

*(Editor's Note: The two contributions in this article are the essays of two mature initial training course students on a day in the life of a CDT Department. We believe readers will enjoy them).*

# A Day in the Life of a CDT Department

## Day 1 by F. Byrne

It was a wet Monday morning in late October, and I was going to be late for school. I was embroiled in another of those traffic tangles that Wolverhampton seems to stage so well.

Of course, there was no chance of me finding a parking space outside the CDT block; I would have to park outside the main school building and walk to it in the rain. The prospect annoyed me. Many may testify to my indolence but on this occasion my annoyance lay deeper. Why should the CDT block be so remote? I thought, why should it not be part of the main building? Such a form of isolation seemed to be bereft of all reason. The CDT block was part of the same school — so what cut it off? CDT, I reasoned, is not some alien subject but part of the real school. Perhaps, I reflected, this was the reason why the CDT staff seemed to mix so little with the rest of the staff. They had made for themselves a cosy little retreat in a far corner of the store room and spent many of their non-working hours in their own company. Such a pity really, I thought; the mainstream of school life flowing past, oblivious to the world of CDT. I was sure that this physical remoteness would not help to integrate CDT into the real way of schooling.

My train of thought was suddenly interrupted by an irate driver behind me, employing his hooter no doubt to remind me that green meant proceed.

I was not late for school, but I was obliged to undertake a minor pilgrimage to the CDT block. Needless to say I made directly for the 'cosy corner' and a cup of coffee to start the day. A cursory glance at my timetable confirmed that my first lesson was to be the 'Hobbies' class: a group of mainly remedial pupils. Strange title, I thought, for a CDT class in a mixed ability school. Pupils segregated out, all working in wood and not a girl in sight! I did not query the logic. After all, I reasoned, that was the headmaster's domain. He did, after all, have impeccable qualifications — a lifetime in school teaching coupled with an MA and a degree in history. I couldn't help wondering though what impressions he had of industry.

'Morning, Frank' I looked up to see Barry buttoning up his overall in preparation for the first lesson. 'Oh, hello Barry, just sorting myself out for the Hobbies class'.

'Hobbies class eh?' he smiled 'well they'll be happy just chiselling their benches to bits won't they?' I was a little surprised by Barry's comment, as I found the class quite keen if you helped them along in a friendly manner. 'Actually', I said, hoping to temper Barry's views 'Wayne Beran wants to make a coffee table'.

'You must be joking!' Barry exclaimed 'Why, he can't even hold a pencil'. I felt quite sad. I'd spoken with Wayne during our first lesson and although he had problems communicating I gathered that he lived alone with his father, and although, probably as a result, his dress was poor, he did have a certain sense of humour. I

remembered the occasion when he first mooted his idea for making a coffee table. 'Have you made any drawings yet?' I asked. 'No' he replied 'I'm not very good at "sizes"'. 'Show me, with your hand, how high it ought to be' I said. He thrust out a hand, and I measured up the height to it from the floor. 'Seventy centimetres' I said 'Easy isn't it?' Wayne smiled. 'OK then — can I have it this long?' I measured the gap between his two outstretched hands, much to the amusement of the rest of the class. 'Easy' I said now you decide the width'. 'Easy' he said 'now I'll do some drawings of it'. 'Good idea' I countered 'but don't forget to put on notes for materials, nails, and wood, and maybe even some ideas on how it will go together?' It was so simple.

The following lesson he proudly showed me three sheets detailing his ideas — yet this was a young man with a reputation for not doing homework.

Eleven a.m. found me back in the 'cosy corner', coffee in hand. Norman, the head of CDT was there, passing circuit boards to John the technician, who was packing them into a box. 'Starting an electronics class?' I enquired jokingly.

'No way' replied Norman 'We started teaching basic electronics last year and it caused a bit of a rumpus'.

'Well surely' I ventured 'electronics is a major component of CDT nowadays?'

