow-capped peaks which surround 'Cilgeraint Farm'. But even Dylan Thomas's Cilgeraint Farm, Bethesda villagers from Llareggub could not have imagined the cultural shock about to be inflicted on this renovated hill farm house which had seen the inactivity of the famous three-year strike in Lord Penrhyn's slate quarry nearly one hundred years ago.

### The change

MAPE had decided to break its liaison with the BKT subscription agency and change to a more personal and efficient service by employing a

Figure 1 Cilgeraint Farm

secretary to administer the database and respond rapidly to questions concerning the membership of the Association. The hope was to effect the changeover with as invisible a seam as possible – it sounds simple enough doesn't it?

### Soap

Val Siviter, an ex-Walsall grammar school girl. had moved from her secretarial job with ICI at Birmingham, to become the secretary to the Professor of Physics at the University of North Wales in Bangor. Her move was motivated by a love of mountaineering and before long, she married Dave, an ex-maths/CDT teacher turned mountaineering instructor who lived at Ogwen Cottage, Birmingham's Outdoor Pursuits Centre. Together they renovated 'Cilgeraint Farm' while Val trained as a teacher at 'Y Coleg Normal'. Dave retrained at Newman College and now lectures in Outdoor Education and IT at 'Y Coleg Normal' as his day job whilst being employed full time as IT adviser for Val! Val, having taught Home Economics at Friar's Comprehensive School, had three children, built half a house, retrained in Desk Top Publishing and started her own business. Now MAPE employs the services of this company director with her advisory staff.

### Wall-to-wall Macs and a bigger boat!

I suppose Dave's addiction to Macintosh computers had something to do with the fact that MAPE invested in an SE30 to run the database, but even Val, who had been weaned on IBM golfballs and trained on a PC, had succumbed to the tempting allure of Mac's user-friendly interface. The compact SE30 joined four other Apples in the Cilgeraint orchard, rubbing shoulders with the extra Answerphone and a photocopier. Dave's original training in CDT came in handy for adding extra work surfaces but if you've seen the film 'Jaws', you'll understand why Val was soon heard exclaiming 'We're going to need a bigger boat'!

### A record achievement

The fateful day arrived in January 1990. Val had been warned that the records from BKT would be bulky. Even Dave had balked at the prospect of converting BKT's COMMA delimited file of 5000 records with 24 fields (database, not farm variety) from an 8" \$100 disc to a Claris FileMaker File on the Mac. It's perhaps as well Val did decide to enter them all by hand because later events were to highlight numerous inaccuracies in previous data entry. No one knew what to expect, and the two foot thick pile of 14" wide computer listing paper that eventually arrived was by that time something of a relief.

To non-typist Dave, the task looked gargantuan but as the days went by and the database grew, Val's speed of data entry increased. By the 5000th entry some said that it was impossible to push a disc into the drive in the time it took to enter a record! April was the deadline for the complete takeover from BKT, with their updates to follow, including a file ominously labelled 'Dead Records'. April turned out to be the critical time when it was not always certain who had been updated by whom and who had been 'killed off' and buried in the 'Dead Records'. For some reason most of the MAPE National Council seem to have crossed the river Styx at some time or other, only to be 'Born Again' as 'Direct Debit Lap Dogs Desk Tops'.

### Pressures of responsibility

The awesome responsibility of guarding the records weighed heavily on Dave who had started to become paranoid at the prospect of months of data entry ending in the 'Mac.Trash' after one of Cilgeraint's regular winter power cuts. Fortunately even the Data Protection Act allows a backup to be stored off site, so two more hard discs used in rotation on a daily and a weekly basis made Dave feel euphoric enough to even suggest that the next MAPE Conference be held at Y Coleg Normal.

### What is she yapping about?

The new MAPE 'phone trills its distinctive tone, unlike any other phone in the world, it seems, and with Pavlovian instinctive response all the Siviters in residence shout 'MAPE' in unison. The real Border Collie, 'Chip', leaps into the air, spins like a disc drive and barks continuously while biting Val's heels as she tries to get there before the fourth default ring on the Answerphone. At least it adds the authentic background farm noises to the new personal MAPE service.

### Fan mail

From a steady start of a few extra letters a day it was not long before Pat the Post's eyebrows raised as he handed over the now normal batch of 50 or more envelopes addressed in familiar fashion to Val Siviter and cryptically endorsed 'MAPE'. (*Village whisper*: 'They say, with a name like that, she's foreign and it probably means S.W.A.L.K. in whatever language she really speaks.')

Mixed in with the MAPE mail a new phenomenon rears its garish head in the form of brightly coloured direct mail variously addressed to 'The Director', 'The Financial Manager' or 'The person responsible for graphic design purchasing', providing extra fuel for the woodburning central heating stove! Full marks to the 'Post Office' though who were able to deliver the letter from a well known subscription agency, addressed to:

MAPE NEWMAN COLLEGE ST ANNES HOUSE BETHESDA GREENWICH LL57 4AX

Post Codes really do work!

### **MICRO-SCOPE**

The first complete mail shot to be attempted was Issue 30 and the *Special Needs* Special. Dave 'phoned Castlefield, the publishers, to find out when the lorry would leave Wellingborough. Then mathematical muscle was flexed to predict that if an articulated truck started at 10 a.m. there would be no delivery until 4 p.m. at the earliest. 'Relax, leave Val in charge, and visit the Bangor sorting office to warn them of their



Figure 2 A mountain of boxes.

future business', he thought. Of course time had atrophied the muscle and the mythical 'small lorry' arrived at three. The scene on his return with an armful of mail sacks was not a pretty sight. Glowing with perspiration, Val leant exhausted against a mountain of boxes outside the door while a sweating driver placed the last box on the pile. Dave sheepishly accepted the mug of tea that Val offered.



Figure 3 Val pulls her weight.

### All pull together

The Siviter children, Roger, Richard and Rebecca (known affectionately as the '3 R's') and some local assistants were hired to stuff the packets while Dave completed the franking of the envelopes. Cilgeraint Farm boasts a billiard table which soon became indispensable as a mailing desk. It came as quite a surprise to the local post office when the third cheque for £1000s worth of postage crossed the counter in as many days. Technology comes late to Bethesda where they even adjust the franking machine with a Biro!

### Take a licking with a lot o' mail

Dave woke early with a hangover-like furriness of the tongue in his desiccated mouth. OK, own up, who ordered a thousand non-self-sealing envelopes by mistake? The post-lady came by that morning in a small Ford van and Dave mentioned that a collection would be needed. 'Oh, I'll take them now,' she said helpfully. 'I think you'd better have a look first,' he said. The sight of a full-sized billiard table surrounded and covered in mail to the height of about a metre and a half is fairly impressive. 'Oh, I see,' she said faintly. She could hardly miss it, thought

MICRO-SCOPE 34 MAPE office memoirs



**Figure 4** Would these fit in your pillar box?

Dave. 'Can I use your 'phone?' she said. After a while the manager of the sorting office answered the call. 'Emrys, I'm at Cilgeraint Farm and there's a lot o' mail here . . . and when I say a lot o' mail I mean a lot. You're going to need the big van and about six cages.' (fig 4)

### Christmas upside-down

Andy and Betty Laing were unsuspecting Australian friends whose Christmas visit to Cilgeraint coincided with the arrival of *MICRO-SCOPE 31* and the *Christmas Special*. It was the first time they had seen snow and ice so it probably seemed quite normal to be put to work packing envelopes. Fortunately Andy had managed the odd frame of snooker before the table was commandeered and Betty, a primary school teacher, became a MAPE enthusiast.

### Breakfast at Bethesda!

The Magic Telephone produced its usual canine reaction at 8 a.m. one bright morning in March to herald the imminent delivery of the *10th Anniversary Edition*. 'Where exactly is this Cilgeraint Farm?' crackled the frustrated voice of Castlefield's man. 'I'm in Bethesda. I started

from Wellingborough at four this morning!' Dave, at last, got his share of unloading as a human chain of Siviters was employed to stack the super-fat super-heavy edition round the snooker table. Val opened the breakfast bar as Dave and the 3 R's rushed off late for school and college.

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### I've been a member now for xx years

The standard tasks of answering mail and updating the database are interspersed with humour as questions arrive from members. It's almost impossible to imagine the variety of requests, and the information submitted on the application forms such as 'Region . . . Catholic'. And the forms are still arriving from BKT nearly two years after the takeover.

### **More Antipodean guests**

It would appear that MAPE is big in the Southern hemisphere if the ratio of visitors to the MAPE office from the Antipodes is used as a statistic. It was with great pleasure that Toni Downes was able to call in and pay her subs to the Secretary and Overseas Rep whilst out shopping for mouse mats from Sydney, Australia (Fig. 5). Toni intends to pop in for the



Figure 5 (l to r) Toni Downes, Val Siviter and Chris Robson.

1992 Conference as well. Sidney, the MAPE office cat, watched with suspicion as yet another layer of his bed disappeared to cement Anglo-Australian relations. You'd think he'd realise that there aren't going to be any mice on the mats while he's there! By the way if you can imagine what a lot o' mail looks like, think about six or seven hundred mouse mats!

### **Rubbing noses**

Black Bess, the Chairperson's dog, has signed the visitors' book along with a number of the National Committee members but as yet she has not developed the MAPE 'phone protocol. We're thinking of training her to explain the difference between standing orders and direct debits. You don't have a dog and bark yourself

do you? Standing order has something to do with the way you have to wait in the queue at Bethesda bank while the clerk enters three hundred individual cheques at £12 onto the desk top calculator, or is that direct debit?

### The future

As the National Curriculum becomes clearer, and MAPE members all change to direct debit, no doubt the the pigs at Cilgeraint Farm will fly off to *Granny's Garden*.

On a more serious note however, MAPE has, we hope, managed to retain the personal touch, and continues in its tradition of teachers sharing their experiences with one another to further the cross-curricular benefits of information technology.

### **MAPE 10th Anniversary competition**

Thank you to everyone who entered the competition. Response was good and the entries will be judged by a panel of judges at the beginning of November. I don't envy them their task!

Winners will be notified by the end of November. Their names and copies of their entries will be published in *MICRO-SCOPE 35*, in February 1992.

# The Shadow: a collaborative writing project using IT

**Margaret Lester** 

Primary Advisory Teacher for IT, Sheffield LEA

The Shadow came about as a result of my involvement in 'The Distant Muse', a national collaborative writing project between school-children and professional writers using electronic communications. The Shadow is an offshoot of the main project.

### Setting things up

Three Sheffield schools took part: one, a Nursery/First and Middle with 341 pupils on its roll, of which over 90 per cent were Asian; the second a junior school of 222 pupils, almost entirely white and from wide social strata; and the third a comprehensive school with 550 pupils, of whom almost half were bilingual. The pupils involved were a class each of Y5, Y6 and Y10 children. The professional writer chosen to be involved was Linda Hoy, author of *Nightmare Park* and *My Friend Rebecca*, both secondary-level novels. Much of the communication was through E-mail, supplemented by personal contact when groups visited each other's schools or the Nether Edge Centre where I am based.

My own involvement, as advisory teacher for IT, was to support the primary schools. This involved helping to initiate the writing, integrating the use by each class of an A3000 computer, assisting with the use of electronic mail and arranging publication of a booklet-length version of the story.

It happened that Sheffield played host to the World Student Games in the summer of 1991, so this gave us an obvious context for our story. In preparation for the games there was extensive building activity in the city, part of which was the construction of the massive, 9000-seat Sheffield Arena on Broughton Lane. We decided to set our story there.

### Putting the plan into action

During the term of the project I worked with both primary schools, sharing a morning between the two schools every week. Initially I worked with the whole class, using magazine pictures and old photographs to stimulate character descriptions. For this we constructed a database of characters using adjectives as keywords. *Datacard* from the program *Datasweet* proved to be ideal for this purpose. The children also painted portraits of the imaginary characters using *Easel2* and imported them into *PenDown* for text to be added.

Having become familiar with the classes as a whole, I next worked with small groups on story writing, and it was with one of these, a group of eight boys and girls aged 10–11, four from each school, that *The Shadow* came about.

The stimulus for it was provided by one of the class teachers, Roger Featherstone, who had discovered that the Arena was constructed close to the place where a notorious highwayman, Spence Broughton, had been hanged on a gibbet in 1791! His bones hung there for thirty-six years until they crumbled to dust and it was from that very dust that the new Arena had sprung up in the street which still bore his name, Broughton Lane. Obviously, such a gruesome background was a spur to even the dullest imagination and it was now that the enterprise suddenly came alive!

An obvious preliminary was a visit with the children to Broughton Lane. To get to it we walked along the canal, and I told them the tale of Spence Broughton as we went. The plot came to us as we stood there and looked around at such landmarks as the canal bridge, the corrugated roof of the Arena and the nearby electricity pylon. Spence Broughton would appear as a shadow, and there would be alarming noises, as of a poltergeist. But the setting would be the here and now of the Arena and the World Student Games.

Back at school a more detailed storyline started to take shape. Each half of the group worked on a computer using *PenDown* with its own part of the story and then sent it through electronic mail to each other and to Linda Hoy, the author involved in the main project. There was a fair amount of collaboration via this channel, with editing and the sending of suggestions. But for bringing the two halves of the story

8 The Shadow MICRO-SCOPE 34

Broughton Lane, just off Attercliffe Common, takes its name from Spence Broughton.

It appears that on 9th February, 1791, Spence Broughton, once a wealthy Lincolnshire farmer, and his companion, John Oxley, held up the Sheffield and Rotherham Mail and stole the post bags, which had inside, among other letters, a bill of exchange for £123 payable to Joseph Walker of Rotherham.

Both the robbers were caught in October of the same year and they were tried for their crime in the old Sheffield Town Hall, which then stood in Church Lane, near the Parish Church Gates.

They were both sentenced to death, but Oxley somehow managed to escape. Broughton was executed at York Tyburn on Saturday, 3rd April, 1792, and in the grey dawn of the following Monday morning his body, which had been brought back to Sheffield, was hung in chains on a gibbet near the scene of the robbery.

This event created great public interest and for the next few days the road between Sheffield and Rotherham was crowded with a moving mass of people anxious to view the wretched spectacle of the body on the gibbet.

One person, horrified and broken hearted at the sight, was the wife of Spence Broughton, who sat at an upstairs window in the nearby Harrow Inn, weeping bitterly.

