We did some work the other day on multiplication tables. The results were, to say the least, astonishing. The paper was marked in a grid of 10 x 10 squares, that is 100 squares arranged in ten rows, 10 squares in each row. Across the top row, and to the left of the left hand column, were written the numbers from 1 to 10, but in irregular order. Thus every one of the 100 squares in the grid was in a numbered columns and a numbered row. If a square was in the row numbered 2 and the column numbered 3, the child was to put in the square the product of 2 x 3, or 6. The square in the row numbered 5 and the column numbered 7 would therefore be filled with the number 35, and so on.

From Marjorie's paper, I got: 4 x 6 = 22, 4 x 4 = 20, 4 x 7 = 32. Then 10 x 10 = 20, and right beside it, 10 x 2 = 22. Then, side by side in the row numbered 8, 8 x 8 = 48, 8 x 6 = 59, 8 x 4 = 40, 8 x 7 = 49, 8 x 9 = 42. In the 7 row, 7 x 5 = 35, 7 x 8 = 24, 7 x 7 = 47, 7 x 9 = 45.

I'm not making this up, I swear it.

Is it enough to say of this child that she does not know her tables?

Holt, 1969, p 114

It is not possible to avoid making mistakes, but it is usually possible to avoid forcing children into situations where they are certain to fail. And when they do fail, it is possible to minimise or even remove the associated shame. When the magazine Lib Ed interviewed children from Summerhill about their experiences of the school, one of them commented with approval that at Summerhill it was all right to make mistakes.

Schools should make it possible for children to discover what they are good at and to enjoy doing it, but they must also make it possible for children to do what they enjoy doing even if they discover they are bad at it.

Most of the children in my class spent a lot of time writing stories. Usually they would know what they wanted to write about, but I discovered that when someone asked for an idea it was not so much an idea for a subject to use that was wanted, as a range of subjects to reject. 'Write about what it feels like to be a rabbit in a cage,' I might suggest, 'or getting up very early in the morning, or borrowing something from somebody and losing it, or a ghost story,' and then all at once the child would say, 'I know. I shall write a story about someone cooking a meal that goes all wrong.'

At first I did not understand the importance of finding out what a child already knows before launching out into whatever I wanted to teach (or whatever I thought others would expect me to be teaching). It became obvious to me after I had been spending some time enthusiastically telling my group about the exploration of the world by Europeans around the sixteenth century. We went to see the copy of Drake's ship at Brixham, and I read them extracts from books and talked about Columbus and the amazing journey across the Atlantic Ocean. And then I discovered that many of the ten-year-olds in the group had no idea where the Atlantic Ocean was. We adults find it strangely difficult to appreciate the fact that there is a great deal of information that we simply take for granted, and that children cannot know because they have never come across it at all. It is easy to recognise this phenomenon when angry parents tell small children not to be stupid (or worse, naughty) when they have locked themselves by mistake into the public lavatory, or when they ask for food that they find they do not like, or in the desire to be helpful stack up the plates so that they fall and break, but it is harder to accept when the children are old enough to be articulate and deft.

Learning may be directed towards a distant target, but it has to start from where you are. It is little use knowing how to get to London from Colchester if you happen to be in Cardiff

Another mistake I often made was preventing children from doing perfectly sensible things that they wanted to do. It struck me for the first time when a child asked me whether she could go outside and find a flower and bring it back to draw. 'No,' I said, although on what grounds I cannot now imagine. And then the next week I found myself sending the whole class out into the grounds to find flowers, bring them back and draw them.

I don't remember who it was that I had forbidden to go outside and find a flower, but I do remember interfering with a bit of research by Peter Nicholson, who now makes documentary films. I had brought various containers and tubes into the classroom so that everyone could find out about siphoning water from one container to another, and for several days they had a great time solving various problems. Then they all lost interest, except for Peter who wanted to go on and on. I'm afraid I probably told him to stop playing about. I certainly took all the equipment away.

Why on earth, I now wonder, did I feel I had to prevent him from carrying on with his interesting experiments? Why couldn't I share in his interest? I obviously must have thought that he was wasting his time, but I hadn't even bothered to find out what was going on in his mind. It was an opportunity lost.

And I remember two girls who always wanted to make up plays together. They would go off to another room to rehearse and after a while would invite me to come and see what they had been practising. It was always a plotless domestic scene – going shopping, doing the ironing, going for a picnic, putting the baby to bed – and I thought that if they were going to spend their time making up plays, at least they should be about something more interesting. Not, of course, something more interesting to them, because they were interested already, but something more interesting to me. They were playing when they should have been working, I thought. So I stopped that, too.

As I look back now, I see at least two reasons why I should have allowed them to continue: firstly, the drama work they were doing was probably necessary for them because they must have missed appropriate play when they were much younger, and secondly, they had found something they wanted to work on with concentration for some length of time – which seldom happened in the classroom.