'Couldn't agree more, Frank' he replied 'but I think we were a bit too successful for the bods in the main block'. (They always seemed to refer to the school as 'the main block'). 'We were obtaining some really good responses, even from the remedial group, but the head advised us to stop it. He said it was overlapping what they were doing in the science department, and they weren't very happy about it'. I was astounded — overlapping indeed. I would have thought complementing would have been a more apt word.

The bell rang for the next lesson. I glanced at my cold cup of coffee and repaired in haste to the metalwork room. I could not help thinking what a pity it was — segregating the groups into 'Wood' and 'Metal', especially when CDT was supposed to involve the integration of materials, processes and design.

At first glance the metalwork room appeared to be exceptionally well equipped — six metalwork lathes with comprehensive attachments, three large milling machines and two pillar drilling machines. Almost an engineering workshop. They were all magnificent machines, but complicated in spite of their impressiveness. How much better, I thought, if smaller, simpler machines had been bought — probably they might have suited young girls better than those big professional ones. My thoughts were given credence later that afternoon.

The metalwork class was engaged in the manufacture of a hand vice — a project I inherited when I took over the class.



'Right class', I said after recapitulating a filing technique 'let's see you try it'. After the usual melee around the file rack the pupils emerged with their files. Three of the girls stood by their vices, waiting.

'You can start when you're ready girls' I said. 'But sir, the boys have got them all'. The situation annoyed me to a certain extent; normally quite well behaved lads treating the girls in such a way. It was obvious that they regarded the girls very much as intruders in 'their' subject. I resolved to give the matter further thought later, when time permitted. 'The metal lathes are set up girls' I said 'why not make your slide pins?' Dawn, the smallest of the trio looked apprehensively, firstly at me, and then the machines.

'Do we have to?' she enquired.

'Why not?' I countered 'We did the demonstration last week, and I'll help you'. 'I know, Sir' replied Dawn, 'But, to be honest we are scared of the machines'. 'Why?' I asked, 'it's only a simple operation'. 'Well, I think the machines are too big for us and they've got too many knobs and levers to go wrong'.

I had sympathy with their views, but in order to inspire confidence, we all went over the procedures again. With a little luck and a lot of coaxing we coped as well as could be expected.

A distant bell heralded lunch break, and I made for the CDT 'staffroom'. As usual, John was there busying himself. John was a remarkable man for whom I had a tremendous respect. Approaching sixty, he had been made redundant from a lifetime's work in industry and he was not an unwilling convert to school life. He had adapted well, his knowledge, experience and manner making him the ideal person for both pupils and teachers to turn to for all manner of help and advice.

The afternoon lesson was again metalwork, again involving a hand vice (which everyone seemed to be making). The class had two black pupils both thirteen years old, who were very lively, to say the least I resolved to have a quiet word with them as soon as the practical part of the lesson was under way. The opportunity arose quite early on, as they started 'drumming' with steel rules in a corner whilst the rest of the class were working. I walked over to them. 'Right, you pair — why all drumming and no working?'

'Cause it's dead boring' said Royston.

'Cause I don't need a hand vice, said Charlie.

'Look', I said, in my most conciliatory voice, 'you may not agree with the choice of project, but it's designed to give you experience on the machines. At the end of the day you will benefit from it'.

They were far from convinced.

'Why can't we make bongos?' asked Charlie.

'Bongo's'? I replied 'what on earth have bongo's got to do with CDT?'

'Well, what have model boats got to do with the Hobbies class?' countered Royston.

'The difference', I replied 'is that they are allowed a choice in hobbies, but in this class we have to adhere to the syllabus'.

The two boys shrugged their shoulders, still unconvinced, and reluctantly started work. I was far from happy with the situation, and I resolved to consult John, my wise old mentor from industry.

I was lucky. After lessons had finished I walked into the CDT 'staffroom' and there was John, alone, whistling quietly as he sharpened a chisel. He looked up as I walked in, and enquired as to how the day had gone. 'Well, not too badly really, John' I replied, 'but I can't understand this school's approach to teaching CDT'. John paused for a moment. 'To be quite honest', he said 'I don't think they do teach CDT as they ought. They might be moving toward it, but things move much more slowly here than in industry'.