The bones of the mail robber hung on the gibbet for thirty-six years, until they crumbled and dropped from the chains. Later Henry Sorby of Woodbourne Hall, bought the land on which the gibbet stood and he had the post sawn down and removed to his coach house.

For many years afterwards, small carved ornaments, said to be made from the gibbet post, were sold at the local public bouses.

**Figure 1** *The history of Spence Broughton – the basic facts. This was the stimulus for the story.* 

```
YP0017
     To:
                                Delivered: Fri 5-July-91 10:15 BST Sys 10001
                                                                                      (1
          YPQ034
   From:
0)
Subject: Reply to: UPDATE OF ARENA
Mail Id: IPM-10001-910705-092390923
In Reply To: IPM-10001-910704-121840615
--More--
What an ingenious idea to bring the story of the highwayman into this!
Did my other page of comments about your story get through - because my
screen went blank just before I sent them?
I like the way you've tried to build up an exciting atmosphere wit
of creaking and of water.
The neame of the character needs to be introduced earlier - so we don't just
have to read
                                                             . We need to mention at
the beginning what the boy is doing at the arena - is he there with
taking part in the Games?
I think it would be even better if we could introduce the highwayman story into the story that is being told to fend off the terrorists. Perhaps the boy co
uld be going back on the space craft ( a
```

**Figure 2** Comments sent by the professional writer Linda Hoy through E mail.

together and for ironing out persistent difficulties it was clearly necessary for the two groups to come together again.

By now they felt sufficiently familiar with each other to be able to challenge suggestions which did not appeal, until eventually a consensus emerged. There was genuine teamwork and interaction. This had taken a whole morning and the children sealed their team spirit by having lunch together.

I then took a draft copy to each school for the teacher to read to the rest of the class so they too could contribute to the project by making suggestions and comments. Each school group

Bod Commonts! 1) We don't like the idea of a 33 year old having a glass lucazade bottle the tommy lipea cup was much better because to many tipes cups are flashe! 1) The Shadow would not cower into a corner when it heard occeans and jet it had a gun it would shoot everone! (3) The nummy is not a good Idea telling the Story The little boy was better we all Hink (4) and even if the mun did tell the story she didn't need to shout (5) Remelber when we changed it to Suit the 1:44 boys way of speaking the boys mother would remember it peopley and she would hardly say hanged She would say hupo!!!!! Good coments

Figure 3 Comments made by half the group in their own school after receiving part of the story through E mail from the other half of the group.

1) The amphere was castic it a good part

@ and it is a good idea to mention

came separately to the Nether Edge Centre and spent a morning editing and preparing a layout for A5 size, which they decided would be most appropriate for their booklet. They used the spell-check, moved text, chose font style and size, and in fact thoroughly enjoyed the whole process of editing, despite the fact that they had shown an initial reluctance to get involved in this side of the work. They used *Easel2* for illustrations and for designing the cover. And eventually they returned to their schools, exhausted!

Further sessions with the whole group were necessary before the work was completed, and these resulted in further improvements. For example, they decided that the pictures should have captions, so they imported them into *PenDown*, resized them, and then added the captions. Two pictures depicting the same scene had been produced, and as neither group wished to offend the other they used both, one in its natural context and one as a frontispiece – an excellent way of satisfying everyone, I thought.

The group printed out the story and collated it, and I added my introduction. I purposely had not intervened to check the final version myself,

but after the printing out I found only three spelling mistakes, which showed the degree of precision and care which the children had put into the editing.

9

### What we achieved

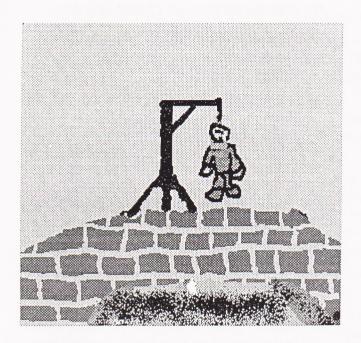
The project proved to be of immense benefit, socially as well as educationally. The skills learnt incidentally by the children proved to me that the computer must never stand alone as a separate experience, but must be integrated as a means of making tasks more fun. And the task was fun, because there was an aim and a specific end product to work towards. Editing, which children commonly regard as laborious and time-consuming, became fascinating and they were prepared to spend a lot of time checking and rechecking. Of course, the spell-check was invaluable. However, important as these skills and techniques were, they hardly realised how proficient they were becoming, so absorbed were they in the task of creating.

As for the National Curriculum Attainment Targets – a wide range of levels was covered, both in terms of Information Technology and English and specific statements of attainment were addressed. Particularly important in IT were: 2b – storage and retrieval of information; 4a – development, organisation and presentation of work; and 5a – presentation of information in different forms for different purposes. Particularly important in English were AT1, 4c – group discussion and interaction; AT3, 5d – revising and redrafting; and AT4/5, 5b – checking final drafts.

Socially the benefits of a collaborative, interschools project were very clear, and I noticed developments in relationships with every day that passed. I witnessed growing friendships between children from very different social backgrounds and saw how, as the project progressed, there was an increasing willingness to work with those from the other school. There was also a sense of shared pride in the finished product. It was very much a team effort with a sense of real purpose.

I appreciate that a project like this may be difficult for many teachers to consider without outside support. But, if linking up with a separate schools presents difficulties, similar success could well be achieved within the classroom or collaboratively with another class within the same school. However, the collaboration across social boundaries was certainly a valuable and satisfying feature in our own case. As one of the girls remarked: 'Next year we can talk to each other through electronic mail, now that we know each other.'

10 The Shadow MICRO-SCOPE 34



His body was hanging for years.

**Figure 4** Sample pages from 'The Shadow'.

"I remember a story that my grandad told me. Please listen everyone.

There was a man called Spence Broughton who married a lady with lots of money, but he wasted it all gambling, so she divorced him and he became a highwayman. He held up a post boy and murdered him as he was coming with the Rotherham post. He lay in wait under the bridge by the canal very near here. He was caught and taken to York where he was hanged. His body was brought back dead to Attercliffe and hung on a gibbet on the bridge that the attack had been on, to warn people not to try and do the same thing.

# News from the world: Singapore Introducing Pip

Jola Cockram Tanglin Trust Schools, Singapore

### Introduction

Greetings from Singapore! As a long-time subscriber to your wonderful magazine I thought it was about time that you heard from us in the Tropics. We at Tanglin Infant and Junior Schools look forward to our copy of *MICRO-SCOPE* arriving, keeping us admirably informed about developments in the IT field in a pleasurable reading style. Your articles are always informative and topical as well as practical.

At present, our school has 1278 pupils aged from four to 11 with a teaching staff of 64 and 28 teacher assistants, so we are rather a large primary school! Our largest classes have 28 children and in the early years this is reduced to 25 with a Teacher Assistant an every infant class. There is a tremendous team spirit in the

school with the headteacher, deputies, year leaders and post holders all working in close cooperation.

Tanglin Schools aim to offer primary-aged children the highest possible standard of education according to a British curriculum. The intention is that children should be prepared for entry to secondary schools in Britain or to schools, both primary and secondary, anywhere in the world that operate a British style curriculum.

We are fortunate in having a complete BBC workstation in every class throughout the schools as well as a computer resource room with another 10 stations available for across-school use. From this you will gather that we have a forward-looking senior management team, and supportive and approachable governors who listen to our requests!

### And so to Pip

Since January 1991, Pip has become a loved and much used member of Tanglin Infant School. We are very fortunate in having several Pips which have proved to be a great source of learning through fun for our early years children. Small groups of reception, Primary 1 and Primary 2 children pay regular visits to our Computer Room where they learn how to handle and operate Pip.

Controls

Wheels

Controls

And Controls

An

**Figure 1** A drawing of Pip by Primary 2 children.

For the first few visits the children were left to discover the sounds Pip made and indeed, to see if they could make Pip move. The children were very excited, little fingers were eager to have their turn and many a 'grumble' was heard from Pip. With judicious intervention from the teacher to explain what the emitted sounds represented, and restricting the figure input to just a single number, the success rate soared!

The children quickly accepted the fact that every time Pip was to move, he needed to be told which way and then how far he was to travel.

After few tries the children began to notice that Pip seemed to be moving a lot further than

the single figure keyed in; the CM key was introduced and so gradually, in short secure moves, the operating instructions were established.

The Reception classes used Pip during their Developmental Play sessions, where he was seen alongside areas dedicated to a variety of creative items from metres of flowing material to cardboard packing cases. It was not uncommon to see Pip – bedecked, however modestly – taking a measured walk along the floor, or pretending to be an elephant. As that particular class's topic was 'The Jungle', Pip was seen moving to the river for a drink and then back again. Wonderful imaginative play took place – Pip was about to join a PE lesson when one



Figure 2



**Figure 3** The reception class with Pip.

excited child asked if Pip could climb the walls like our friendly geckos do!



Figure 4

Practical sessions with Pip are ideal in giving children practice in understanding the wealth of mathematical terms to which they are exposed daily. The skills of sequencing, creating shapes, directional moves, number and logical thinking are all being promoted through this work. Pip certainly proved to be quite a success with the reception children and so far, has stood up well to the handling he has had to endure!

The children in Primary 1 and 2 have moved a stage further. They have visited the Computer Room on a regular basis and have begun to create their own short programs. The groups had already met FORWARD, BACKWARDS, CM and GO, so during one of their visits a challenge was set; they had to write a sequence for Pip, test this and then pass it on to another group who would hopefully be able to read and run their short program.

Trials were undertaken to make Pip move, estimation skills developed and the sheer value gained from having to explain an idea to others

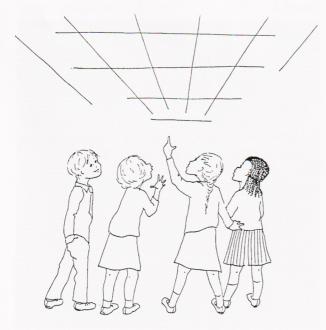


Figure 5

within the group, with all the ifs and buts that this generated, was tremendous. Collaborative writing followed and flaws were spotted, drafts were developed and soon 'TURNS' were needed. For a short time the children were left to handle this problem for themselves but it became apparent that help was necessary when Pip was not the only one starting to grumble!

At this stage the teacher intervened and 'sharp turns' were discussed. Luckily I have a ceiling made of large squares and by looking up (Fig. 5), all the children could recognise what they wanted to achieve – the right angle!

So a practical session followed where each child took a partner and found a space on the floor. One behind the other in a follow-the-leader game they walked and turned according to the ceiling! We sounded like this:

FORWARD – NUMBER
FORWARD – NUMBER
FORWARD – NUMBER
SHARP TURN LEFT – NUMBER
FORWARD – NUMBER
FORWARD – NUMBER
FORWARD – NUMBER
SHARP TURN RIGHT – NUMBER

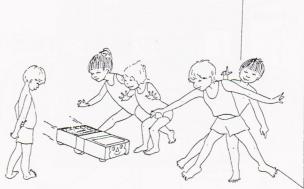


Figure 6

The 'magic number' for the sharp turn was then worked on by the children in their small groups. A restriction was placed on the children; this was really meant to prevent too many failures that could result in loss of interest. The children were asked to use just a single figure for each GO key. I was pleasantly surprised that this investigation didn't take long and soon all groups had discovered the magic number 9 (see Fig. 7).

So to programming: the children created a number of mazes, as in the example shown as Fig. 8.

Further up the school our eight- and nineyear-olds have only just been introduced to Pip; during their first session they worked without the 'magic key' and discovered for themselves

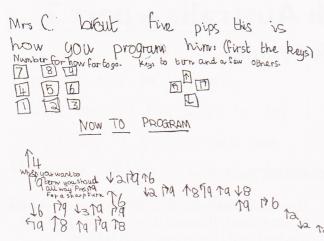


Figure 7

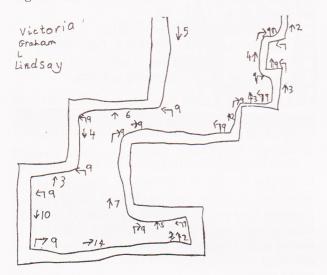


Figure 8

the unit of measure employed by Pip: one unit represents 1 cm. We had discussed the keypad and the commands used by Pip before the children made their attempts. The groups were then set the challenge of making Pip move a set distance. Pips were lined up behind the starting line and all the groups came to an understanding of what was meant by finishing! Once they had established the rules between themselves they began their programming. Keypads were shielded, strategies were whispered. Different opinions were expressed with all the head-shaking and facial contortions to match!

On the first attempt most reached half way to the target. Re-thinking and more programming came next. Success could be judged from the whoops of delight! For fun all the Pips were programmed with the same instructions and sent off in unison – the children thought it was wonderful! FORWARDS and BACKWARDS.

RIGHT 90 and LEFT 90, Pips marched in formation.

Someone suggested using a computer stool and judging the distance and angle from where they were to the target. Great! A challenge set for the next time they meet Pip!



Figure 9 Eight- and nine-year-olds work it out.

These children all experienced a sense of achievement and Pip certainly promoted logical thinking and accurate estimating. It turned angle learning into fun and hopefully what they learnt will be remembered and applied to other learning areas.

I know that all the groups are keenly waiting the next play session with Pip. He has become a special friend to many of the youngsters who ask how he is and what adventures he has had. Pictures are drawn for Pip and elaborate coverings designed for him.

There are so many learning areas in which Pip can play an active role and we at Tanglin have discovered but a few in the short time we have used Pip. However, with all this enthusiasm around, it won't take long before new ideas develop and Pip will be seen in many more learning situations. (And, we hope, be the subject of future MICRO-SCOPE articles! Editor.)

For more information about Pip, contact: Swallow Systems, 32 High Street, High Wycombe, Bucks, HP11 2AQ. Tel: 0494 813471. 14 MICRO-SCOPE 34

# News from the world: Australia - part 2

# Roamer and its application for young visually impaired children

**Hock-Neo Syn** 

Burwood School, Royal Victoria Institute for the Blind, Australia

Burwood School is attached to the Royal Victoria Institute for the Blind and has a unique policy of Reverse Integration; a carefully selected group of children from a mainstream school also participate in our program on a full-time basis.

