

The planning, delivery and evaluation of a moving pictures project

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Abstract

For this assignment I decided to take a unit of work from the QCA Scheme of Work we have recently adopted at my school. I currently teach a Year 1 class so decided to do a project called Moving Pictures, which I hadn't taught before.

In this unit the children must practise making a moving pictures using slider and lever mechanisms. The unit would last six sessions of an hour each. I tried to use all the essential activities suggested by QCA to plan a sequence of lessons (as shown below).

Lesson 1: Practise making a moving picture using a sliding mechanism.

Lesson 2: Practise making a moving picture using a lever mechanism.

Lesson 3: Design a moving picture for a page in a story.

Lesson 4: Make the moving picture designed for the story in draft.

Lesson 5: Make the moving picture using card (final product).

Lesson 6: Decorate the moving picture using finishing techniques and evaluate the product verbally.

However, as will become evident, everything did not go according to plan.

Each lesson followed a similar format. Firstly, there was an introduction, which involved an explanation of the lesson objective, a demonstration of the skills involved and a discussion of safety issues when using tools. Next, the children were sent to their tables to complete a task to satisfy set criteria (which is crucial according to Banks, 1994) and were grouped in each activity according to ability. Finally, there was a plenary at the end of each session to review what we had done. Kimbell, et al (1996) says the action and reflection cycle is necessary for progress.

Lesson 1

In this first lesson (see Figure 1) children had to look at a variety of examples of moving pictures in storybooks. I had found various books which gave examples of pictures which moved using sliding mechanisms, I had also asked children to bring in any books they had at home with moving parts, these excited the children, but were much too complicated for them to copy. I could not find any texts in school, libraries or book shops which had examples of 'simple, moving pictures which they could use as a model – this was my first problem.

I explained to the children the overall objective for the project was to make a class book containing moving pictures, as it is very important to give context and meaning to the task (Kimbell, *et al*, 1996).

I decided, therefore, to make a variety of (what I understood to be) simple moving pictures using a slider. To create these pictures children needed to place two slits into the card in exactly the correct place to allow the slider to manoeuvre within the picture appropriately. We had just completed a topic on forces involving pushes and pulls so the children could understand how the slider would operate. DATA (1996) says it is important to do previously needed knowledge or skills from other subjects. However, when I was making my example pictures for the children I realised this was actually very challenging and immediately recognised that the children would all need adult supervision for this. It was also quite difficult for me to think of lots of ideas for pictures using a moving part, I felt a little apprehensive, but as Jarvis (1993) states 'children will think of more ideas than the teacher alone'.

The QCA scheme, I feel, did not give specific enough direction as to how to approach this activity* I interpreted it in a very different way to that intended – I was making the activity far too difficult (as I later found out). Perhaps this is an issue for QCA? The children all had one piece of A4 card and one card slider to make their picture, they could copy an example shown to them or create their own. As I had never done this project before I was unaware how much card would be needed, there were limited supplies in school and so children were made aware they only had one piece each and if they made a mistake they must try to correct it. This was a good learning experience for the children as they would learn to respect the value of materials and not to be wasteful (Johnsey, 1998) but also to learn by mistakes and cope with failure (Jarvis, 1993). Children attempting their own ideas were encouraged to design their pictures on scrap paper first.

The children really enjoyed this activity, there were some incredibly creative ideas, I was really impressed (see Figure 2). However, most children needed support to place the slits in the correct place as I had anticipated. Children were unable to do the activity completely independently and the teaching assistant's help in this lesson was crucial. I could not have helped the children by myself.

Lesson 2

The aim of this lesson was to make a moving picture using a lever mechanism. Again, the children were shown examples I had made

(see Figures 3 and 4) as I was unable to find many lever pictures in story books. Children were told they could copy an idea shown (if less able) but were encouraged to create their own (if more able) again impressing the importance of designing beforehand due to the lack of card.

While preparing for this lesson I had tried using hole punchers (as suggested) to create a hole for the pivot on the lever, but they made holes too large for the split pins and they also would not pierce a hole in the middle of the picture as they could only go about one centimetre in. I was really annoyed, as the hole punchers had been purchased especially for this project and felt they were a useless waste of money. I came up with an alternative technique so I showed the children how to pierce a hole using a drawing pin and then push the split pin through the hole created.