'Well, why does the headmaster not move things along a little?' I enquired.

'Probably', said John, 'because he doesn't really understand CDT, so he shows a natural preference for the areas in which he feels competent. To be honest, I don't think things will really start to happen until we have headmasters, and headmistresses, qualified in CDT as well as the more academic subjects. That would give CDT tangible status. Many headmasters, and teachers for that matter, have been isolated from industry because of its image. I think that the government will have to take more radical steps to overcome that inertia'.

'Well, I think I agree with what you say' I replied 'but the government are trying to help by coaxing people like me out of industry to give teaching an added dimension'. 'That's a reasonable start' replied John 'but it doesn't really help the ethos of CDT within the schools — but the government could, almost overnight if they wished'. I could hardly believe my ears, but John was really getting into his stride. 'Well', he said 'the government influence entry levels for all people entering their service, as well as the police, and armed forces. If they really wanted to give CDT equal status with English, History and Science they could insist on CDT along with other subjects as a qualification to many of their openings — what you might call positive discrimination. You might well find that a lot of ladies who are guided away from CDT would actively seek CDT. In that way we would probably see more female teachers opting for CDT, which would in turn make CDT more attractive for girls. The problem at our level is teachers who have been teaching traditional woodwork and metalwork — its very hard to push them into CDT. I'm afraid only time will ease that problem'.

It all seemed to make sense to me, and I felt a lot happier than I did at the start of the day.

'Oh, by the way John', I asked, 'what about bongos?' I started laughing as I put on my coat. 'Two lads in one of my classes want to make bongos' I said.



John looked at me seriously. 'Why shouldn't they?' he asked 'If the curriculum was planned by people of a different culture to ours they might well be in the syllabus. Don't forget, our curriculum is often planned by middle class white gentlemen, and their values and culture often affect what they see as fit for the curriculum. We should not dismiss out of hand any idea for CDT, provided it lends itself properly to the stated aims of CDT. I would suggest that if those two lads could properly research the subject, and then design and make their bongos, it would be just as relevant as someone in the school making a guitar or a violin case. It's all a matter of your standpoint'.

'I've got to hand it to you John', I replied, 'I think you're right again. In fact, if the lad's research took them to Jamaica perhaps I could go along with them'.

'Me too' replied John, pulling on his wellington boots. 'It looks like we're going to have to paddle over to the main block!'

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#### Day 2 by J.E. Renwick

I remember it as if it was yesterday, I was back at my old school and things had changed. I was a teacher and the former grammar school was a comprehensive. Who would have thought that shy fifth former with five 'O' levels would be back as a head of department with a degree.

The school had changed in size as the near town I had known in its infancy had grown towards its full potential. The facilities were now far greater and one part which had grown considerably was my new charge the Craft, Design and Technology department.

The department itself was new; in fact it did not really exist at the end of that summer term. The new department was to start the following autumn term, taking the place of the handicraft department. Between terms I and my staff had a lot of work to do; this was our initial meeting to iron out any problems or doubts that the staff may have had. Without proper dedication from them such a venture as the introduction of a new subject to the curriculum was doomed.

With me were the four members of the department. Graham was a tall, athletic woodwork master who had already attended a one term in-service course on CDT. Nick was more slightly built

and had been sharing his time between teaching formal graphics and woodwork. Mick's forte was metalwork and he had been on the same course as Graham. The final member of the team was Bob; not only was he the oldest but also the most traditional minded of the four his subject was metalwork, pure and simple.

'OK, gentlemen, let's make a start', I said. As from now we are all working in a new department and teaching a new subject'.

'Isn't it just a different name for the same subject?'

'Not really Bob, but I think that's what a lot of people assume. Maybe it would be useful to give an authoritative definition of what CDT is supposed to be all about'.