### Introduction

Roamer is a large 'smartie-shaped' programmable toy measuring 30 cm across. It is the latest electronic educational product from Valiant Technology, manufacturers of the familiar Valiant Turtle. As with the turtle, the program commands and functions for the Roamer are based on the computer programming language 'Logo'. For example, the command RT 60 FD 10 causes Roamer to turn 60° to the right and then to move forward 10 'units'. Unlike the turtle however, Roamer is a self-contained robot which can be programmed to perform its actions without needing to be attached to a computer. Commands are entered using large, brightly coloured keys set in the top of the dome. Roamer's programming language also enables a sequence of actions to be combined into a procedure and subsequently activated by a single command.

Roamer is an ideal tool for introducing children from the age of three upwards to early oral language development. Children of this age are beginning to comprehend positional concepts, such as 'up', 'down', 'near' and 'far'. Roamer can be programmed to obey such positional commands – 'go up the ramp'; 'come through the tunnel'. Even young children can learn to control Roamer's movements by keying in commands that correspond to simple language concepts.

Such learning situations and related activities provide a context in which children can learn about turn-taking, sharing, and cause and effect – if Roamer is going to knock down the skittles, which direction does she need to go in?

How much does she need to turn? In the setting of our school, Roamer is particularly useful in teaching and reinforcing skills such as:

- visual training visual tracking and exploration;
- directionality left and right;
- spatial concepts up/down, here/there;
- early number and pre-reading work;
- language work learning colours.

In September 1990 Roamer made her maiden appearance before an excited integrated group, comprising four visually impaired and six sighted children in my grade.

With a young visually impaired child, learning must be a first-hand experience. The child, wherever possible, should take an active role. Roamer makes this possible because of its programmability and design. It makes a 'whirring' sound as it travels over most hard surfaces, allowing visually impaired children to locate it more easily.

### Fun in learning to use Roamer

Before the children used Roamer they learnt the simple commands needed by participating in indoor and outdoor activities.

Roamer is programmed to move forwards and backwards in 'units'. (A standard Roamer 'unit' is 30 cm, the diameter of Roamer, but it is also possible to specify your own Roamer units, such as centimetres, and program in this information via the keypad.) Sighted children can comprehend lengths and distances but visually impaired children can find it difficult to understand and make sense of lengths and distances. Hence, the everyday action of taking a specified step forward becomes a complex task for most young visually impaired children. In order to make the distances tangible, a cushion measuring 30 cm was used to enable the visually impaired children to know what a Roamer unit was.

### Roamer the show-off clown

Roamer can be cheeky,

When you tell him what to do,

Sometimes he goes forward one

When you tell him to go backwards two.

But don't you know that Roamer

can be good too!

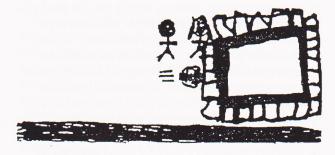


Figure 1 Many a true word . . .

The concept of turn is a difficult one for any young child to comprehend but poses particular problems for the visually impaired; our children practised making 90° turns by following the outside wall of our school building.

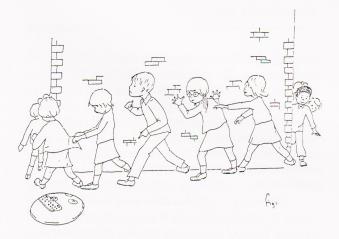


Figure 2

Once the children had grasped what commands such as **forwards**, **backwards** and **turn right** and **turn left** involved, they were able to program Roamer to perform the same actions – the promise of being able to use Roamer later on provided great incentive for the children to practise their new skills!

Visually-impaired children also have difficulty in estimating distances. For example, one child would lie on the floor and the others would guess how many 'Roamer forward units' long the child was. After a period of practice, their estimating ability showed marked improvement. The children had great fun making their estimations first, and then using Roamer to check their answers.

Visually-impaired children have 'orientation and mobility' lessons training them to move independently. The use of Roamer seems to reinforce what they learn in those lessons since the programming commands which are used to direct Roamer are similar to the commands which they themselves must follow. Visually impaired children also do not always see that skills learnt in one area can be just as applicable in other areas. The use of similar commands both in mobility classes and in directing Roamer may help them to learn that specific skills have broader applications.

There was a high degree of expectancy among the children; everyone was eager to have a turn at using Roamer. It was not long before the children were keying in commands themselves and the conveniently located tactual keys made it easy for the visually-impaired children to use them.

Roamer emits a 'positive' sound if the correct keys are pressed. When a wrong key is pressed, a buzzing sound lets the child know that Roamer has ignored that incorrect command. This means that a blind child is able to operate Roamer right from the start and to work with a sighted peer without undue reliance on an adult.

Roamer could not have arrived at a more appropriate time since our school was preparing for a concert on the theme of The Circus. Classroom lessons and activities in mathematics, language, arts and crafts were centred around a circus theme and Roamer became Willie the Clown!

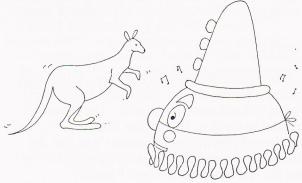


Figure 3



In one class, children had to estimate how many 'Roamer Units' Roamer had to make to knock down some plastic skittles. By this stage the children's estimation skills had improved

greatly and one totally blind six-year-old girl's estimate almost got Roamer to knock down all the skittles. She was so excited when Roamer just stopped short of the skittles!



Figure 5

Some partially-sighted children, with some residual vision, do not know how to use their vision to track moving objects. They must be trained to do this. In another instance, the thrill and fun of playing with Roamer was just the thing that motivated one partially-sighted boy to use his residual vision to see Roamer.

The children made up stories about Roamer the clown and these were written using *Stylus*, MAPE's 'talking' word processor.

These stories, relating to the circus theme, were simplified and brailled for the blind children. Tactile pictures were produced and labelled in braille. One classroom project was the production of a classroom newspaper using Front Page Extra. The children agreed to the suggestion that the small profit from the sale of our newspaper ought to go to help the school concert. Such 'decisions' challenged the children to act as a team and they experienced a great team spirit. One particular child, who is totally blind and usually rather passive, was encouraged to enter the discussions and was able to participate meaningfully at his own level.

Roamer's 'personality' really does make it fun for the children. Roamer comes with a number of coloured plastic jackets which can be decked in fancy dress. Another feature which is especially valuable for children with severe visual impairment is Roamer's musical capabilities. Roamer has a three octave range. Musical notes can be defined according to standard musical notes, and the duration of each note can also be specified. These 'notes' can be stored in Roamer's memory. Melodies which are stored in Roamer's memory may be incorporated as part of a sequence of commands. In one language lesson, the class was asked to suggest tricks for Roamer, alias Willie the Clown, to perform and so he was programmed to play the tune 'Skippy the Bush Kangaroo', much to the children's delight!

### ROAMER AT THE ZOO

Not long ago Roamer decided to visit the Melbourne Zoo. He met Wally Wombat. Skippy Kangaroo and some other animals were there too. Find out the other animals he met. Skippy took a liking for the strange looking Roamer. So he taught Roamer his favourite song SKIPPY THE BUSH

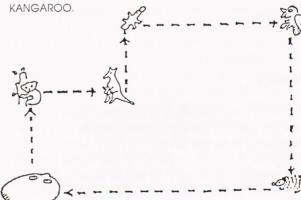


Figure 6 Activities with Roamer.

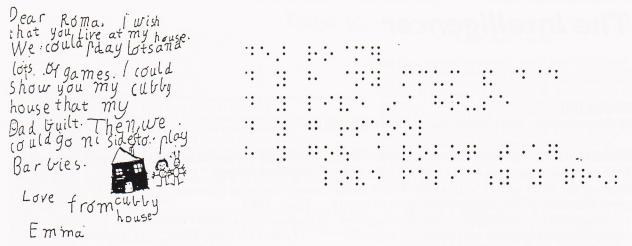


Figure 7 Roamer is a true friend.

We found that Roamer motivated children who have specific disabilities to maximise their other learning capabilities. Some children, who have above-average ability, may still have specific learning problems in some areas of learning. One of our visually-impaired six-yearolds has spatial problems with her gross-motor skills. She becomes disorientated in space as she attempts to find her way around. Yet another child has fine-motor problems and has difficulty in manipulating small objects. In spite of these disabilities, these visually-impaired children have strengths in music and creative play, and the motivation which they derived from using Roamer enabled them to participate to the maximum during group sessions.

### **Summary**

Roamer has come to stay at our school. Roamer is not just another robotic toy. There are many excellent toys which are suitable for sighted children, but unsuitable for the visually-impaired. Roamer is one toy that appears to be well adapted for both sighted and visually-impaired children alike. Roamer has been a valuable learning tool with a personality that has encouraged our children to display some of their latent skills. Their enthusiasm to play with Roamer has fostered their willingness to work independently. Many thanks to Dave Catlin of Valiant Technology for creating this unique 'giant smartie'!

### Acknowledgement

Thank you to Mr Geoffrey Treloar, Headmaster of Royal Victorian Institute for the Blind, Burwood School, for his helpful comments on this paper, and for all the support and encouragement he has given me. Thanks also to Mrs Pat Minton for the valuable information and help she has given to me and to RVIB.

Editor's notes: A longer version of this article was first presented as a paper at the 'Paper Clips to Silicon Chips' Conference in Hobart, Tasmania, from 18th–21st November 1990. The conference focused on technology and disability issues. The first article, in which Hoc Syn talked about using voice-synthesised programs with visually impared children, appeared in MICRO-SCOPE 33.

Valiant are developing a utility which will allow Roamer procedures to be saved to, or loaded from a computer. Contact the manufacturers for up-to-date information about this.

### **Product information**

Valiant Technology Ltd, Gulf House, 370 Old York Road, Wandsworth, London SW18 ISP, England. Tel. 081 874 8747/874 9000.

In Australia: Computelec Data Systems Pty. Ltd. 44 Peninsula Boulevard, Seaford. 3198. Victoria. Tel. 03 786 7177; Fax. 785 3599; Contact: Bruce Dixon/Candy Embleton.

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# The Intelligencer

### Simon Hill

IT Coordinator, Northaw School, Near Salisbury

Recent work on the computer-based simulation 1665, in which my class of 11- and 12-year-olds took on the roles of public health officials in the year of the Great Plague, inspired them to create a 'contemporary' newspaper. The Intelligencer was produced using cut and paste techniques, with Advanced Folio's Elixir font to give the pages an 'olde fashioned' look. Two typical pages from this newspaper are shown on page 19, opposite.

# Software reviewed by the children of Northaw School

Title: 1665

Supplier: Tressell Publications,

Lower Ground Floor, 70 Grand Parade,

Brighton BN2 2JA

Price: £30.00

Availability: BBC B, Master, Compact,

RM Nimbus

### Comments by the pupils

When our teacher first showed us 1665, a computer simulation program about the Great Plague of London, I was impressed. I thought it was very well set out and clear. The User Guide and monthly meeting sheets were useful. The graphics were very realistic, especially in the Introduction. The music at the beginning, Ring a Ring a Roses, was a very suitable start.

I learned a lot from the program. I had never realised that the Plague was so serious and how quickly it spread. The sections in the program that told me about the death tolls were very good. Some of the medical solutions were very interesting and helped me to realise that medical knowledge in those days was rather insufficient. I think that the 1665 program made clear these problems very well.

I found that the program really took me back to London in the time of the Plague and it helped me to imagine that I was amongst the frightened citizens and Plague victims. Being an official during the Plague would have been a very difficult job. No decision could have been easy and some of our choices in fact made the situation worse. I think that 1665 showed this guite well.

I did not find 1665 frightening, but I think it would not be suitable for children younger than nine years old. Perhaps 1665 did not explain very much about our characters (I was Mrs Alice Holmes, a resident of St. Pauls). This could be improved. At the end of the program the computer did not tell us whether we had made sensible or stupid choices and, if we had made better decisions, how many lives we could have saved.

Overall the 1665 program is very good and I enjoyed it.'

'When I first saw the 1665 computer program, an historical simulation, I thought the layout was very good and I still think that it is. As the program went on, I liked it more and more. I also found it very interesting. It taught me a lot about 1665 and I hope it teaches a lot more children.

I think the Pupils' Guide was a bit uninteresting, compared to the computer program itself. I think there could be a few more pictures.

I became quite involved with the program. I became very interested in the plague and all the people that got it.

I think it is perhaps not suitable for children under the age of ten because it might be an upsetting subject.

My conclusion is that 1665 is a very good program, but I think that there is some room for improvement in the User Guide. Altogether I think that this is a very useful program.'

Max Buttimer and Jeremy Norman-Nott

### Page 2

### Plague officials



The people who search houses are the examiners. Their job was to

check every house with a red cross on it. Then there are the watchman whos job was to wait out side the house day and night to stop people coming out of the house and walk around town and giving the plague to other people.

Then there was the nursekeeper whose job was to help the sick

they stayed with the sick untill he or she got better or died.

The most important of all are Physicians. They were asked to come around to the house and to try and cure the victim. The other was the Surgeon. He was like the Physican but he mainly searched for the bodies.

Then there were the Corpse-bearers. They went along the road with large carts to collect all the roads to collect all the dead bodies. To warn people about the burial, they had to hold a stick three feet long.

#### Riot breaks out in Leondon

At seven thirty this morning a riot broke out in Aldgate, some people got killed and a few doctors were injured. The ring leaders said, "We get paid to do our job, It's our job to put our rubbish in the river." At nine thirty the right matchmen stopped the riot and the ring leaders were arrested. It was found out that a lot of them had readers were arrested, it was found out that a for of their had smallpox. If a rested, it was found to be and not heard about the riot. He said, "30 far this morning I've seen more rubbish in the river than water". If a re we interviewed the head craftsmen. We asked him what he thought about the rubbish in the river and he said, "I don't see the difference between clean water and dirty water. My Dad Fred was able to put his trash in the water." After that we got one hundred people to say if they liked a dirty river and put more rubbish in the river or stop putting rubbish in the river and have a clean river, but the results were that sixty two people would like to carry on dumping rubbish and only thirty eight people would like a clean river.



### Plague spreads

The plague has suddenly started to spread, People are dying all over London, Priests believe that the plague is a punishment from God for all the evil things people have done, Scientists believe that the cause of the plague is to do with bad air, possibly volcano dust, Doctors say it is passed from person to person by bad breath.

Other doctors say the plague is imported through barrels of cotton other doctors say the plague is imported through earress of cotton and silk from the Lievant, People say the sighted comet is a message from God telling us he is going to punish us. Common people believe that if you chewed or smoked tobacco it would purify the air. Reports have been coming in that a boy at Cton has been caned for not smoking.