There was another science experiment that I stopped, but in this case with some justification. I had invited the children to connect up batteries and bulbs in various ways, to see what happened, and some boys had discovered that if you connected enough batteries in parallel you could blow the bulbs. It was interesting, but it was too expensive. I would have liked to allow the boys to carry on with their experiments, but we ran out of bulbs.

Much the best time I had with science was when I noticed that the boys at the back of the room were more interested in the wobbly pencil illusion than whatever it was I was trying to explain. They were holding pencils loosely by one end and shaking them gently up and down so that they appeared to be bending.

I stopped explaining whatever it was and invited everyone to watch the apparently bendy pencils. Everybody was interested, and we then went through what I believe to have been a genuine scientific experience. None of us knew why the pencil appeared to bend, so we thought of a number of hypotheses. (I hate teachers saying 'we' when they mean either 'they' or 'I', but in this case we really were all working together.) 'It's because of the hand going up and down,' was one hypothesis, and another was, 'It's because your two eyes see different images,' and a third, 'The pencil really does bend.'

People then devised experiments to test these hypotheses, and they were all rejected. At last someone came up with a new hypothesis that seemed convincing, but we needed a cine-camera to test it, and we did not have one. This last hypothesis, which was not mine, was that the eye retains an image of the pencil in different positions for a short period of time, so you get the same sort of curve as you can make winding string on a pin-board, or drawing straight lines between, for instance, these pairs of points on a graph: 0,0 to 10,6, 0.5 to 10,4, 0,2 to 10,2, 0,4 to 10, 0.5 and 0,6 to 10,0 for the pencil going one way, and 0, 5.5 to 10,2, 0,4 to 10,4 and 0,2 to 10, 5.5 on the way back.

The significant thing about this work, which went on for more than a day, was that I did not know the answer to the problem, and it was not I who found the probable solution.

I loved activities like 'Express Writing', which meant writing as much as possible about a given topic in two minutes and then, if you wanted, reading out what you had written, which was often entertainingly nonsensical. This would melt away the most intractable of writer's blocks, and I think everyone enjoyed it. And I loved 'Impossible Riddles', which had no known answers; riddles like 'Why don't pigs eat blackboards?' or 'What is the difference between Tuesday and a parachute?' A group of fifteen or twenty children would find plenty of interesting answers. And then there was 'As Many as Possible', which was the same game as 'Names, places, animals' except that the headings for the columns might be 'Things that fit in a matchbox,' 'Places to hide a grandfather clock' or 'Things to say to someone who says, "You're mad."' (If you have been reading this book carefully you will recognise this last topic.) I think the children enjoyed these activities too.

And I loved the children's stories and poetry. One of the achievements I most prized was The Boring Book, which consisted of the work the children had produced when they were trying to write as boringly as possible. I had to omit the most boring composition of all, which was on 'The Front page of my Exercise Book' and was so long and so boring that I couldn't even force myself to read more than the first page and a half, let alone type the whole thing out for publication. Other contributions, such as 'Out for a picnic' and 'A paper hanky' managed somehow to be boring and brief at the same time.

The two most important events of each year were the plays and the summer camps.

The plays, which would include everyone in the junior school, so about forty or fifty children, were originally devised entirely by me, but as the years went by they were more and more based on the children's own ideas, and the dialogue was always extemporised. Songs would have some words by the children and some by me, and the music, nearly always by me, would be specially written so that it was easy for particular children to perform. (It was not always so easy for adults; I remember one music teacher shocked that her daughter was expected to sing a song in 5/4, and a violin teacher appalled that her pupils were expected to play a double sharp, not realising that I was expecting them to perform without ever having seen the music written down. The boy who had to play a piano accompaniment with six flats didn't know it had six flats; he only knew it was all on the black notes.)

I could rehearse sensibly with my own group, but the younger children would get wildly excited and I was lost with them. Their own teachers had to come to rehearsals to support me.

I don't know why plays are so important and children generally love them so much, even though I too have always loved plays and loved acting. I know that the best performances I have seen by younger children have always been those with the most extemporisation, and that even teenagers, who are capable of wonderful performances from learnt scripts, can also

often be heard reciting their lines woodenly with minimal understanding. Drama courses offer opportunities for many kinds of learning, but the delight of performing seems to be an end in itself; a school play is an artistic creation, not an educational exercise.

It was while children were painting the scenery for a nativity play that I was directing that I learnt something very important from Bernie Forrester, the potter, who was teaching art at Aller Park at the time. He refused to run compulsory art classes, but always had the art room full whenever he was available. I went in one evening to see the scenery the children were painting. While I was there one of them turned to Bernie and said, 'Shall I paint this roof gold?' I would have found it hard not to express an opinion, but what Bernie said was, 'Try it and see how it looks.'