Children were very careful doing this activity especially when piercing the holes in the card. The possibilities for lever pictures were limited by the size and shape of the pre-made levers, but some children did come up with some great ideas (see Figures 5 and 6). Care needs to be taken not to limit creativity by an inflexible structure (DATA, 1996), so next time I would let the children make their own levers, but for this project I was limited by the amount of card we had.

Lesson 3

QCA had recommended making moving pictures for a storybook, so as our project in

Lesson Plan

Title: Moving Pictures 1

SUBJECT: DT	DATE: 7.3.01
Group size: Whole Class Age: Y1	Time span: 1hr
Aims:- Use tools safely to make a moving picture that incorporates a slider mechanism.	
AT's covered: labc 2a 5a	
<u>Organisation:</u> Whole class - look at the moving books, demonstration Individual - work to create own sliding picture.	<u>Resources:</u> Collection of books with moving parts Scissors pencils rubbers
<u>Introduction:</u> Introduce new DT topic explain we will be each making a moving picture to put together to make a book. Show children a collection of books/cards with moving parts. What does the moving part do? How does it work? What effect does it have? (e.g surprise, reveal picture, show how something moves).	
<u>Development</u> Read a book which uses levers and sliders to make movement and bring a story to life (e.g "Jimmy's Sunny Book" by Paul Bowling)	
Show examples of teacher made sliders and lever moving pictures. What is moving in each picture? Which mechanism is used to do this?	
Allow children to use these examples to make a slider mechanism this week. Children can explore the idea of appearing/disappearing or movement across/up-down the page	

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Figure 1: Lesson plan for Moving Pictures project.

Figure 2.



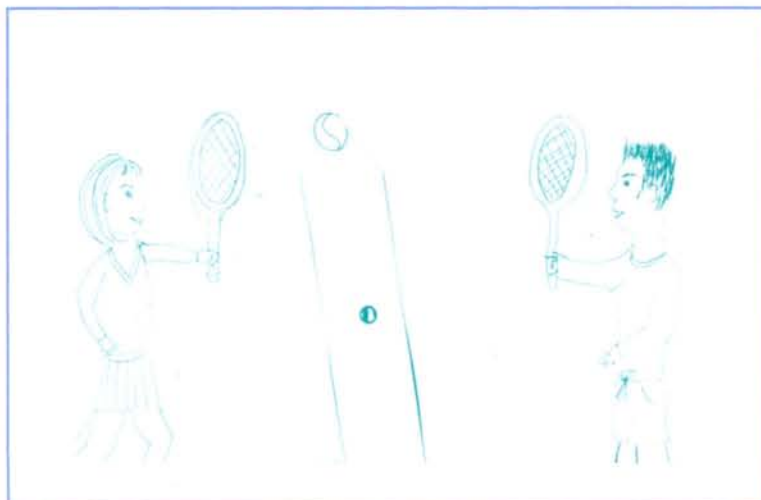
Figure 3.

literacy was story writing, we wrote a class story based on a book the children were familiar with called *Sam Plants A Sunflower* (which is a lift the flap book). Our story was called *Jack Plants a Broad Bean Seed* and our aim was to make moving pictures to relate to the story. I had intended for the children to type this story up using the computer, thus creating a link with IT and to give the book a quality finish. However, time was a limiting factor, so I decided to type the story myself. In future I would allow more time for the children to do this activity.

The story was broken down into sections and I took a section and modelled how I would create a moving picture design (see Figure 7). Each child was given a section of text and a few minutes to discuss with a partner a related moving picture they might design. The children had to consider if their picture would move using a slider or lever.

The children went to their tables to start their activity. Most children, particularly the girls, were able to draw a detailed picture relating to the text. This seemed to be the only gender difference in the whole project, it was something I had noticed during 'free time'

Figure 4.



that girls would predominantly pick artistic activities. This could have put the girls at an advantage, but as Banks (1994) questions, 'if you are poor at drawing are you poor at designing?' I found many of the boys had great design ideas but were less able to put their visualisations on paper. Many skills, and knowledge needed for design and technology are borrowed from art (and science) (Johnsey, 1998).

Many children could not then think of an appropriate moving part for their picture without help. When children felt they had their idea on paper they were to come to me (as the teaching assistant was unavailable for this session) to explain it and tell me how it would move (see Figure 9). By the end of the lesson many children had not finished their designs and I had only managed to check and talk through about half of the finished ones, so I decided to devote another session to completing this objective.