### Two Dutch Refugees attacked

Festerday two Dutch refugees were accused of spreading the plague, This incident made the mob very angry, The crowd wanted them and then lynch them both. But the night watchmen took them in, This men typen mem oom, but the night watermen took them in, this made the mob very angry so they threatened to burn the prison down. So there was only one thing that the night watermen could do and that was to hand the Dutch over to the mob. If after in the day we found the two Dutchmen one dead and one critically injured he was taken into care very quickly. We interiewed him in Hospital.

taken into care very quickly. We interiewed him in Hospital,

"We were trying to escape from the mob as fast as we could.

When we got to the end of the alley some of them were waiting there they had weapons like knives and sticks. We turned round to run but there were more coming down the other way. They were drawing closer and closer to us every second, I suddenly saw a club come down at me I did'nt know what happened after that because I had been knocked out, When I woke up my friend had been stabbed,"

### The Intelligencer 2d

2nd September, 1665

### King Charles Reaves Rondon

Rumour has it that King Charles II and his court are leaving Irondon. They say that they cannot live happily and comfortably in this infected city. "We want to go somewhere nice and quiet," said the King. Inster we interviewed a courtier who knew the King quite well. "I think it's appalling that he is leaving and deserting his fellow Londoners.

### A Plague Doctor

Recently we interviewed Dr. Chomas Iregg. He told our reporter, "I fear that the is going to be a great sickness in the city. Already houses have been shut up because of it. I fear the worst, so be careful."

One apothecary told our reporter, "I have been studying it and being seeing what causes it but it still puzzle me. I fear that it will get worse. It appears that it is already in certain places of the city. There are only two solutions and they are to move away from the city if you can or you can isolate yourself. I hope you do not catch it."



### ADVERDISEMERDS



Finest smoking TOBACCO Learned Physicians tell us that smoking will purify the air and keep away the terrible PLAGUE. Price: 2d a pound.

Dead TOADS for sale Best quality & guaranteed remedy for the Plague. Price: one groat. Money back if your TOAD does not give full satisfaction.

### Plague Water?

People living at the time of the plague such as workmen, hat makers all throw their waste and rubbish into the Chames. This pollutes the river very badly. Three suggestions came up to keep the water clean,

Firstly we should build a new water supply coming from the country.

The problem is that it would cost too much money and also it would take about five years to build by which time the plauge would be over.

Another point was to ask the Royal Society test the water. The test would be pointless because we already know the water is dirty.

The last suggestion was to ban people throwing rubbish into the river.

The problem is that tradesmen and craftsmen will complain that their fathers were allowed to throw their rubbish into the river and that they are not allowed to.



### A Chames Waterman

We were talking to Mr. Thomas Reynalds, the Chames waterman. He was saying how disgusting the water was. He thinks that is how the plague started, yesterday we gave an interview to Mr. Chomas Reynalds, "Yesterday I was rowing down the Thames, It was disgusting I found two dead dogs, floating on the surface and some sawdust from the craftsmen." Later in the afternoon we talked to Mr. Flaiter, a craftsman, "Why can't I throw my rubbish into the Chames? It doesn't do any harm, I woudn't be able to get rid of my rubbish, It's disgusting to keep it in my house, My house would be filthy."

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# Putting on the agony

Nina Fugaccia
MAPE Conference '91 organising committee

'They must have seen you coming' is what my mother always says when I have bought something which is not to her liking or have agreed to do some voluntary work. Ever been had? Hmmm! according to my mother, it happens to me all the time, and true to form, I never saw this one coming.

Early in 1991 the vast choice on offer at the MAPE National Conference in Glasgow occupied my mind; should I go to a theme? Both the Burrell and the Mackintosh themes seemed to offer an 'art' topic, an area of computer work I had just begun to explore in school. But the presentations also looked very tempting and the exhibitions could throw a light on new things to come. What I needed was expert advice and so, during a local MAPE Committee meeting, I talked to Peter Pearson, our regional primary computer education adviser . . .

. . . 'on balance I think you would gain from the exhibitions.'

'Yes, but I'm really tempted by the themes. Just how are they going to work? I like the idea of a visit as a starting point. . . .'

A month later, as I was on the way to the next MAPE Committee meeting, I met Peter again:

'How would you feel about helping with one of the themes?' (Echoes of 'Step into the parlour . . .'.)

'Er...it depends on which theme you have in mind. I'm quite a fan of Charles Rennie Mackintosh. It could be interesting.'

And I really meant it. After all, someone else would be in charge, telling me what to do, so there would be no real pressure on me, would there?

On the return journey . . . 'Nina, do you know someone who could help you with the theme, or shall I try to find someone for you?'

A thousand thoughts ran through my mind....don't panic... keep calm... but I thought I'd offered to help, not be in charge of a theme... don't be a coward, Nina – tell him!

'I thought you said you wanted someone to *help* run the theme?'

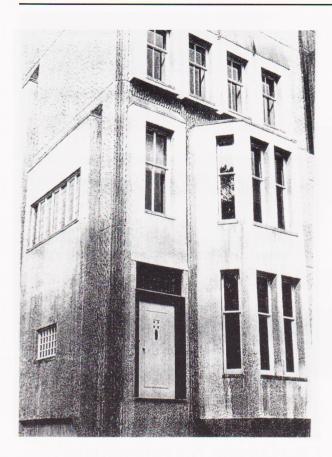
Alas, those pitiful words fell on deaf ears and as I heard my mother saying 'When will you ever learn?' I had a vague suspicion that everything had already been arranged before I joined the committee!



I thought that at least I would be able to pick the committee's brains, but, committees being what they are, I never did get round to it. Ann Clayton, a senior teacher in learning support from Perth, was persuaded to become my partner in adversity and she was to prove a great support and a most industrious worker.

Four weeks before the conference I still had no real idea of what I wanted 'my class' to produce and so Ann and I paid a fresh visit to the Hunterian Art Gallery, where there is a replica of Mackintosh's own home, complete with furnishings. We went not as mere spectators, but as teachers looking for ideas, desperate for that spark of inspiration.

It worked! We were fortunate in finding a 'treasure of a man' in a custodian who listened to our conversation with much more attention than our pupils pay in class. He joined us and suggested other places to visit, then added: 'I might have the very thing for you.' It was intriguing to say the least, and just as we were about to leave, he appeared with his 'treasure' – an old poster for a Charles Rennie Mackintosh exhibition, showing a stencilled wallpaper background with an elongated chair and the silver lamp from the dining room of his house. Just the thing! Feeling much happier, we visited other possible places of interest in Glasgow and decided on the materials we might need.



**Figure 1** The Mackintosh Wing, incorporating the original fenestration and front door.

Day One of the conference arrived and after a little time to settle in, we had an informal meeting with our new 'class', setting the scene for the days to come. Somewhat to our surprise, not one of them was Scottish, so enthusiasm for working on Macintosh as a novelty was high, especially for the visit to the Hunterian Gallery. When everyone had immersed themselves in the atmosphere, and, in true primary school outing fashion, caused a blockage buying souvenirs at

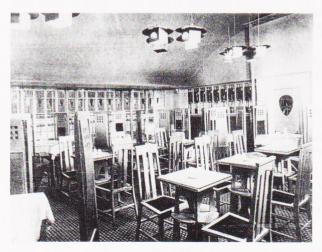
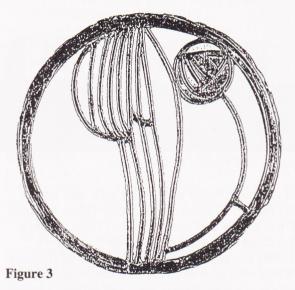


Figure 2 The Room de Luxe at The Willow Team Room.

the shop, it was time for coffee. We announced our plan to have coffee in the University Visitors' Centre, but by this time, one of our class had discovered that the famous Willow Tearooms in Sauchiehall Street still served coffee and muffins! Five taxis later, we were soaking up more atmosphere, eating cheese muffins and buying more souvenirs! The afternoon was spent using a variety of software packages to create CRM designs which were turned into stencils and used to produce wallpaper, wrapping paper (for the retiring Editor's presentation clock!) and silver lamps.



It was during this afternoon session that I made the mistake of saying that, magnificent though the Hunterian's Mackintosh House was, the place to *really* appreciate Mackintosh was Hill House at Helensburgh where quality of the light added the finishing touch to Mackintosh's designs. In our pre-conference planning, we had talked of visiting Hill House which was created by Mackintosh for Walter Blackie, but dismissed the idea as too expensive. Financial considerations were swept aside however as a delegate from Devon said 'it would be a pity to be so near and yet so far!' It was unlikely that many of the group would make a return trip in the near future and they'd heard so much about it, so please . . . ! The group's solution to the financial problem was to have an early lunch, pay for the petrol and work extra hard on their return. And this was exactly what they did!

Everyone agreed that it was a trip not to have missed and was the epitome of the Mackintosh experience. The room was a hive of activity on their return, with much discussion and collaborative work. Some people even wanted to work on whilst the ceilidh started without them, but, much to their disappointment, they found

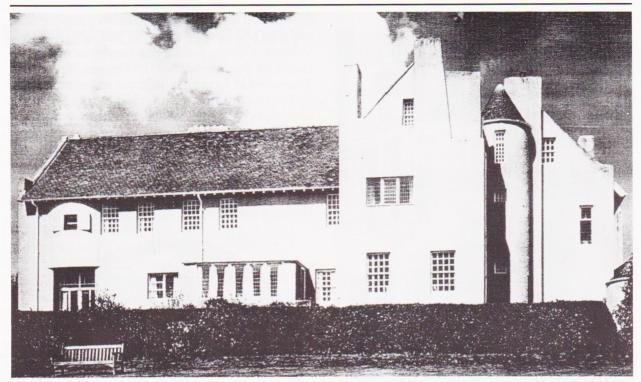


Figure 4 Hill House, Helensburgh.

that the equipment was under lock and key. Next morning, most of the group chose to finish the work they had started rather than attend a presentation of their own choice!

It was my first experience not only of running a theme, but also of going to a national MAPE Conference and despite my trepidation, I really did enjoy it. It gave me the opportunity to re-visit the Mackintosh houses and to see the designs translated into computer forms by a very enthusiastic class of pupils!

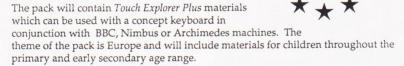
But in future, I must remember to approach MAPE Committee meetings by the back door,

so that they don't see me coming – my mother will be proud of me!

Editor's footnote: As a participant in the Mackintosh theme I can only say to Nina that her trepidation didn't show! We all thoroughly enjoyed our CRM experience and, if you read the Conference accounts in MICRO-SCOPE 33 (pages 31–33), you'll remember that I wasn't the only one who became a Mackophile. Thank you again to Nina and Ann for their inspiration, thorough preparation and unfailing good humour in the face of an unruly class who persuaded them to change all their plans!

# Are you ready to go Into Europe in '92?

Early next year, current MAPE members will receive, FREE!! the *Touch Explorer Plus Support pack*.



The discs will contain a runtime version of TE+ which will enable you to run the files, although you will not be able to alter them in any way. To do that, you will need a full version of TE+ and there will also be an opportunity for members to purchase this at a reduced rate.

But that's not all!!..... The pack will also include a completely revised and updated version of the MAPE Concept Keyboard Special, first produced in 1989.

If you haven't yet joined MAPE, do so now to take full advantage of this unrepeatable offer!

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# One year on . . .

### **Reg Eyre**

Curriculum Support Teacher, Wiltshire LEA

Ouch! Ouch! Isn't it amazing how wonderful word processors are? You can even write letters one-handed. When the Editor has your arm twisted behind your back, you will even agree to write an article for *MICRO-SCOPE*!

I have been asked to say how I am getting on in my new job twelve months after I replied (MICRO-SCOPE 31) to Rosemary Burton's letter in MICRO-SCOPE 30, and I can only say . . . I am loving it!

Although there are only two of us to cover about 300 primary schools spread around the county of Wiltshire, we have continued to operate in the manner that we think and believe is the most effective, i.e. working alongside teachers with their classes. We still run courses during the day and after school, as well as one five-day residential control technology course.

We try to build in follow-up visits to any school we work in and also for teachers who have been on courses. This does mean that there are still many schools in Wiltshire that we have not been to. The only way we can respond to this concern is to say that if a school contacts us with a problem or request, we try to accommodate them as soon as is practicable.

Are we therefore reactive or proactive? Our intention has been to strike a balance so that we do not become a fire-station service, going out merely to solve niggling problems with printers or software. We are also wary of being used as shock storm-troopers, ready to parachute in to any school which has had a general evaluation and told to correct shortcomings arising from the inspection report. Fortunately, we are seen as friendly people who are prepared to help in almost any number of ways. Sometimes a headteacher will use supply cover for a teacher so that we can work through a specific agenda such as designing or creating Concept Keyboard overlays; we may start a topic with a class and then let the teacher take over so that our role becomes one of offering moral support; or we can find ourselves working with all the teachers in a small school where we move from class to class just to see that everything is underway.

The follow-up to the residential control course involves going to the teachers' schools and either seeing what they are doing or offering

a hand to extend the children's activities a little further. The children and their teachers are then able to come to a Control Challenge session where they show other teachers and their classes the type of work they have been engaged in.

The other major activity this year has been to write a set of guidelines for the use of IT in the National Curriculum. Most of this was started by the previous team of advisory teachers, but it fell to us to finish off the writing, proof-reading and preparation of the document for printing. The editing, re-drafting and proof-reading seemed to go on for ever! The end result looks and reads really well and I think that anyone involved in its production can be justifiably proud of a very professional document. Even after having read the major amendments to the National Curriculum Science document, our own guidelines on science do not need altering.

In primary schools, IT is not a top priority at the moment, which is hardly surprising considering the amount of work they are having to cope with. Our own work comes after the major preoccupations with SATs, profiling, planning, record keeping, evaluations, etc. However, we still get a steady number of calls for help, perhaps because teachers can see that IT is a useful vehicle for enhancing children's learning in any of the other National Curriculum subject areas.

To summarise: I am enjoying my work and I hope we are bringing useful teaching ideas into classrooms under the umbrella of IT. We may be only using BBC Masters or model B computers, but we do so knowing that they are useful work horses, able to do most things that we ask of them. The few fortunate schools that are using the A3000 machines are doing some exciting work but they are also rediscovering the frustrations of the early days of 1982!

