

Food for Thought

A 3 Act Play

The story spans the first day of Kevin Fields' (Final) Teaching Practice. Kevin is a student CDT teacher about to teach in a very traditional Craft Department. The traditional beliefs, teaching techniques and work done in the department are a reflection of George Thomas's own views on the value of skill-based teaching. George has been the Head of the Craft Department for 10 years and teaching for 30 years.

Act 1 . . .

. . . finds Kevin coming into School at 8.30 in the morning. Entering the Craft Department, he sees a light on in George's office.

Act 1

Scene: George's Office 8.30 am-8.55 am
Knock and enter

George . . . Morning Kevin.

Kevin . . . Hello.

George . . . Are you ready to do battle?

Kevin . . . I think so.

George . . . You are the first student we have had for some years, I can't remember the last student we had . . . Now . . . I suppose we had better go through your time table. Oh, what date do you leave us Kevin?

Kevin . . . Thursday 13th of December.

George . . . I'll just make a note of that. Let's see . . . you start with a First Year Metalwork group straight after assembly.

Kevin . . . Yes. Class 1P for first two periods.

George . . . O.K. Kevin. Show me what you intend to do with them.

Kevin . . . I want this class to design and make a balancing figure on the theme . . .

George . . . Just a minute, just a minute. These kids are only 12 and there are girls in this class. You can't expect 12 year old kids to design when they don't even have the basic hand skills. You have got to know basic skills before you can start design. I tried the design approach three years ago, a third year class had to make a weather vane. They couldn't design it, they didn't know how to join the parts together, they had not been taught or had forgotten riveting and brazing.

Kevin . . . But surely it isn't necessary to show details of fixing methods on initial sketches, I won't require this class to show that much detail. I will be looking for an understanding of my Design Brief followed by investigation, initial sketches of at least 4 different solutions and a presentation drawing of their chosen design and, of course, a materials list. I shall resource these

early lessons with examples of various fixing methods in a variety of materials so they can choose an appropriate method without needing to know how it is produced.

George . . . If the kids haven't got the basic skills they will design things that they can't possibly make.

Kevin . . . I expect them to do that. That way they gain new skills from the project. Of course, the constraints of the workshop and materials are built into the Design Brief.

George . . . Yes, but my syllabus requires that first year's cover these basic hand skills.

Kevin . . . A design brief *can* be written to cover any skills. The balancing figure covers measuring; marking; cutting; bending and joining of mild steel and possibly plastics and timber depending on the pupils' designs.

George . . . Let me get this clear, Kevin . . . do you mean that you are going to teach all of these skills in wood, metal and plastic to the whole class.

Kevin . . . Oh no. Each pupil will only learn the skills necessary to make his own job.

George . . . So you intend to teach each kid almost individually.

Kevin . . . Yes . . . because all the designs will be different, using different construction methods, but the methods common to all designs will be taught as class demonstrations, using my time effectively.

George . . . Even so, you won't find time to teach individuals; there aren't enough hours in the day Kevin.

I have found it much easier to give all the kids the same drawing, it's easier to plan the work and cover the skills. I have worked this way for 20 years and it makes for a much easier life.

Anyway, what is a . . . er . . . balancing figure? How much material is it going to use? Have you got an example to show the class?

Kevin . . . No. I don't want to show them an example. I feel that it narrows their thinking by using mine as a model. But the project will only use about 10 pence worth of mild steel and a few pence worth of plastic and timber.

George . . . We have never used timber in the metalwork room; there simply aren't the tools.

Kevin . . . Er . . . well . . . would it be O.K. if I borrowed a few woodwork tools for these Monday morning lessons?

George . . . I'd rather you didn't . . . Well, I

suppose so, but *you* make sure that they all go back after the lesson.

Kevin . . . Yes of course . . . er . . . where is the plastic kept?

George . . . I have never used any, but I think John Adams may have some off-cuts in a drawer in his stock room. You will have to see him about that.

Kevin . . . There's no immediate rush. For the first couple of weeks I want the class to design . . . Oh, have you got some sketching paper and pencils . . . and some crayons would be useful?