'OK Jim, let's have it'.

'Right, I'll read you what a Joint Council Working Party has to say . . . they see the aims of any CDT course as reflecting the complex abilities required to exercise control over the man-made world but the common core activity can be identified as designing and communicating, making, testing an evaluating'.

'Sounds very technical and all a bit too complicated for most of the pupils at this school'.

'Yes, Nick I think it would frighten most of them off if it was presented to them like that'.

'I agree Jim, but what can we do to explain it to them and their parents if necessary?'

'And the rest of the staff Graham, because you know what a low status craft has in this or any other school'.

'Sometimes I wonder if we bring that on ourselves by the way we act'.

'How do you mean Jim?'

'Hasn't the handicraft department become a sort of isolated outpost where our word is law'.

'I know what you mean. Very often the only time some staff come down here is when something needs mending and they see us almost on the same level as the maintenance staff'.

'That's not at all surprising since many of us, and our colleagues, have come into teaching via industry or specialised institutions where we did not come much into contact with students from other subjects'.

'The pupils have always looked up to us as being good craftsmen haven't they Jim?'

'But hasn't it been a case of us instilling a respect for work and workmanship, the dignity of labour, honesty and integrity in the use of techniques and materials which are really traditional manual working class values?'

'Yes Jim, I can see that and it's not easy trying to convince a fourth year the underside of a coffee table needs as much care and attention as the top'.

'We've always looked upon ourselves as providing a subject for the least motivated pupils in secondary schools'.

'Not only that but we open up a range of intellectual activity to many pupils who because of their lack of verbal capacity are unable to take a



meaningful part in many areas of the school curriculum'.

'I think that is important Mike but it's the success with such pupils giving them the opportunity to express themselves in practical terms that has contributed still further to our lowly status by ensuring that our involvement with the more able and higher status pupils is relatively diminished'.

'There are examinations which give the traditional subjects some academic standing'.

'But Bob, they mainly consist of regurgitating pieces of remembered knowledge, and skill from which almost all creative performance is eliminated and the universities do not accept them for entry'. As the group fell silent, I started on a new tack . . . 'Nothing much has changed over the years and nor have the processes taught or the items made'.

'The old pipe or book rack, table lamp and the like'.

'Exactly and metalwork has its old chestnuts like pokers for kids with central heating'.

'I can see that we have been guilty of not moving with the times but we have a great deal of very expensive tools and machinery which needs to be put to good use'.

'The point is Bob that we must look at the facilities we have and see if they are suitable for today's education'.

'In what way Jim?'

'Well if you look at the difference between the provision of tools for woodwork or metalwork and the materials used in the manufacture of modern consumer goods, you will see that times have changed. We should not be looking to teach skills in a limited range of materials but we must select the best material available for the job'.

'All right but how do you see the teachers being qualified? Jack of all trades?'

'No I think what is needed is a teacher with a core subject expertise coupled with a personal interest, enthusiasm and understanding into other fields'.

'So there is still to be some craftsmanship then'.

'Oh yes Bob, CDT is not an excuse to do shoddy work but it should not waste time projecting a technique that is of little or no use to anyone. CDT should give pupils the opportunity to experience and come to terms with a whole area of human understanding not represented by any other curriculum activity'.

'Like what?'

'Like the design and production of two and three dimensional solutions to meet human needs'.

'What about making a typical advert for our subject or at least the way others see it'.

'Good idea Mike. We have all had some good insights into that already today'.

'I don't think they see craft subjects as being very academic or the pupils who take them being very good with language either written or spoken'.

'But good with their hands Mike, What about the sort of background they came from?'

'Definitely working class boys'.

'Boys Graham?'

'Oh yes, I think that's generally accepted Jim'.

'Right what about this then . . .'

NOT TOO KEEN ON ACADEMIC WORK?  
NOT TOO GOOD WITH SPOKEN OR  
WRITTEN LANGUAGE?  
FROM A WORKING CLASS BACKGROUND?  
MALE?  
GOOD WITH YOUR HANDS?  
THEN CDT IS FOR YOU!