### References

The Wiltshire Guidelines documents are available for £9.00 from:

Ed Larkin, IT Adviser, County Hall, Bythesea Road, Trowbridge, Wiltshire BA14 8JB.

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# Musing on the educational IT scene (4)

### 'Are you sitting comfortably? Then I'll begin . . .'

Chris Hurrell Shropshire LEA

In that wonderfully cosy phrase – cosy for those of us at that certain age, that is – there is a golden nugget of truth. If you are sitting comfortably you are more than likely to be absorbed in whatever you sat down to do: writing reports, watching TV, eating breakfast, driving. Now driving – there's a good example! Car manufacturers' research and development departments spend millions of pounds just to get drivers sitting in the best position. All this work by the clever designer people just so that drivers can do a complicated job needing a deal of concentrated effort to prevent cars leaping into the landscape guided by uncomfortable fidgets. (By the way, did you know that German car seats are on average wider than British car seats, because German bottoms are on average wider than British bottoms? Interesting stuff.)

So what's all this got to do with IT in the primary classroom? Quite a lot actually. Just have a look around your school, college or wherever, and watch your students at work sitting at the computer. Are they sitting comfortably, rather than standing at the keyboard as some infants do, enabling themselves to see the keyboard by looking own at it rather than viewing it at chin level? Is the screen they are looking at directly in line with the keyboard, not offset to left or right? Are they able to see the screen without craning necks like a crowd at an air show? Are there distracting reflections of lights or windows on the screen? In essence, are they sitting comfortably?

A little cautionary tale. . . . I was in a primary classroom recently doing my advisory teacher bit, ie watching children at work, when I observed some peculiar behaviour at the keyboard. Little lad – let's call him Bob, for reasons that will become clearer later – was typing away at an account of a visit to the local supermarket, quite a good typist, two hands, two fingers, reasonable speed, but every so often, the typing stopped and the lad did a

bobbing up and down movement a couple of times in front of the screen, then the typing continued. After a few of these low level jack-in-the-box attacks I was moved to ask what was going on. I can't see the words for the lights, says Bob, as if it was blindingly obvious. But I can see the words! What do you mean Bob? says I. The lights are just where I write, so I stop to have a look at what I've written. So I got down to his level and lo and behold - there was a reflection of the class strip light, right across the line where the cursor appeared on his word processor. He could not see a thing as he typed, just reflections of strip lights, hence the bobbing up and down. Quiet word with the teacher, teacher fetches larger chair, Bob climbs on, all is OK. Supermarket visit continues apace.

Where was I? In office and industrial environments an enormous amount of cash is spent on getting computer users comfortable, because those who are paying the wages of the computer users know that productivity is higher, typing more accurate, concentration periods longer, if the operator is comfortable at a well-designed work station. Just have a look at how much gas suspension chairs cost, or anti-glare screens or swivel/tilt monitors, to see the value that employers put on comfort. So in our classroom, a little more thought about the sitting comfort of the user and the siting and layout of the workstations may do wonders for productivity and motivation of our students. If Bob had had a gas chair, his jack-in-the-boxing would not have been necessary.

The comfy chair – this could be making a major contribution to the development of the English language!

I really must find something other than the camping chair I'm sitting on to type this article – no wonder I've got backache!

The views expressed in the article are personal and not necessarily those of Shropshire LEA.

# CLIPS: The Cheltenham Laptops in Primary Schools project

### Les Watson

Cheltenham and Gloucester College of Higher Education

In 1987 I began working with Bill Tocknell and the children of Randwick Primary School in Stroud using desktop personal computers to investigate the potential of authoring software as a content-free tool for use in primary schools. In the terms which followed we buried a Viking village in the computer, created a database which the children were then able to use to solve a murder in a Gold Rush town, journeyed into space, and investigated a mysterious theft in a fictional village! Accounts of some of this work appeared in *MICRO-SCOPE 25* and 26.

For all these topics the children worked in groups of three and four and only one group at a time could have access to the computer. This was not a major problem as the files that we had written were designed to generate work away from the computer, but there were times when a second machine would have helped. So I took my own laptop computer into the classroom for the children to use during my weekly visits. The machine had a high novelty value and was greeted with enthusiasm by the pupils! They particularly liked the fact that it was portable and did not tie them to a particular place in the room. As much of the software being used relied on research skills and required ready access to a stock of suitable books, being able to take the laptop to the library corner was ideal.



This experience convinced me that it would be worth while to investigate the potential of laptop computers as a classroom resource and their suitability for the purpose. After discussions with NCET, the CLIPS project was established, to give a number of primary school teachers and children access to laptop computers for an extended period of time. IBM offered seven IBM PC convertible machines and Logotron provided copies of *Eight in One*, an integrated package consisting of a word processor, spreadsheet and database to complement the work already taking place with the authoring software, *Linx88* and *Keys88*.

Teachers from the five project schools, in Gloucestershire and Wiltshire, began with a short INSET session on the use of laptops and an introduction to the MS-DOS operating system. This was deliberately kept low key so that those in the group who felt uneasy about using a new type of machine were not discouraged! Whilst some possible uses were discussed, no attempt was made to prescribe the way in which either the machines or the software should be used; this was allowed to develop naturally in each school at a pace which suited the teachers concerned.

### School reports: The teachers' comments

### Nailsworth Primary School, Gloucestershire

'The children took an instant liking to the computer. It looked a lot different from the usual BBCs and I believe that many of the children realised that it was technologically quite advanced and therefore something special; many commented that their parents used one at work.

Being able to use it either on batteries or from the mains enabled the children to work on it wherever was most convenient – at their desk, outdoors or at home. The children found the system easy to use, were able to locate the required program quickly after very little practice and found the spell-check facility very useful. Although the printer has the advantage of being portable, it has caused us a few problems, failing from time to time and producing printouts of variable quality, even with a new ribbon.

Nevertheless, the system certainly stimulated and motivated those children who could be classed as poor writers and has served to extend and further develop the skills of those who are more able. The main advantage is, I feel, the machine's portability, which enables children to continue or commence work at a point and place of their choice, be this at home or at school.'

### Randwick School, Gloucestershire

'The laptops have been used by:

- teachers working on Linx88 simulations at home:
- all junior children, although only to a limited extent;
- a boy with dyslexic problems, who found the word processing facility a great help;
- by the school secretary, to type out questionnaires about our school journey.

Portability and battery operation were among the advantages of the machines; disadvantages were printer failures, losing work when the batteries failed, and teacher reluctance to let the children use something with which they themselves are not entirely familiar!'

# St Bartholomew's School, Wootton Bassett, Wiltshire

### Points for:

- as the machine does not need permanent access to a power supply, it can be moved around easily;
- it can be taken home to be worked on by the teacher – it's a bit of struggle, but I've mastered the art of cycling with it on my back! It can also be taken home by children, provided they are collected by car;
- children do not appear to be put off by the size of the screen.

### Points against:

- The model we were using is too heavy to be moved safely by junior aged children;
- I personally found the screen tiring to look at although, as I said, this did not seem to worry the children;
- things happen which I can neither explain nor correct quickly!
- the printer caused a great deal of trouble. For children using a word processor, much

of the appeal vanishes if they cannot see their work printed out straight away.'

### Longleaze School, Wootton Bassett, Wiltshire

'Our aim on receiving the laptop was to develop word processing as an accessible writing tool, to be used as and when there was a need for a piece of writing to be done. Previously we had tended to use our BBC word processor to produce 'best copy'; now we wanted to use the laptop as a starting point for writing.

As we were working with a group of 64 children we decided not to make it available to all of them, but limited its use to a few children and for 'special' pieces of work such as writing up scientific observations. Most of the children in our group are at ease with *PenDown* and *Advanced Folio* on the BBC and so were happy to continue with these programs, rather than learn to use a new program. Consequently, those few who *did* use the laptop had reasonable access, as and when they needed to use it, and when a second laptop arrived, we were able to increase the size of this group.

One of the obvious advantages has been to place the writers (we encourage a collaborative approach) in more control of the writing process. Redrafting and checking is being done instinctively, although it is still done as more of a grammatical or spelling exercise rather than as a refinement of ideas. However, with the ease of editing which the word processor provides these skills are now being catered for more in our planning and we hope that they will develop accordingly.

One of the worries often expressed by parents is that an increase in the use of computers for writing will lead to a decline in handwriting skills. This has not been the case so far, and indeed, there are positive signs that children who find the mechanics of writing very laborious are actually producing work of greater quality through the use of the laptop. The visual appearance, an important factor in children's writing, becomes of secondary importance, although time taken to complete the task has increased.

It has been particularly useful to be able to allow children to continue work at home by allowing them to take the machine home. So far, this has only happened with few children but nevertheless has been a successful experiment and encouraged a greater participation by parents in the everyday activities of school.

The major disadvantage has been problems with printing, but all in all, we have been extremely pleased with the children's positive

responses to this addition to our classroom resources.'

# Beech Green Primary School, Quedgeley, Gloucestershire.

For the first six months of the project the machine was used by my colleague and me to author our own applications using Linx88 and Keys88, and by the children to run the programs in class. However, as the project developed, the word-processing software was used increasingly by the children and some have also taken a machine home at weekends.

The children became very fond of the laptops, feeling that they are special child-sized computers where real work is done. They particularly liked the size of the keyboard and had no difficulty with either the size or appearance of the screen. The children also like being able to go into a quiet corner to work or take the machine outside and sit by the pond waiting for inspiration! They quickly realised that the flashing screen was a danger sign and would rush back to the classroom so that the machine could be plugged into the mains supply! The only disadvantage has been the portable printers which have not been equal to the tasks they have been asked to perform; although a more substantial printer would not be as portable, on balance I would forego portability for reliability.

Both the children and I enjoyed taking a laptop home to work on in the evening and at weekends; the children produced some excellent work, there was a good spin-off for parent-teacher relationships and I felt like a real yuppie!

The two laptops I have had in my class have been a valuable asset and have helped many children to improve their writing skills and develop aspects of IT capability which they will need in the future.'

### The children's comments

'I think the laptop computer is brilliant because it has got lots of things on it. You can have games or a word processor; it's got a spell check and can count words. You can save writing, print it out, remove files; it's got loads of pages on the same piece of writing. You can find out the time of 16 countries in the world, an alarm, a stopwatch and a calculator. You can copy discs or a program. It gives you information.'

(Liam, aged 10)

'I think the laptop is good because you can take it home with you. I don't finish some work at school and it's good to save it and do it at home. The programs are good. I like *Linx88* because you can make your own adventures; it's like you're really there.'

(Corine, aged 10)

'I like the laptop because it's easy to carry around, it's easy to set up and operate. The best thing I like about it is it just needs one disc to operate five or more programs. I like things like the world clock, stopwatch and countdown. The safe thing about it is all the discs have a code.'

(James, aged 10)

### The parents' views

'This was new technology to me, but after we had found out how to turn it on, Hazel was away. She enjoyed using the machine and it is a good device for children to take home who haven't got the use of a computer at home. It shows them today's technology – things they will find at work.'

'I think that they are excellent machines, which encourage children with their writing. The fact that they may bring them home gives even more encouragement, and allows them to expand on their work in a way that there would probably not be time for in school.'

'Initially we were concerned that the machine might accidentally get damaged. We found however, that Darren made great use of it and there were no major mishaps!'

The project highlighted the need for a combination of reliable hardware (especially printers!), suitable training for staff and sufficient follow-up time. In this, the CLIPS project was not unique; all these elements are essential if any innovation is to be successful. The integration of the laptops into the schools has been a slow process, but despite minor technical problems, the machines are being used effectively in schools. They are a valuable addition to classroom resources which extend the range of IT experiences for pupils.

Editor's note: Since this project began in 1988, the number and range of laptops now available has increased dramatically and prices are beginning to look more reasonable. With the expectation in the National Curriculum, that 'pupils should develop IT capabilities through a range of curriculum activities', the size and portability of such computers would seem to offer many advantages. It is increasingly difficult to find suitable accommodation for large desktop computers in busy classrooms

and I know from colleagues around the country that a number of projects using laptops or small portable computers are taking place. I would like to include accounts of these in future issues, so if you are involved in such a project or know of colleagues who are, please drop me a line.

### References

For further information about the CLIPS project or about the authoring software, *Linx88* and *Keys88*, contact:

Les Watson, St George's Place, Cheltenham & Gloucester College of HE, Cheltenham GL50 3PP.

# Genesis: of the frog

### Dave Hollett Cadishead Junior School, Salford

### Introduction

There are many pieces of software that deal with pond life but they usually take an information handling approach using the traditional files-andrecords type of structure (Grass from Newman College) and deal with the great variety of life in ponds (Pond Dipping from MAPE Tape 4 or *Pond Life* from Mercury Educational Products). I have taken these approaches before but with the arrival of a new piece of software, Genesis, and a new computer - the Acorn A3000, I decided that when doing a pond topic I would focus on the life cycle of a particular creature. I decided on the frog because living examples of the early stages could be kept in class and the stages of development are quite easily demarcated. (Editor's note: check with your LEA for Health and Safety regulations about keeping 'livestock' in classrooms.)

As with most topics this one took on a life of its own and the use of the computer developed from using the *Genesis* application to producing a booklet about the frog, into using an animation of the developmental process (using !Player), using sprites to populate an empty pond from within !Paint, using Poster to print out large outline pictures of pond creatures for display, and using *Creator* to produce a game for the children to play. Although the IT part started as language orientated it soon spread into other areas such as art and design.

### Rationale

My aim was not to develop specific IT skills in the children but to use IT to enhance their learning. Owing to the dual nature of the tasks IT capability was increased but within an appropriate context.

I wanted to give more breadth to the IT aspect of the topic and also wanted the children to use their existing IT skills within a new situation, becoming more independent in their learning. The materials were designed to be appropriate to my own classroom situation.

I designed the *Genesis* application around the principles developed in a Schools' Council publication *Reading For Learning in the Sciences*. The main argument of this book is that there is a limited number of distinct types of text within science which can be identified by the nature of the scientific content they present. Effective reading occurs when it also involves practical activity and hypothesis testing on the part of pupils. A piece of text about the development of phenomena or other changes is classified as a 'Process Text' and describes 'transformation and sequential changes over a period of time'. The types of information contained within such texts are:

- a state or form of phenomena at different stages
- b properties/structure of the phenomena
- c stage or steps of time of change
- d action which causes transformation
- e location of the change
- f instrument or agent of the change.