George . . . Look, I don't know whether you will get these kids to sit down and draw for two weeks; they are used to coming into the workshop and getting stuck into their practical work.

Kevin . . . Well, I'd start by giving them the design brief and discussing it with the whole class then I'd show them some examples of solutions on slides.

George . . . You'll have to find a projector and screen.

Kevin . . . Fair enough. Then they will start sketching their ideas. Midway through the first lesson I will stop the class and introduce size and scale. By the end of the first lesson all pupils should have several ideas complete with dimensions. But I will need paper and pencils.

George . . . You will get the paper and pencils from the T.D. Room, we haven't got any crayons.
Well . . . you have got some interesting ideas; I don't know whether they will work with the type of kids we have got here, you can only try them and see. Shall we have a cup of tea before we look at your next lessons. What class is it, Kevin?

Kevin . . . Four-option-three metalwork.

George . . . Oh yes . . . This class is a bunch of idiots. Last week there was a fight in the lesson. Keep an eye on Potts, Stevens . . . oh . . . and especially Taylor; he is waiting for a place at a special school. Don't turn your back on him. Look Kevin, I don't care what you do with this bunch, just keep on top of them. I have had them writing for the last few weeks, because they are just too stupid to do practical work . . . that is those of them that can write, they are all from rough working class homes and they wouldn't know what to do with a book.

Kevin . . . Would you mind if I did practical with them?

George . . . Well, I suppose not . . . in fact it could be of value to you to see a group like this in the workshop. What job had you got in mind?

Kevin . . . I thought a simple project in gilding metal.

George . . . Forget it! We are not wasting expensive material on this bunch. They steal or vandalise each other's work. They never finish the jobs and never pay for them. Have you got a simple job they can do in mild steel?

Kevin . . . How about a wrought iron table lamp?

George . . . Yes, that's more suitable; I don't think they have done forge work. Check with Mr Stanley that the forge works, I can't remember it being used.
Have you got a set of drawings for the job? I would like a copy.

Kevin . . . No, the lads will design and draw their own lamps before they can start practical. But when they have completed them I can get copies off their drawings.

George . . . Kevin, these kids haven't got the intelligence to design, you have got to tell them what to do every step of the way . . . even when to blow their noses.

Kevin . . . I think that every child has ideas. I had some excellent designs from remedial pupils on my last Teaching Practice. It's just a matter of getting them to put it down on paper.

George . . . This remains to be seen. But I have no objections to you trying. Let me know how you get on at lunch time, I'll see you back there. Well . . . you had better get ready for your first lesson. I have got registration now. See you later.

Kevin . . . O.K.

Act 2 . . .
. . . George has been waiting in his office since 12 o'clock for Kevin, who finally arrives at 12.18 pm.

Act 2
Scene: George's Office 12.20 pm-12.55 pm.
Kevin enters

George . . . You are nearly 20 minutes late, Kevin; where have you been?

Kevin . . . Oh — a few of the 4th years wanted to carry on and finish their sketches.

George . . . This is your lunch hour. You need a break. If you start having kids back out of hours, they will fill *all* your free time. Take it from me, Kevin, don't start that habit.

Kevin . . . I enjoy it. Only the interested ones come back and they are a pleasure to work with.

George . . . But Kevin, you are making a rod for your own back. You see you will be doing this every lunch time and after school.
Out of interest, who did stay behind?

Kevin . . . Four lads from 4 option 3.

George . . . Yes, but who were they?

Kevin . . . Mark Smith.

George . . . Yes, good lad.

Kevin . . . Colin Webster.

George . . . Yes.

Kevin . . . Paul Scrivens, and Darren Taylor.

George . . . Taylor?

Kevin . . . He's not a bad lad. He seemed to enjoy the work.

George . . . Ah, it's probably because you are a new face. Anyway, how did the morning go?

Kevin . . . Pretty good generally. The first years are an excellent group.

George . . . Well? Can 12 year old boys and girls design?

Kevin . . . Definitely. Do you want to see the results?

George . . . Have you got them with you?

RUSTLE OF PAPERS

Kevin . . . Here are a couple of good ones. This lad has got some really original ideas.

George . . . Right. Show me some of the poor ones.