This ability to stand back and trust in the children's own judgement is something that I have learnt to value more and more highly.

Of course I tried, personally, not to humiliate any child, but I did not always succeed. Some of the games I introduced into French lessons showed up the less able. Even when I was teaching general subjects in my junior school class I could not disguise the fact that some people did better in my lessons than others. For some of them it must have been very like the situation I found myself as a pupil in PE classes.

When I had been at school I had felt like a third-class citizen – the first class were the staff, the second class were the other boys, and I was the third class. At Dartington I don't think anyone felt like that. Late one winter evening I drove to fetch my son Nathan from the senior school, because he had a leg in plaster. I was waiting by the second courtyard, where there was a narrow path between the boarding-houses and the art room. The only light came from the windows of the overlooking rooms. A bunch of large, alarming-looking adolescent boys were in conversation in the middle of the path when a young girl came out of the art room and began to walk towards the boarding houses. I wondered what would happen when she reached the group, and admired her courage as she approached them. They all stepped off the path to allow her to pass.

I never expected anyone to step off a path for me.

Jenifer Smith taught at Aller Park for two years before moving on to Countesthorpe College in Leicester. In the thesis which she later wrote for her M. Phil at Southampton University she listed some of the things she had learnt with us.

I saw how it was to be with children in a peaceful, open way.
I saw an easiness between adults and children.
I saw adults treat children who had behaved terribly badly with a firmness and compassion and fairness that supported and nourished and did not condemn.
I saw adults and children engrossed in conversation; sharing joyful activity, music making, flying kites, canoeing, camping; I saw them engaged in serious pursuits together, badger-watching, taking pinhole photographs, keeping bees, each learning from the other.
And I had a chance to do these things myself.
I also saw adults able to step back and allow children to engage in their own pursuits without adult interference.
Despite all kinds of sophistication, children seemed able to be children for longer.
At Dartington children directly challenged me and my assumptions and I had to recognise their criticisms and answer properly.

My style of teaching had developed while I was at Dartington, but at Sands I learnt little new. Teaching methods are not central to the school's philosophy. What I learnt there was more to do with trust and personal relationships. However I did see one confirmation of a basic truth about teaching that made a strong impression on me. Before he began working at the school my son Nathan, who was an enthusiastic climber, agreed to take a group of Sands children climbing at Hay Tor. I drove them out there in the school minibus, and saw what happened. When they arrived he whisked up the face of a rock, fixed some protection and lowered himself back to the ground. Then he asked who wanted to try the climb, and everyone wanted to. He chose someone to go first, showed him how to attach his safety harness and stood back. He did not offer a single word of advice until it was requested. It was requested surprisingly soon, and extremely emphatically.

Most teachers are convinced that they must teach children how to do something "properly" before they allow them to try to do it their own way. Would-be carpenters, for instance, often have to learn to make joints before they have anything to joint together. If only their teachers had the patience to wait to be asked for advice they would learn far more earnestly and with a great deal more pleasure. If what children were doing in the classroom was something they wanted to do really badly, they would be clamouring for help when they met difficulties.

The first teaching I saw that approached this situation was not at Sands, but at Countesthorpe College in Leicester in the 1970s. There were fourteen hundred students there, aged between fourteen and eighteen, and below the sixth form every one had an individual timetable. Almost all, if not all, these timetables were different. Some subjects were taught in classes behind closed doors in the ordinary way, but what was special to Countesthorpe was 'team time,' when pupils were under the supervision of a team of teachers, but each one of them was working independently on a topic of personal choice. 'Personal choice' is too weak a description – they were topics of absorbing interest to the particular people working on them, for instance the grand-daughter of a market stall-holder recording his memories, a boy writing a play to be performed in the local primary schools, a girl studying racism so that she would know what to say when people expressed racist views, a boy concerned for the environment photographing examples of pollution, a girl describing her work with mentally handicapped children.

Both at Dartington and at Sands I tried to recreate this situation, but although I think I sometimes helped people to write imaginatively about their own ideas, I never matched Countesthorpe's success with factual work. The only time I even saw how well it might work in my classes was when Hannah Roberts chose to describe an accident in which she had been hurt. She had been in a bus on the way to school; another vehicle had scraped against the side of it, breaking some windows, and she had been injured by the broken glass. Previously she had found it difficult to write at any length, but about this incident she wrote several pages, and, to my great surprise, her spelling had miraculously improved. She never actually finished the story, but what she had written obviously gave her great satisfaction, and showed me the importance of allowing children to work at topics that interest them.

Other teachers at Sands – Sybilla Higgs in her English classes, and Steve Hoare in the art room in particular – have succeeded in doing this, but they have had to work largely within a normal timetable.

What I did learn at Sands, in relation to teaching, was a little about the differences between what the teachers did there and what happened at other schools.