I tried to fill in most of the slots within the *Genesis* application although d and f are not covered since they involve sophisticated genetic/chemical processes which are beyond me, not to mention my Year 5 children!

### The application

The application takes the form of several pages which can be opened from a title page, which has

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SMALL TADPOLES	7
After about 10 days the tadpoles are ready to come out and cling to	Taran :
the jelly or small plants.	d l
At first it has 3 pairs of feathery gills for breathing which are on	1
either side of its head.	
In about 2 more days the tadpole is ready to begin swimming.It swims by wriggling its tail.	1
At this stage it only eats plants so it is classed as a herbivore.	
	1
Complete the sentences.	
By wriggling its tail	1
A Maria Caracteristics of the Caracteristics	1
The gills are located	]
A herbivore is	Ĩ
	1
NACTOR AND	× .
DEVELOPING LEGS	(C)
After about 6 weeks legs appear at the base of the tail. Each has	
5 toes with skin growing between each toe. The feet look like a pair of swimming flippers.	
The tadpole has developed lungs and has to rise to the surface o	f
the pond to breathe.	
After about 8 weeks it starts to eat meat instead of plants and is classed as a carnivore.	
Classed as a Carinvole.	4
How would a frog's feet help it to swim?	
	1
	1
Why does the tadpole go to the surface?	
the control of a second and an arrange of the second of the control of the second of t	3.0
THE FROG.	á
By 14 or 16 weeks the frog is fully formed but it will take at least a year to	
reach full size.	1
It will eat worms, slugs and spiders and in the winter it will hibernate.  Sometimes it will shed its skin and grow a new one. It will eat the old skin.	1
The whole process of changing from a tadpole to a frog is called	
metamorphosis.	
When it is ready to mate the frog will retum to the pond .	1
The second secon	18
Park Control	
What does hibernate mean?	A. C. C.
Name items in the fact. I have	
Name items in the frog's diet.	5

**Figure 1** Examples of information pages.

What happens to the old skin?

numbered boxes on it which open up each page when clicked on. Each page has information relating to the stage of development along with sprites to illustrate the stage. There are a number of language-based activities on each page ranging from sentence completion and anagram solving to sequencing and other reconstruction activities.

When the children have completed their pages of the application they can be printed with their names on the cover to provide them with a permanent account of the development process. The data handling aspects of *Genesis* were not used on this occasion since there is not enough variety of information within the application.



Use the pictures opposite to write your own account of how the tadpole develops into a frog.

If you want more information click on the picture opposite or send the screen to the backand you will return to the cover where you can open any pages you need.
You can cliange the size of the page so that it can be read as you type.
Think about food and breathing and what the tadpole looks like.

Figure 2 An example of an activity page.

The children quickly found their way around the electronic book. The only skills they needed to operate it were those connected with window management and mouse operation. If you have 1 megabyte of memory then you can usually only open one page at a time so you need to be able to close one page (after saving or printing) before you can open the next one. At first I printed the pages but found that valuable time was being wasted waiting for them to appear. To solve this problem I prepared a blank master disc. The children saved their pages onto their copy of the application and these were printed out during lunch time and break. When one group had finished I copied the blank master onto the completed disc which was then ready for the next group.

Typical comments from the children were:

'It looks good on the wall when it's printed.'
Paul

'It was easy to operate and mistakes were easily corrected.' *Mark* 

'Some parts were easy and some parts were difficult.' *Vicky* 

You don't need *Genesis II* to use the application but you will if you want to alter it. If you do change it, I would be interested in seeing any additions you or your children make.

Also included in the application is a short film, which helped to increase understanding of the sequence of changes. *Player* is an amazing piece of free software by Emmet Spier which allows

you to create animations from sprite files. Not only can you make animations but you can alter their speed/size and can even have the animation repeat itself backwards. The children can use Paint to produce three or four slightly different sprites, drop the file onto the player and watch their own little animation of a smiling face or a bouncing ball. If you have 1 megabyte of memory then you cannot see the film if a printer driver is also loaded but pages can be saved and printed out later. The sprites used in the application (plus other pond creatures) are on the application disc and can be used in !Paint to populate your own pond. There are two empty ponds in the sprite file, so just select one of these, pop up the tools menu and choose one of the other sprites as a brush. The children enjoyed making their own individualised ponds and quickly demonstrated their ability to identify the creatures they were 'painting' with. This activity became a kind of electronic 'Press and Peel'. If you have Artisan 2 you can make wallpaper patterns out of diving beetles or water boatmen!

### **National Curriculum**

The application covers the following targets:

English: AT1 L3 a,c,d; AT1 L4 b,c,d; AT2 L4 c,d; AT3 L3 b; AT3 L4 b; AT4 L3 a,c,d.

Science: AT1 L3 b; AT1 L4 j; AT2 L2 a,b; AT2 L3 a,c; AT2 L5 a,d; AT3 L3 a;

AT12 L3 a,b,c.

Technology: AT5 L3 a,d; AT5 L4 d.

IT capability was developed in conjunction with other subject attainment targets as I feel that it is important that children experience IT within a wide range of contexts. The IT work was relevant in that it took place within an appropriate curriculum context.

### References

If you would like a copy of the *Genesis* application **!Frog** and the animation/sprites, send a formatted disc

+ 50p postage to:

Dave Hollett, Cadishead Junior School, Allotment Road, Cadishead,

Salford M30 5JD; tel: 061 775 2217.

The disc contains full instructions along with ideas for use in school.

!Player and The Pond Game, in which the tadpole has to dodge the nasties and eat food in order to grow into a frog, are available from:

Mike Witkiss,

Diamond Public Domain,

86 Meadowbank, Moore Lane,

Holway, Holywell,

Clwyd CH8 7EF.

Diamond also have the *Genesis* **!Frog** application and a large collection of free clip art and drawing programs which could be useful in school. Ask for a free catalogue.

Genesis II is available from:

Oak Solutions, Cross Park House,

Low Green, Rawdon, Leeds LS19 6HA;

tel: 0532 502615.

# Computers in the rural primary classroom

**Barry Smith MEd** 

Educational Technology student, UCW, Aberystwyth

It is now almost a decade since premier Margaret Thatcher announced a scheme whereby all British Primary schools would receive a microcomputer package. There was an expectation that this would be the dawning of a new technological age. With computer usage now figuring in the National Curriculum one would expect that a visitor to the 'average' primary school would encounter pupils proficient in computer skills, in command of, and at the forefront of technological advancement, watched over by teachers well versed in the skills of integrating computers into cross-curricular activities.

After recent research with a number of ten-year-old pupils I would suggest that this is not the case, rather the situation exists where our students and teachers are not masters of the technology, but are mastered by it.

As teachers, many of us are of an age when our preconceptions of computers were governed by the ways in which they were depicted in science fiction cult series such as *Star Trek*; machines which knew all and had ultimately been programmed to have the welfare of mankind at their electronic hearts. In the main, our direct experiences were severely limited, which has led us to overestimate the understanding that our

pupils have of computers. They are owners and users in their own right, therefore we believe that it is they who are the experts. The increased use of technology has dulled us to its dangers. These exist at two levels: for the teacher there are misinformed expectations and for the pupils incorrect assumptions.

Firstly there is a danger that as teachers we are allowing ourselves to be guided into adopting teaching strategies that we would consider unthinkable and dismiss out of hand if they were presented in any other format than computergenerated. Are prolonged drill and practice exercises any more justifiable when done on the computer than they are when done with pencil and paper?

Secondly, there are occasions when the computer is used for no other reason than the fact that it is there – to be seen to be a good teacher one should be seen to be using the computer.

There is a genuine desire amongst the teachers I have met to use the computer to its full potential but their knowledge is often limited due to lack of good in-service training. Many teachers have only attended a few courses and many of those date back to the early days of computer familiarisation, when little more than viewing available software was on offer. With so much pressure on teachers, occasions must surely arise when children who know how to load a disc are just left to 'amuse' themselves.

'You'll get some good replies from the children', I was told. 'They know all about computers.' The head teacher echoed the beliefs held by many both inside and outside the teaching profession. True, the children know how to switch on the machine and load discs, but the danger exists that we attribute to them an understanding which many adults lack.

The 24 pupils who were the focus of my research were ten years old; boys and girls were equally represented, 18 were owners of computers and all were users. When asked what a computer knows, the answers were almost universal, 'everything', 'lots' and 'most things'. Mike said 'It knows everything,' adding 'it's not something you can cheat with.' When asked 'What if I told it you were Prime Minister?' he replied with, 'You couldn't do that, it can help you with hard sums and all that but it doesn't cheat and it never lies.' This is an interesting comment for Mike has severe behavioural

problems. He is an avid home computer user whose classroom confrontations with his teacher continually revolve around his being unfair, cheating and 'lying about me.'

All respondents in the research believed that the computer actually knew when errors were being made. The majority of pupils also believed that the computer understood them, indicating that it referred to them by name. Simon believed that 'it understands how I feel when I'm playing games.' Keiran went further by explaining 'It knows when I'm playing and getting excited because it makes the game harder.' In viewing the comments of these pupils who have extensive experience of computer usage it is possible to obtain an insight into their perceptions of computers. These views have important educational implications. As has been highlighted earlier there is a danger of teachers believing that the students understand and are masters of this modern technology. The reality, however, is totally the opposite; they are servants dulled to its dangers by constant use and merely masters in so much as they can operate and use it for technology's sake.

From the many comments passed it was also obvious that there was a real danger that the pupils identify the computer as a human form which provides them with information that is always true and neutral in content. This view of the computer may be strengthened by the terminology surrounding it. In common usage we often refer to the computer as having a virus, something that the students may not understand in technological terms but can relate to in human form.

There is a real need for teachers to clarify their own understanding of the computer ideology and to question the values and ideologies that are being presented in computer assisted learning. Without this the pupil becomes nothing more than a passive respondent. This is heightened by the fact that computer programs are seldom mediated by the teacher. This is important for, as pupils come more and more to use the computer, a time may arise when they will value only what *it* generates, eventually seeing it as the only source of information.

Many teachers are aware of the potential and motivational qualities of the computer; I feel it is important that we also recognise the dangers inherent in misuse, for only then can we truly master the tool.

MICRO-SCOPE 34 32

# So you've been asked to produce a pupils' booklet? Then let the pupils do it!

Sue Gallagher

Kingmoor Junior School, Carlisle

I had returned from a two-year stint as an Advisory Teacher for IT and 'Practise what you preach' seemed to be ringing in my ears! I had a class of 26 Year 6 children with a very wide range of ability. We had a Nimbus for the first term, and straightaway I had introduced the children to the idea of their own personal disc. This was

taken on board with few problems.

Organising access to the computer in a purposeful way was the difficult task I knew it would be. There were a number in the class for whom the computer offered little excitement and challenge, and at the other end of the scale, were those who would spend all day on it . . . and I mean all day! I chose some group tasks as one way of addressing the problem. During the term, they complained to Carlisle City Council about the lack of recycling facilities, quoting letters they had written to and received from Sheffield City Council about their recycling facilities. They collected and processed data from a survey on shopping preferences, with particular regard to recyclable materials. Some individuals, not all, drafted and redrafted free writing on a number of subjects. Children also brainstormed ideas, and used cut and paste to organise their thoughts. There was an ease in handling the equipment, and I was pleased that children were beginning to say 'I think I'll word-process that'. I was also pleased with the way those with less than pleasurable handwriting were gaining some satisfaction from seeing their ideas in this form.

The main thrust, however, was to be the production of a booklet for new pupils. As preparation we had interviewed the children in Year 3 in our school, and in Year 2 in the Infants' school next door. I had taped some of the interviews, and the quality of some of the questioning, the ability to make the interviewee feel at ease, and the lengths to which some of the children had gone to help the interviewees expand on their answers, and the children's attitude and dedication to the task surpassed all my expectations. The Micro 'bit' was a two and a half day project. An early start by me was essential in order to set up the 9 machines we had, and I should have realised how seriously

the children were taking the work, when several arrived in at 8.30 on the second day. 'Could they get going? . . . there was a lot to do.' (Did they think I hadn't noticed?!) By the end of the second day, I was feeling distinctly superfluous to requirements! There was a query about a printer driver, and another about a page width . . . otherwise I may as well not have been there! By 8.30 on the third day, nearly the whole class were in and hard at work.

The groups had chosen themselves in the main, but there were a few children who weren't asked to be part of a group, and who got together with my prompting. For such groups, the first job was to get on with each other, and the second, to negotiate tasks. . . . One group in particular had a difficult time for the first day, and their draft booklet reflected that. There were groups of very mixed language ability, and over the project they developed a rapport and mutual dependence which changed their views of each other. The sharing of skills between groups seemed to happen with little prompting from me.

The deadline approached, and the atmosphere was tense, as they seemed to shift into overdrive. All I could do was stand and watch! No-one needed me to do anything, except perhaps to keep out of the way!

We presented the booklets to the Year 2 children in the Summer term, and my class were clearly pleased with the positive comments they

received.

A lasting impression? Not skills with the micro, not skill with cut'n'paste, not even busyness and purposefulness . . . and these were present in large measure. No, it would have to be the skills of evaluating positively and of coping with someone else's evaluation of your work. I couldn't have found a more 'equalopportunities' occasion, for children with such a wide range of ability, to air their views, and have them valued by their classmates, to handle it when someone said 'The page is a bit squashed', or 'I don't think the year 2 children would understand that', or to feel good about themselves when someone said, 'The front cover is very good. It is very well designed'.

After Christmas I knew we would have a term with little access to a computer, because there simply weren't enough to go round. I was sure they had become very skilled, and that the skills would stick, because they had had such an intensive three day session. But this all had to be proven in practice, and it would be 3 months before they would have such an intensive opportunity again.

### **Evaluating each other's booklets**

If I had to say which aspect of this project offered the greatest potential for increasing confidence, listening, and being heard, valuing and being valued . . . it would be this one. The children stayed in their groups and spent 10 minutes evaluating the booklets. I had already talked with them, about some of my own comments, because I wanted to 'open some doors for them'. (The reading ages in my class are from 7.6 to 14+, and in only one group was there a similar reading age across the whole group. There is also a wide range in confidence across the class, so I was particularly pleased at the comments which really boosted the confidence of other children.)