Lesson 4

There had been a few children absent from the last session so after we reviewed what we had done the previous lesson I started helping the ones who were absent or who remained unfinished from the last session, whilst the others improved their designs then coloured them. Again, the teaching assistant I normally had during the session was otherwise engaged, therefore, the children who had finished could not be taken onto the next stage, however, I felt it was very important to take the whole class to the next stage together.

During this session I became very stressed, all the pressure was on me as children who hadn't started needed help, children who couldn't think of their own design needed help and children who had finished wanted their work checked. Despite using capable early finishers to help the less able, I soon realised the majority of the class could not design their picture by themselves and they were not going to understand it, or be able to make it, themselves. Also, I was aware of being behind schedule and was finding it difficult to manage by myself, so I abandoned the lesson. The children were getting frustrated, I was exhausted with all the constant attention needed so I told the children to stop what they were doing and sit on the carpet.

I told the children why we had stopped – that we were all finding the lesson too hard, even me! Many children agreed and expressed their frustrations too, it was nice to know we all felt the same and could talk about it honestly. To fill the time until the end of the session, we had a story and early playtime!

Figure 5.

I had almost given up on the project, but decided to ask for advice at my next design and technology training day. I was discussing the difficulties I was experiencing with colleagues on the course, one of them had done this project a number of times before, she showed me examples of moving pictures she had made and explained she had got her ideas from the *DATA Helpsheet* pack which could be purchased to accompany the QCA Scheme of Work.

I purchased a copy of this pack immediately and wow! it was like being given an idiot's guide to teaching design and technology through QCA! – pictures, explanations, practical tips... Now I understood what QCA had meant by 'simple' moving pictures, I had interpreted the task explained by QCA in a totally different way and was consequently teaching the children something too difficult – no wonder we were all finding it much too hard.

The children had been asking about the project and enquiring about when we intended to finish it. After this course I went back to school with renewed vigour! I explained to the children about the course and that I had learnt a lot about making things from other teachers and had learnt a really easy way to make moving pictures – the children were very excited about the next lesson.

Lesson 5

As there was only time for two more sessions I decided to concentrate purely on moving pictures using sliding mechanisms. I showed the children examples of completed moving pictures I had made and the children were greatly impressed (see Figures 9 and 10). I demonstrated how to make the first stages of the moving picture (the lesson objective) and the children realised how easy it was to do.

As we were using the hole puncher for the first time I asked the children to see if they could think of the safety issues for the lesson – they came up with very sensible suggestions and some children even suggested rules for the tools we were using.

The children went to their tables to create their moving picture, unfortunately there wasn't enough time to design their pictures. I realise design skills are vital for a quality product (Benson, 1997), but children had done a lot of design drawing over the last two lessons and now we were also limited again by time (I would ensure next time the design



Figure 6.



Name: Wes Riddell Date: 05/0

My Design For A Moving Picture

<u>tools needed</u>	<u>resources</u>
hot rock	cat Pencil Pencil Pencil Lol one sl

Figure 7 and 8.

process would be included). What a difference this lesson was to the others, hardly any child needed attention, they were all motivated and everyone was on task. At last I was able to sit with a group and give them some quality time and help. Although the teaching assistant again was unavailable to help during the lesson, children coped very well and most completed the first stage of the moving picture without any help at all (see Figures 11).

During the plenary we looked at examples of well made or creative moving pictures and we talked about how much easier this method was. All children said they enjoyed this lesson and were eager to take the finished products home.

Lesson 6

During this last lesson the children had to add finishing techniques to their picture to make it a good quality product. The resources they were allowed to use to do this were displayed for them to choose from. Again I demonstrated how I would decorate my picture and I tried to use a bit of each

resource to show how different materials can give different effects.

The children were sent to their tables to decorate their pictures and again all children were highly motivated and on task. What was really heart warming was the way they were complementing each other's work and co-operating when they needed to share a resource.

I had planned for some of the children to evaluate their picture verbally in front of the class (choosing the more able first), during the plenary. But the children were so engrossed in what they were doing and as many hadn't finished I decided to let them work up until the last minute of the session. So I decided to spend an extra session (half an hour) on evaluation of the pictures so that everybody got a chance to talk about what they liked about their model and what they could do to improve it if they had more time.