RUSTLE OF PAPERS

Kevin . . . These two pupils have obviously copied from each other. It may be that they feel embarrassed by their poor sketching ability. But the vast majority of the class produced some good sketches showing some excellent ideas.

George . . . This sketching isn't very impressive for two periods' work. This one looks like a page of scribble.

Kevin . . . Oh, that was his first-ideas-sheet; these two sheets

RUSTLE OF PAPERS

developed from that one. Can you see how he has taken this idea and developed it into something quite unusual.

George . . . Yes, I can see that. But couldn't he have got to that idea without wasting this first sheet of paper.

Kevin . . . No, that first sheet contains *all* his ideas on how to solve the problem: I agree his presentation is a bit rough, but I'm sure it will improve with practice.

RUSTLE OF PAPERS

George . . . Oh this is a good one, why is it in colour and the others' aren't? Whose is it?

Kevin . . . The name is on the back.

George . . . Sharron Taylor? Darren Taylor's sister?

Kevin . . . Yes. I think she is.

George . . . I am surprised. Did she use her own crayons?

Kevin . . . Yes. I couldn't borrow any crayons for the class but some of the pupils carry their own. I've found that girls can sketch and design better than boys; there is a certain quality about their work. On my first teaching practice I came across many mixed classes in the workshops, and girls' work was generally superior to the boys.

George . . . In my experience, I've found the opposite to be true. I gave a mixed class a simple job . . . a . . . garden trowel; the girls couldn't read the drawing, couldn't measure or master any of the practical skills, in fact, they spent most of the time distracting the boys.

Kevin . . . I think it's important to choose a design problem for the class which is equally interesting to boys and girls.

George . . . Where is the interest in a balancing figure? What does it do?

Kevin . . . It's an executive toy, or a sculpture, a mobile or just an ornament. A lot of interest is generated because the project moves. Of course, the rate of movement can be varied by each pupil. But probably the biggest interest comes from the fact that each pupil is working on their *own* design.

DOOR OPENS

Another member of staff —

George, there is a lad out here who wants to see you.

George . . . Tell him to clear off, this is my lunch hour.

DOOR CLOSSES

Do you see what I mean Kevin, they don't give you a moments' rest.

Oh . . . I walked past your 4th year class just before lunch. I see you took my advice and then had them sitting in silence.

Kevin . . . Oh no, they were working . . . very well in fact. I didn't find this class a problem. They were a little restless to begin with but once I introduced the design brief they soon took to the work. As you said, Potts and Stevens are inclined to do as little as possible, so I told them that they couldn't start practical until their designs were finished.

George . . . Let's see what you got out of that class.

RUSTLE OF PAPER

Kevin . . . This is Darren Taylor's work; the second sheet is his working drawing which he completed in the lunch break.

George . . . This looks promising.

Kevin . . . Yes, I'm pleased and he showed a lot of interest in card modelling which we will be doing next lesson.

George . . . Taylor is quite safe while he's working with pencils and paper, but as I said this morning, don't turn your back on him when you start the practical work. But these sketches are an encouraging start. I'd like to get an overall impression of this groups' work, just spread them all out on the table.

RUSTLE OF PAPER

Well, Potts hasn't got much to show for an hours' work and Brookes has only drawn three lines.

Kevin . . . This shows the vast ability range, and for that matter, the vast interest range of this class. But it certainly shows that some pupils have *never* been asked to express their own ideas in sketch form.

George . . . Perhaps they just don't have any ideas.

Kevin . . . I think all children have ideas, but some ideas will be better than others and some pupils will sketch better than others. Every pupil just needs the encouragement and guidance to master designing; it's nothing special, we can all do it.

George . . . You are an optimist Kevin. You said that you wouldn't let them start practical until they had completed the design?

Kevin . . . Yes, that's right.

George . . . A staggered start could be an advantage with this group, particularly from the discipline point of view . . . but it can be hard work when the kids are all at different stages of the job.

What material does this job use? Ah . . . mild steel strip and bar. Have we got enough of this in the store?

Kevin . . . Yes, I've checked.

George . . . So you can get 20 pieces cut to size before next week.