At the end of this session, each group got back its own booklet, and could query any of the comments. The comments were appreciated, discussed, and most were acted upon.

And of course, evaluating is now an OK thing to do!!

### Personal reflections on the project

1. Equipment needed

Voltage details

1 x 2 and 1 x 1 socket in my classroom. Take note of trailing leads.

Borrow from other schools. Check on Insurance if you keep them overnight. If someone offers to bring their computer to you, let them! One child brought in own computer and printer.

- 2. Ratio of one computer to three or four children
- 3. Pre Work

Brainstorm what we might ask year 2/3

(Eng 1)

interview year 2 . . . what would they like to know? (Eng 1)

interview year 3... what do they wish they had known (Eng 1)

Record some of the interviews?

4. Planning session without the computers

- Organise tasks. There are two sheets of A4 folded, to form the booklet. What text, diagrams, maps, illustrations, borders . . . ?
- 5. Task then took two and a half days at the end of the Christmas term. I shall never make another bit of paper holly ever again! At the end of first day, each group evaluated three other booklets (so far) and gave comments (Te 4, Eng 1, 3). The deadline for the booklet was 12.00 on Thursday, but I already knew that they would need another day for each group in the following term. At the beginning of this term we all evaluated each other's booklets, working in the same groups. I was amazed at the level of constructive criticism they produced. Should I have been amazed? In terms of evaluation in general, this activity changed the attitude of a number of children. Now, drafting and evaluating, either incidentally, or on a grand scale, are part of the usual activity. AND we hang on to drafts, and they go into final work folders. Since the learning, or most of it, takes place through the drafts, it would seem a folly to throw them out. I have informed parents about this. I want them to know why!

### **Progress**

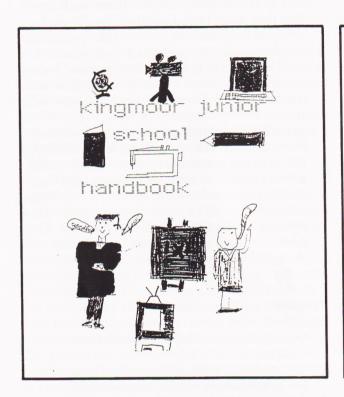
- 1. Greatly increased levels of confidence with equipment.
- 2. All used own discs, and swapped around to use other people's 'brill' maps etc.
- 3. Awareness that their disc only holds text/pictures and that 'procedures' are on program disc.
- 4. Cut and paste technique took huge leap between draft and final version
- 5. Much learning from others' work. It was OK to look!
- 6. Close attention to the audience . . . what would make sense to them and what wouldn't?
- 7. I raised awareness about negative messages to them. This was taken on board.

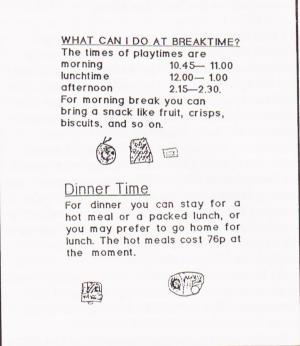
Editor's comment: Sue sent me enough photographs and mounted work to mount a full-scale display, but to reproduce it in MICRO-SCOPE would not have done justice to the splendid work her children produced! Evaluation sheets of each group's draft booklets were mounted together with Sue's comments, such as 'Lovely page! Watch for corrections I've made. Pictures in shades of black?' and 'Can you fit the bit about PE on the page with Sports on it? It's JOGGING and CATCHING, not CHUCKING! . . . and as

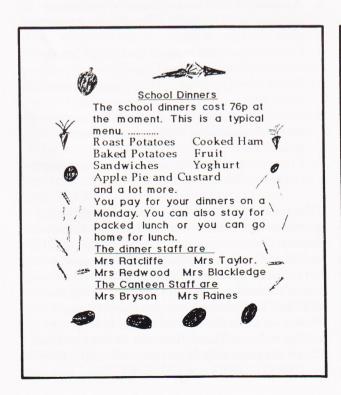
you cricketers know, you don't CHUCK the ball in cricket'! and 'There WERE moments when I wondered if you were going to make it! So you can imagine how pleased I was with your work. There may seem to be lots of bits to change, but what is especially pleasing about your booklet is that its style is exactly right for young readers. Well done Gang!!'

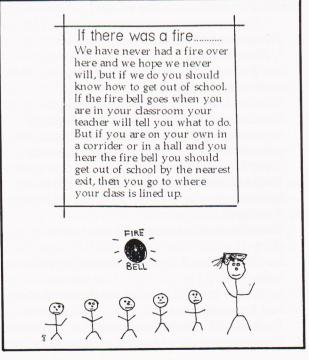
I have included a few pages from some of

the booklets, but you'll have to take my word for it – the rest were just as good! There's no doubt that all the children involved developed many aspects of IT capability and reading, writing, speaking and listening skills in a way which benefited both them and the rest of the school. I look forward to hearing what happened after their three months' break!









# Escape from Granny's Garden - part I

### **M P Doyle**

Honorary Chairman, British Logo Users Group

### 1983 and all that

Looking through the 10th anniversary *MICRO-SCOPE* I found Mike Matson's reminiscences fascinating (*MICRO-SCOPE 32*, pp 13–16). I too first met Logo at the 1983 BLUG Conference, but I hadn't written any software of my own then – just converted Microprimer materials to show how much better educationally they would be with a concept keyboard and with 'Audiotext' speech synthesis.

My reaction to *Granny's Garden* must have been very similar to Mike's reaction to Logo. It seemed a neat idea, but Oh! how soon it became boring. It was somebody else's closed world; I could not create variations within the same medium. For any project work built around it, my pupils and I had to return to pencil, paper and crayon. The Wizard had me in his thrall.

### Who is controlling whom?

IT in education, to me, is about control over the medium I am using. When I read Roald Dahl to the children I know that we share a literary tradition. They are apprentices, I am a mentor, and Dahl is a goal. And the children (not I) may reach that goal – with just a pencil and paper (both hi-tech products.)

Not so with *Granny's Garden!* Even the author gave up writing in the computer medium. It was too hard.

So what have we done? Like the children with reading difficulties we have fallen back on drawing. We demanded 'exciting graphics', easy 'front ends' and a concept keyboard to stick pictures from magazines on. So enthralled are we with the televisual spy-hole on the world, with its elite producers, that we have not noticed that we have lost control.

Must teachers be reduced to the status of the illiterate lay brothers who must illuminate the Latin to which they are denied access? Or, should we equip ourselves with a suitable language with which to take control? I use the term 'language' advisedly, for if we have not language, as Vigotsky clearly showed (and any autistic child will demonstrate) we have little

control over our world. Teachers without control over their media of education are but servitors of an elite.

This is why I stuck with Logo, dubious though I was about its first implementations. I was in sympathy with those who could not tell the difference between *Dart* and Logo – and with those who thought that *RM Logo* was totally unrelated to Logotron's offering.

The difficulty posed by attempting to do more than turtle graphics was alarming: strange things called 'editors' and 'files', a 'text screen' on which you could not write and a 'drawing screen' on which you could, not to mention funny punctuation marks and something called recursion. How was this relevant to me as a teacher of young children? Surely I did not need to become a computer scientist?

So, whilst graphics packages, newspaper simulations and multifont word processors flourished, Logo sank into the mathematics ghetto – in the UK that is. Logotron commissioned no new version, and the academics at Edinburgh University got bored with Logo, so *RM Logo* saw no development. Consequently, by the 1990s we in Britain were left with versions of Logo designed for the educational environment of the late 1970s.

### Logo has a philosophy

Fortunately for Logo, its originators knew why, in educational terms, they had developed the language in the first place. They wanted children to be able to control computers – not computers to control children. Turtle graphics was just the first microworld that children were put in charge of. Further developments had to await the arrival of what Papert termed the 'computer culture'.

A decade after the microcomputer first appeared this happened. In Canada in 1986 Logo Computer Systems Inc (LCSI) of Montreal released the first version of *LogoWriter*. *LogoWriter*, as its name implies, is Logo with an additional writing 'microworld'. It has a word processor you can control the same way you control a turtle.

For various reasons, LogoWriter did not make it across the Atlantic and onto the BBC Master which appeared a little later. In the absence of Apple II computers in British schools, we had to wait five years for the arrival of LogoWriter – until, in fact we were 'permitted' by the government to buy the IBM PC compatibles upon which LogoWriter 2 runs. This wait, fortunately, has meant that the LogoWriter we now use is a much more mature product. It has curriculum support materials and, at our request and to our specification, another microworld: the concept keyboard microworld.

### Why is Logo Writer so important?

In a nutshell, *LogoWriter* provides the first step on the long road to teacher control over computers. It does so by providing us with some 'tools of the IT trade' and the language through which to control them.

### Three 'O' levels required

My analysis of the intellectual demands made of teachers by LogoWriter suggests that anyone who has the equivalent of 'O' level English and mathematics plus a second language possesses all the prerequisites. A fuller account of what LogoWriter can do will appear in the next issue of MICRO-SCOPE, but I hope that the following brief description will show why it is important and whet your appetite for the next instalment!

### Logo Writer

Logo Writer is, to borrow a phrase from the WCCE '90 Conference programme, Seymour Papert's successor to Logo, but it is in fact, rather more than that. It is an attempt to provide a language environment through which teachers and their pupils may bring the shiny new IT-based medium of instruction under their intellectual control.

LogoWriter is particularly relevant to those in primary education, though the tools it provides will also be found useful by Logo-literate pupils when carrying out IT projects from Level 7 up. (Projects I have in mind are writing versions of, say, Touch Explorer, Developing Tray or a painting package.)

In addition to the facilities of classic Logo, including turtle graphics, *LogoWriter* has primitives with which to talk to a text cursor on

the screen – just as you talk to the turtle. Let me give you an example:

Suppose I want to hide all the text on the screen. The following short procedure could be used:

to hide top select bottom settc 0 unselect top end

which is, 'send the text cursor to the beginning of the text, switch on extended highlight mode, send the cursor to the bottom of the text; set the colour of the selected text to black, switch off extended highlight mode; return the cursor to the top of the text.'

All these actions will already have been experienced concretely by children when doing word processing and turtle graphics. Within *LogoWriter* children will have changed the colour of the text, and, as *LogoWriter* is a full-featured word processor, they will have selected and highlighted text by hand. Thus the concrete operation has preceded its formalisation in language. From hand to command. From process to procedure.

However, to communicate in any language, you have to have some degree of fluency; the odd word *might* get you what you want but intelligent conversation needs grammar and vocabulary. Teachers the world over are under-resourced and over-worked; those in England and Wales are preoccupied with ATs and SATs whilst those elsewhere have other demands on their time. How can teachers achieve minimal fluency in the face of such odds?

LCSI have not been unaware of the problem and so curriculum support materials for Logo-Writer have been developed for all levels, from infant to secondary. These range from very simple, highly structured activity cards to project books, and provide a range of activities relevant to many curricular areas, from turtle graphics through to wordprocessing, to animation, to databases and beyond. As the children progress through the activity cards the teachers will learn along with them. After the first year, the teacher's knowledge of LogoWriter will be far greater than it would have been after, say, an INSET weekend. Comparing the price of these support materials (£80 in the UK) with the cost of, say, a day's supply cover -£85, certainly makes them well worth considering.

For me, LogoWriter is an escape route from Granny's Garden; a means of wresting the control of classroom IT from the witch. In the next article, I will wave the magic wand again and give you the bones of Developing Tray,

talking to the concept keyboard, *Touch Explorer* and branching stories.

### References

LogoWriter is available for the Apple Macintosh and all IBM PC compatibles, including the RM range.

It runs on the Acorn A3000 and Archimedes under their PC Emulator and on RM 186 PCs under their IBM mode software.

If you would like more details about *LogoWriter* and the support materials contact:

MP Doyle, BLUG, PO Box 43, Houghton on the Hill, Leicestershire LE7 9GX.

### Software reviews

Title: Time Traveller

Supplier: ESM Educational Software Publishers Developed by: Homerton College, Cambridge

Price: £40 Availability: BBC

*Time Traveller* is an innovative program which aims to provide pupils with the opportunity to explore the concept of time and chronology.

It is a flexible, content-free software package into which pupils can enter data for any year(s) up to the present from 1000 BC, any decade from 2000 BC and any century from 9999 BC. Entries are made on a screen page which allows text up to a maximum of 496 characters in a word processing mode. Text can be fully edited and saved to construct a datafile. If descriptive text is not required statements of events may be entered up to a 31 character maximum eg *Titanic Sinks*.

Individual entries or events can be linked by a timeline. The achievements of a major political figure can be recorded with a timeline linking their political career. A maximum of eight timelines can be included and the screen display scrolls to accommodate overlapping links. The timeline links can be labelled horizontally or vertically. All text, labels and timelines can be printed. The print options provide a flexible range of output.

There are limitations on the amount of information that can be entered. The maximum of 100 pages could be inadequate if 30 pupils were each trying to enter four descriptions of events. However other limits are generous and unlikely to be a problem unless the class is embarking on a complete history of the world!

Running the program is simple and straightforward. All operations are selected using a permanently visible control menu along the bottom of the screen. Using the arrow keys options are highlighted and confirmed by pressing RETURN

Time Traveller comes in BBC 40T format with a program disc, a sample data disc of events from 1891–1990 entitled A Hundred Years of History and esm have thoughtfully included a blank data disc ready for pupils to create their first datafile. Documentation is excellent, consisting of a 37 page Teacher's Handbook with a comprehensive and illustrated range of ideas and a 13-page User Guide which is clear and precise. Particularly useful is a double-sided A4 Getting Started Exercise Card which takes the novice user through an initial exercise.

The program is a database of chronological information but there is no search facility. Information has to be located by scrolling through the screens. Descriptive text is not immediately visible unless the respective year is 'opened' which restricts its use as an enquiry tool unless an approximate year or era is identified beforehand. A free text search option would have made the program a powerful retrieval tool.

Time Traveller is an excellent tool to help pupils understand the sequencing of events and allow them to investigate events in a cause and effect situation. It provides a clear visual presentation of time important at all ages. The content free nature of the information that can be appended makes the program an ideal cross curricular resource. Time Traveller provides a stimulus for motivation, discussion and understanding within topic work in Key Stage 2 and 3 but has applications that can contribute throughout the school curriculum from 5 to 19.