We carried out the evaluations the following day (this was probably a better time to do it as all the pictures had a chance to dry), it was a very positive session. The children enjoyed

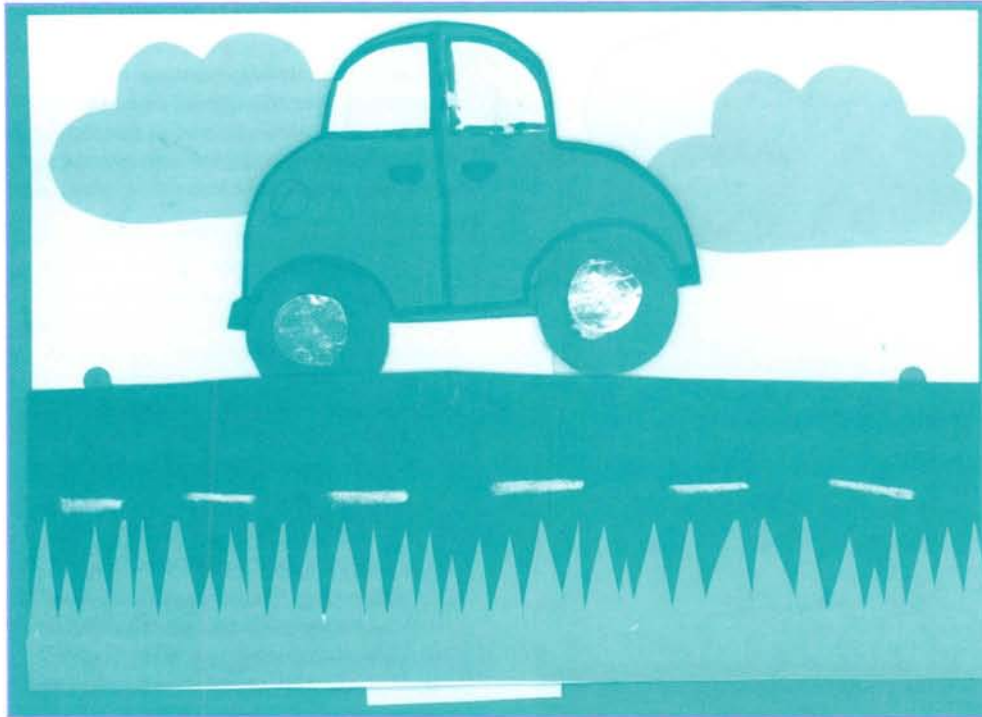
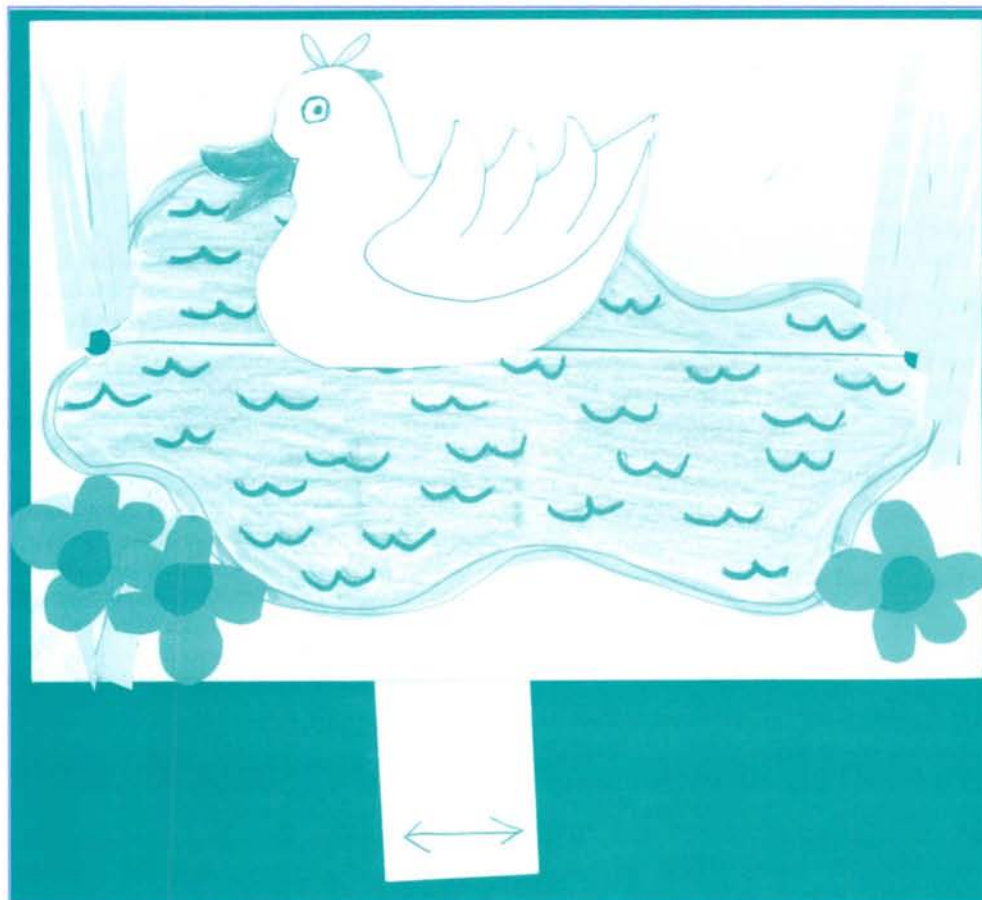