Kevin . . . No. I can't prepare ready cut material. Every pupil's job is in a different size and shape. This class seemed to put a lot of emphasis on originality.

George . . . What do you mean?

Kevin . . . Each pupil is making his own design, and will have to select and cut his own material.

George . . . The kids aren't used to that. They have always been supplied with ready-cut

material in the past. Anyway I don't want 20 kids in the stores; for that matter I don't want any . . .

Kevin . . . I will put lengths of the correct material on a bench.

George . . . This could be very wasteful unless you supervise every single cut . . . which you just cannot do.

Kevin . . . Before they cut any material I will check their materials list — cutting their own material further staggers the start of practical, which helps with bottlenecks like the forge.

George . . . Look Kevin . . . I'll come in for next week's lesson and keep an eye on the material cutting while you teach the design and forging skills. O.K.?

Kevin . . . Fine.

Oh — there was something I wanted to ask you. Where can I get a video for tomorrow?

George . . . There is a shop around the corner, you must pass it on the way home.

Kevin . . . No. I've got the video tape, I need the recorder and a television.

George . . . Oh, I see. I believe that the school has got one, but I don't think you would be allowed to take it home.

Kevin . . . I don't want to take it home. I want to show a film to a class tomorrow.

George . . . Which class is this? Is it a free period?

Kevin . . . 2T Metalwork. The film is an introduction to designing simple hand tools for the disabled.

George . . . How long is this film, Kevin?

Kevin . . . Only about 10 or 11 minutes. It's just an introduction to design and ergonomics in hand tools. It's all about the design of the Stanley screwdriver handle.

George . . . What has this got to do with the jobs the kids are going to do?

Kevin . . . The project is to design and make a hand tool for use by disabled people to open ring-pull cans. The video will give the pupils a starting point for shape and size also introducing them to ergonomics.

George . . . I will have a word with the English Department, I think they have the equipment . . . Er, I'll have a look at it when you get it set up.

Kevin . . . Oh, my lesson this afternoon — 2nd Year wood sculpture, which is one of your lessons.

George . . . Yes.

Kevin . . . I've got them down for doing 'touch forms'. Would you mind if I changed the project, but covered the same skills?

George . . . What have you got in mind?
 Kevin . . . I want them to design and carve boat hulls. If there's enough time we'll power them with rubber bands and hold a competition to see whose is the best.
 George . . . You do make life hard for yourself, Kevin — but the kids will love it.
 Kevin . . . Right. I had better put my boat posters up on the wall — see you later.

Act 3 . . .

. . . George finds Kevin in the Woodwork Room, tidying up after his last lesson.

Act 3

Scene: Woodwork Shop, after school. 3.30 pm

George . . . Ah. Here you are, Kevin. How did my wood sculpture class go?
 Kevin . . . Very well. Most of them have started on the practical work this week. I was surprised how quickly they progressed through the design stage.
 George . . . You have done well. I've found this class to be a little disinterested and quite slow. The 'touch form' job that I've been doing with them was started weeks ago and we are still a long way off finishing.
 Kevin . . . Oh yes. Your 'touch forms' are in a box in that cupboard.
 George . . . O.K. Kevin. I may leave them there. Is this some of this afternoon's work?
 Kevin . . . Yes, and these are their designs.
 George . . . Well, what did you actually ask them to do?
 Kevin . . . I gave each pupil this design brief.
 Would you like a copy?

RUSTLE OF PAPER

George . . . Thanks. Let's see what it says . . .
 Number One. Your problem is to design and make a boat hull.
 Number Two. You will use the piece of timber supplied, which measures 50 x 70 x 150 millimetres . . . Oh, you were able to use ready-cut material.
 Number Three. Sketch a range of ideas and produce a card silhouette of your chosen design . . . Oh, that's what these are . . .
 Number Four. Each boat hull will be powered and tested for speed and distance in water.
 I imagine that interested the kids, but where will you test them, Kevin?

Kevin . . . I've managed to borrow a tank from the Science Department. It's over there; I've been using it for a demonstration this afternoon. Is it alright if I make a

display out of these silhouettes and put them up on the wall?