All agreed this was a typical view taken, by many of our subject.

Our task was to set about creating a new projected impression as far removed from this stereotyped image as possible. It was obvious that it did not do much to aid recruitment to or improve the role and status of CDT in the school curriculum.

'I suggest we try to tackle the points one at a time. First of all how can we raise the academic status of CDT?'

'I think that, in part, the Universities have helped there by recognising some design based 'A' levels as acceptable qualifications for entry onto certain courses'.

'Yes Graham that has helped but until the student with a design based qualification is given positive discrimination for relevant degree courses such as engineering, technology or design, we cannot be completely satisfied'.

'In the meanwhile what can be done from this end to ensure that CDT is not treated as a recreation period away from formal lessons as has tended to be the case with handicraft?'

'I don't think you can stop that completely Bob, but we should make more of the cognitive process involved in design, together with the relevance to how we live, and the needs of people, to attract the more able pupils'.

'But what about the less able pupils? Surely if we make the subject so complicated and involved we are not in danger of putting them off completely?'

'Yes Nick there is that danger when trying to form artificial links with accepted academic subjects by using high flown terms and phrases, although a distinction needs to be made between the traditional manual subjects and CDT which is more concerned with the problem solving techniques of design'.

'That distinction could well help to destroy the working class image that handicraft was often labelled with'.

'That, Mike, is due to the prevocational training appearance of handicraft in equipping pupils for jobs'.

'And these jobs may have only a limited life expectancy, or may not exist at all'.

'On the other hand the versatility of the training given in the designing process can be so easily applied to everyday life and not just work'.

'Yes Graham, good point. But just to go back to Nick's point about putting off the less able. What



needs to be made clear is that all pupils can make a contribution in CDT according to their own capabilities'.

'Not everyone can design' but they can make a constructive contribution towards a solution of a problem. Is that what you mean Jim?'

'Thank you Mike; now to round off the ability aspect, I think it's fair to say that intellect may achieve its highest expression in its engagement on practical tasks, and that practical needs are one of the major stimuli to intellectual work. So let's hope all can benefit whatever ability they may have'.

'That's good and I think CDT can be more easily linked with jobs away from the shop floor destiny of the handicraft pupil, whilst still allowing the manual dexterity to be practised'.

'Wouldn't it be a travesty of a balanced education if we failed to offer our pupils the opportunity to design, to create, to build and make things'.

'The point is though, due to sex stereotyping we tend to deny that very opportunity to half our school population'.

'I agree Nick and this is where the introduction of CDT will help break down the traditional barrier of boys' craft subjects and girls' craft subjects. It's upto us to make sure girls can be shown how they are able to contribute towards problem solving situations in a relevant and desirable way even if they cannot design in the accepted sense of the word. After all how many new designs are merely modifications or improvements of existing ideas'.

'Once I read quote from Einstein which said . . . "Interest is the real driving force in education, since it is the source of effort and gives effort its value". If we can give the interest and show the girls that the problems which need solving are as much theirs as they are boys' then there is no limit to their progress in CDT'.

'There is another group not many of us think about and that's other ethnic cultures. They have very little opportunity to express themselves according to their own traditions in the old handicraft subjects'.

'Yes Mike that's right and it could be an increasingly important consideration for many urban teachers'.

'I know Jim, you want us to teach Indian metal craft and African wood carving'.

'Very funny, Nick. No I was thinking more of how the rest of the class could benefit from influences of non-indigenous cultures'.

'True Jim, even though they are born in this country many still lead a way of life influenced by their ancestry and this can easily show itself in their free expression'.

'Yes Mike, like *all* pupils they need the opportunity to express themselves according to their own needs, develop those skills, and hopefully achieve control over their own affairs'.

I knew we were on the right lines when, after our meeting, Bob asked to go on an in-service course for CDT.

Our department was born and it would grow in size and importance.

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