Jeff Warlow Advisory teacher for IT, Somerset

Title: Clipboard

Supplier: Black Cat Software, 3, Beacons View,

Brecon LB3 7LY

Price: £49 Stand alone version

£95 Network version

Site and County licences are available.

Availability: Research Machines' Nimbus range

Clipboard, developed by Black Cat Software, has been written and put together with Key Stages 1, 2 and 3 in mind. Running on the RM range of machines, Clipboard takes full advantage of the graphics and mouse facilities available on them, unlike many packages which have simply been adapted from the BBC versions. The program has been extensively trialled in primary and secondary schools and many of the teachers' recommendations have been adopted.

Screen displays are uncluttered and colourful, with all functions operated by clicking on icons; the only reading required is in the content of the records themselves. There are all the features you would expect from a high quality children's database plus a few more besides. Along with the usual search and ordering options with the attendant graphs (all graph formats mentioned in the mathematics national curriculum up to level 7 are supported) are some truly innovative additions.

Setting up a new database is very simple; I have used the program with Y2 children. Each record will hold up to 12 fields, with the choice of numeric, alphanumeric or key for each field. The 'key' field is particularly useful, allowing the teacher to restrict children's choices for any particular field. For example, when setting up a database about **Ourselves** one of the fields might be **eye colour**. This field can be set up

so that the child has to choose one of the colours contained in the key. This prevents the situation which every teacher who has used a database must have come across; you know from the appearance of the graph that something is wrong, but it takes much painstaking effort to discover that the word 'brown' has been spelled in three different ways and has thus been treated as three different colours! With a key field the child is presented with a list of colours and clicks on the appropriate one which then appears on the record.

The database can be configured from a teacher's page, providing an easy starting point for children new to such work, but also offering plenty of flexibility when using it with more experienced children. The graph icons can be turned on or off and the search facility made simple or complex. There is also a facility to load pictures from Paintspa as part of the record. Clipboard will print out to a range of printers including the Integrex 132.

I found that children throughout the primary phase find the format, functions and operations needed in Clipboard easy to understand. Setting up and interrogating a database presents no problems and printouts can be obtained merely by clicking the mouse on the appropriate icon.

Clipboard comes complete with ready made files, excellent teaching notes, advice, ideas and a comprehensive range of teaching materials to support many curriculum areas including science, geography and history.

> Chris Britten South Wales regional representative

Title: Desktop Folio: The Christmas Theme Pack

Supplier: esm

Price: £35.00 + VAT Availability: Archimedes

Users of Desktop Folio will welcome this timely addition to their classroom resources. The Christmas Pack is the first in a series of Theme Packs which esm are producing and contains a host of seasonal ideas. There are three discs in the pack: The Library disc, as its name suggests, contains Christmas pictures, greetings in fancy fonts, nativity characters and festive scenes: the Creator disc is really 4 discs in one! Simple instructions show you how to make 4 work discs, each one with a range of pictures and stationery to enable you to created your own cards, calendars, diaries, letters and envelopes. The third disc is a ready-to-use Work disc. The A5 binder in which the pack is housed also contains a comprehensive illustrated booklet of practical

design ideas in which author Des Thomas has linked work to the National Curriculum. He also includes a useful resource list of software, fonts and books.

Those who already use *Desktop Folio* acknowledge that it is a powerful desktop publishing tool which can be used easily and effectively by children and adults. The Christmas Theme pack is a valuable addition to the Desktop Folio 'library' and provides a wealth of resources just when you need them!

Chris Robson

### Support materials

Title: 2000 years of word processing (code H50)

Supplier: Pictorial Charts Educational Trust

Price: £6.00 + VAT

Availability: Wall poster, measuring 70cm x 100 cm

Pictorial Charts Educational Trust have produced plenty of good IT posters to cover those ugly cracks in the wall above your computer. The series of posters about process control in industry is a must for the teacher introducing control technology, while the lively and colourful set about telecommunications would be invaluable for a Communications topic.

PCET's latest package, 2000 years of word processing, is a beautiful, full colour and full sized poster, together with some useful support materials. Produced in association with Longman Logotron, the poster covers the development of writing, from clay tablets to the microchip (with *PenDown*, of course!). The chart is clearly laid out and has an interesting assortment of captioned pictures. The package games with excellent, freely copiable notes that link the material with History Key Stage 2. At £6.00 + VAT it's a bargain!

Editor's note: PCET produce posters and sets of photographs to support work in all curriculum areas throughout the age range. Subject sets include Early Years, English, Technology, History, Geography, Maths, Music, etc.. Contact PCET, 27 Kirchen Road, London, W13 0UD Tel: 081 567 9206, for a free full colour catalogue. Post and packing is free for UK customers but charged extra for overseas customers.

Simon Hill

MAPE software is distributed free of charge only to those people who are members at the time of publication. However, those who subsequently join may still obtain copies of the software.

MAPE Tapes 1-3 (now on disc) were produced a number of years ago. A selection of the better programs has been collated in order to produce:

The MAPE Compendium

Micro: BBC, RM480Z, RM Nimbus\*

Cost: £14.00 (non-members); £10.00 (new members) Programs include: Canal Locks, Mangonel, Marsh, Mallory Manor, Crackit, Mousey, Front Page Extra and other old favourites.

\*Malcolm Neave has converted the programs to run on a MAPE software news Nimbus. There are a few hiccups, but if you would like to test the programs please send us a formatted 3.5" disc plus a stamped addressed label to the value of 45p.

Also available:

MAPE Tape 4 (on disc)

Micro: BBC, RM480Z

Cost: £12.50 (non-members); £8.50 (new members)

LEA licences available

This includes:

BBC: Pond Dipping, Magic Telephone, News Bulletin and Topol.

RM480Z: Adventure Story and Adventure Editor,

MAPE Tape 5: The Owl Pack (software and resources)

Micro: BBC, RM Nimbus

Cost: £14.50 (non-members); £9.50 (new members)

LEA licences available for the software. A3000 version from Newman Software.

MAPE Tape 6

Micro: BBC B and Master, RM480Z (Orb of Zalibar only), RM Nimbus

Cost: £14.50 (non-members); £9.50 (new members) LEA licences available.

MAPE 6 includes Stylus (an update of Concept Writer) and The Orb of Zalibar adventure game.

The A3000 version is available from Tina Carr, Prime Resources, Newcastle Upon Tyne, NE2 EHE. Tel. 091 281 1831.

Stylus Plus is now available for the BBC micro. This is a modification to the original version of the program, in which the Talk option has been removed and replaced by the facility to block move text. Anyone who would like this version in addition to their existing one can acquire a copy by sending a blank 5.25'' disc together with a cheque for £5.75 and a  $9'' \times 6''$  sae (50p postage).

### **MICRO-SCOPE**

Concept Keyboard Special and Special Needs Special £2.00 each.

Old *MICRO-SCOPEs*, before issue 30, £0.80p each. Bulk purchase price (10 or more copies) for LEAs: 30% reduction on non-members' prices.

All prices quoted include VAT at 17.5%. Post and packing included, except on bulk purchasing.

Please send orders (include information about the type of micro) to:

MAPE Information Officer, Technology Centre, Newman College, Bartley Green, Birmingham B32 3NT. Cheques should be made payable to MAPE.

# **MAPE** regional news

### **Chiltern Region**

Our cross-curricular approach to adventure games had to be cancelled as only three people applied, despite widespread advertising! Perhaps the omission of the magic (?) word 'National Curriculum' from the title had something to do with this!

Our next planned event will take place on Saturday 1st February 1992, from 9.30–12.00. Chris Robson, Editor of MICRO-SCOPE and IT Adviser for Berkshire will talk about 'Using MAPE as a resource in the delivery of the National Curriculum' and this will be followed by workshop sessions, refreshments and lively conversation – all free! The event will take place at Barnet Teachers' Centre, Finchley – put the date in your diaries now. There will be further details in schools, local papers and Teachers' Centres or you can ring me on 081 866 0827.

If you have any comments about, or suggestions for regional events, please ring or write – the committee is trying to meet your needs, but if we don't know what they are, it's difficult to do so effectively!

Betty Lumley

### **East Midlands**

We are pleased to report a growing interest in MAPE in our region and have recently welcomed several new members to the Regional Committee, volunteering their help and offering new ideas. Committee work is, of course, unpaid but the company is good, the meetings are fun and the ideas stimulating so why not come and work with us? We particularly need volunteers from Derbyshire and Lincolnshire. You don't need to be an IT expert – just some enthusiasm and a little time and energy.

Lincolnshire members contact: Graham Keeling, Earlesfield County Primary School Dysart Road, Grantham Tel: 0476 62091.

Derbyshire members contact: Jo Scothern, Kilburn Junior School, The Flat Kilburn, Derbyshire Tel: 0332 661890

Our Saturday workshop in May was very well attended and we were inundated with teachers wanting help with basic skills on the A3000. Data logging in the afternoon attracted fewer members but the quality of discussion and the generation of ideas for classroom use provided much food for thought. Our October workshop on control technology, run by Keith Hemsley from NCET, maintained

this high standard and was welcomed by all who attended.

Our next meeting will be on 23rd November at All Hallows Primary School, Priory Road, Gedling, Nottingham when John Moore from Nottingham Polytechnic will lead a session on the Humanities and IT. There will also be a morning workshop on making the best of your free Archimedes software – in particular !Draw and !Paint. You don't need to be a member of MAPE to participate, so do come along.

Another date for your diary is 7th March when David Allen, English Inspector for Nottinghamshire will be leading our course 'English and IT', with support from practising classroom teachers. This will take place at William Rhodes School, Chesterfield. Contact me on 0602 267762 if you want more information about any of our events, or, even better if you would like to join our committee.

PS An urgent message from Stan Norman: 'Would the lad who rang me on 0607 75540 about Genesis for the Bangor 92 Conference please phone again. Your letter did not arrive and I have no way of contacting you!'

Chris Foster

### West Midlands

Join us on Saturday, January 11th at Newman College to find out *All you ever wanted to know about the Concept Keyboard for BBC and Nimbus at Key Stages 1 & 2*. The report on our June event, including a blow by blow account of the juggling, will appear in the next issue!

Chris Hurrell

### **Scotland**

30th November, 1991 – Scottish one day regional conference, entitled 'IT's Environmentally Friendly' in Stirling. Evenings in Tayside in February are being arranged. Contact your regional rep for more details.

### Northern

We have sent a questionnaire to all members in the region, and hope that the returns will help us to provide range of activities to meet your needs. We have already had some returns but would like as many as possible, so . . . please return your questionnaire! If you haven't had a copy, ring me at Pentland Primary (0642 552848).

Sessions looking at how members use MAPE software in the classroom have been booked in Northumberland, and a similar session is planned for Cleveland in the autumn term. We shall be holding a regional one day conference in March '92 and are already beginning to plan for the '93 National Conference which will take place in York. From past experience, the more members there are on the organising committee for a National Conference, the better . . . and it's fun too! Contact me for further information about anything to do with MAPE in the North.

David Campbell

#### South West

Proposed events for 1991/92

Wednesday, 6th November: Computers at Christmas, at St Luke's, 4.30–6.30

Wednesday 4th March: Art and Design, at St Luke's, 4.30–6.30

Wednesday, 11th March: Databases, at Cullompton, 4.30–6.30

Volunteers or persons who are willing to organise and coordinate events in the nether regions of Cornwall and Devon are wanted. A starter pack of ideas and coffee money are available. Contact me on 0392 264828.

Chris Taylor

#### Southern

Dorset MAPE members have organised termly events for this academic year:

November 16th: Roger Keeling – 'Databases – an alternative approach.'

February 29th: Software demonstrations

Summer term '92: Software market – invitations will be sent to various software companies to demonstrate their products.

If you would like to help with the organisation of events in your part of Southern region ring me on 0305 772817.

John Bennett

### **Ireland**

BP Oil/ MAPE Primary Computer Competition, 1991 This, the seventh year of the competition, was the first year that it had been sponsored by BP Oil and we are most grateful to them for their generous donation of prize money of £1500. Two hundred primary schools had entered and the final 18 were invited to the final judging at Stranmillis College, on June 11th and 12th.

The judges, Dr Ron Cromie (Stranmillis College) and Margaret Murphy (NICC) had an extremely difficult task but the winners of category B and overall winners were St Patrick's Primary School, Dunmanagh, with their Wildlife entry. Category A was won by Victoria Primary School, Newtownards, category C by Mercy Primary School, Belfast, and category D was won by Killard House Primary School, Belfast.

Eire MAPErs, where are you?

We would like to start a MAPE support group in the greater Dublin area. If you are interested in helping to form such a group or would like to attend MAPE workshops in or around the Dublin area, please contact Pete Young, MAPE Rep (Ireland), Taughmonagh PS, Findon Gardens, Belfast, BT9 6QL Tel. 0232 669698

Pete Young

#### **South Eastern**

On Saturday 18th May, members of the London group arrived at ILECC to see what was available in control technology. As Inner London teachers had been recommended to use Lego Dacta by the Design and Technology Centre before it closed in 1990, we invited Economatics and Technology Teaching Systems to show us some alternative systems. We also asked for volunteers who had used any systems and could show us models to come along too, so we anticipated and interesting day and were not disappointed!

The morning was spent informally as members pottered around looking at the teachers' work and the variety of technology equipment on display. Even a total beginner managed to write a brief program for Lego traffic lights and the floor robots were well used too.

Simon Hill answered our request for volunteers and came from Salisbury with a car full of models and photographs. We were able to see working models made from both Lego and Fischer Technic during the morning and in the afternoon he showed us his slides of children working on the models. We concluded with a general discussion and most people agreed that it had been an enjoyable and informative day.

Future events: 2nd November 'Fun with Graphics on the Archimedes,' at Merton Court School, Knoll Road, Sidcup, and in the planning stage, E-mail in the classroom for the Spring Term, and Getting to Know the Apple Mac in the summer.

Further information from Eileen Jacques, ILECC, John Ruskin Street, London SE5 0PQ (071 735 9123) – a stamped addressed envelope would be appreciated!

Eileen Jacques



MAPE S.E. members "in control" at ILECC

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# IT Enhancing the Primary Curriculum



Y Coleg Normal Bangor - North Wales

Saturday 11th -Monday 13th April 1992

Conference Office: Cilgeraint Farm, St. Anne's, Bethesda Gwynedd. LL57 4AX Telephone: 0248 602655



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