George . . . There isn't a display board in this room.
 Kevin . . . I could put them up on the wall with tape, or how about if I put up some of that pin-board from the stores and made it a proper display.
 George . . . Yes, use the pinboard, it was brought for that purpose about . . . 4 years ago.
 Kevin . . . I'll cut the pinboard and frame it, then fix it with wall plugs . . . How about painting it white . . . George?
 George . . . Don't get carried away. We have managed without a display board for four years. Just cut the board up and nail it to the wall.
 Kevin . . . Alright then . . .
 George . . . Will the kids still be working on this boat job after you leave?
 Kevin . . . No. It should only take about 4 weeks. They are well motivated at the moment and extra interest will be added when I introduce the technology element in a couple of weeks.
 George . . . Technology element? What's that?
 Kevin . . . The powering and testing of the boats.
 George . . . Does that count as technology? I thought technology was all electronics, pneumatics and computers.
 Kevin . . . Any method of power conversion, in this case, a rubber band to linear motion, is technological, and the testing is a basic topic in any technology course.
 George . . . Yes, I suppose it is. So you think that they will finish this job in four weeks?
 Kevin . . . Yes.
 George . . . That's good, because this job will cover all the wood carving in this year's syllabus.
 I must say Kevin, you have done very well considering the quality of kids you've taught today. Okay, two of them were mixed ability classes which really means low ability in this catchment area; but one class was all C and D streams — I mean the 4th years, of course.
 Kevin . . . They did not seem too bad — I thought they were a mixed ability class.
 George . . . No. We only get C and D streams in here — the Head uses this Department as a dumping ground.
 Kevin . . . What do you mean — George?
 George . . . The Headmasters' speciality is Physics and any kids who show the slightest spark of intelligence are channelled into

the science options. Even the options are separated into academic and non-academic groups. So we cannot even attract the brighter kids who want to do craft as well as science.

- Kevin . . . If there were more brighter pupils interested in a craft plus science options, would this make the school modify the options available?
- George . . . Oh yes — Each year the options are reviewed by a committee which takes into account pupils' and parents' views.
- Kevin . . . So it's really a matter of attracting the more academic pupils and perhaps educating their parents to the advantages of design and technology.
- George . . . There's the stumbling block — these kids are only attracted to what's on the television. They've got no interest in school work.
- Kevin . . . The 4th years were keen enough to come back in their lunch break and some of the 2nd year wanted to stop over.
- George . . . True enough — but it could have been because you are a new face as much as the work they were doing.
- Kevin . . . No, I'm not that special. It's the work I'm giving them to do. They like the type of projects, especially if it involves movement. They like the design approach and modelling is a favourite. They like the choice of materials. They like the application of technology, but most importantly, they like being able to make their own designs.
- George . . . You reckon that's all there is to it?
- Kevin . . . Yes. It's only the individual design approach which *really* counts with the children.
- George . . . That's only half the story Kevin. How do you educate the parents? They have got no interest in their own kids or what goes on in the school.
- Kevin . . . Perhaps school is not very interesting for them. How many parents come round on open days?
- George . . . Not many — you wonder if it's worth the effort: there is never much work to display of a decent quality. Anyway, you cannot display 20 identical examples of the same job.
- Kevin . . . Surely, this is a good case for the individual design approach and in the past I have certainly found this method can improve results. I think with design based projects and technology, a CDT department could mount a very interesting display in its own right.

George . . . It's certainly food for thought, after what I have seen today . . . Kevin, can you let me have a copy of your design briefs, the ones you have used today, and any others?

Kevin . . . Yes — I have got a set here in my folder you can have.

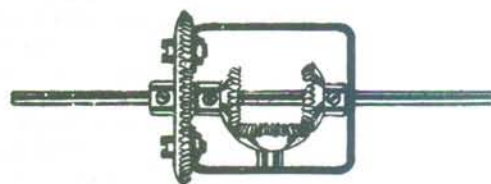
George . . . Thanks. I'll take these home and study them over a scotch tonight. See you in the morning — Goodnight Kevin.

Kevin . . . Goodnight George.

All the people and places portrayed in this play are fictitious, any resemblance to actual people is purely coincidental.

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