Figure 9 and 10.



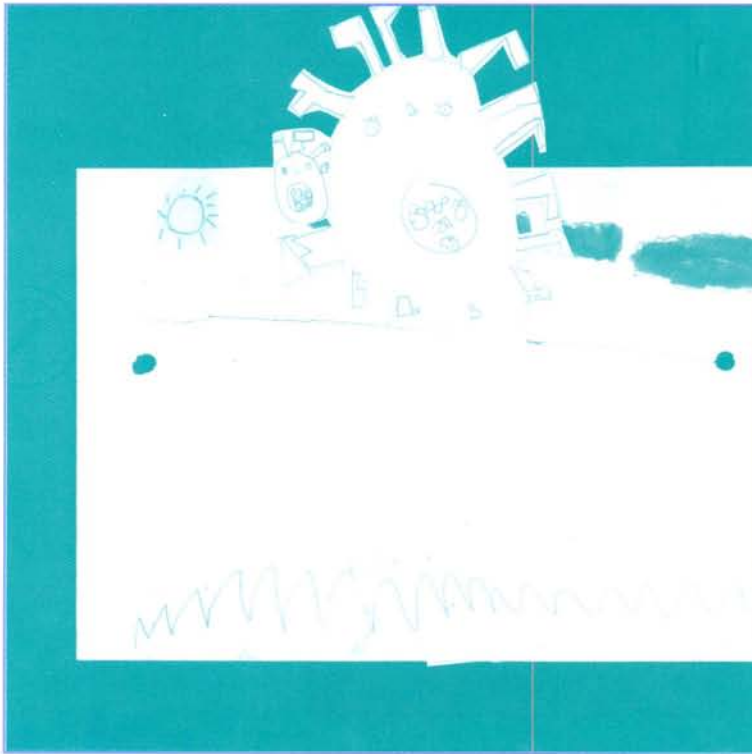


Figure 11.

looking at everyone else's work and had gained more ideas. They listened well when others were talking about what they liked on their pictures and many offered positive comments or good suggestions as to how other children could make their pictures better. Each time, as a class, we decide if the picture fit the criteria set – everybody passed!

I asked the children if they wanted extra time to carry out the improvements that had been suggested and most said 'yes', so during a free time session many chose to complete their work. At the end of the project many moving pictures were displayed (unfortunately not all due to limited display space).

I realised the children had learnt a lot from this project, despite the errors in the first lessons, we had all learnt from the mistakes, especially me. I have learnt that it is very important to talk to colleagues about a project you are unfamiliar with, there is a wealth of experience within a body of staff, someone would surely be able to help. I would also make time for the designing process, despite the children's finished products being good, they would have been brilliant with more forethought and practise. Another thing I have learnt is the importance of other adult helpers during design and technology lessons. When I return to school I am determined to set up a group of parent helpers which will go in to each class to help with such lessons.

The only way I feel I will be able to build up my knowledge and skills as the design and

technology co-ordinator is by doing a variety of different projects with children of different ages, which is one of the reasons why I have volunteered to be the internal supply teacher for my school. Although I won't be teaching Year 1 next year I will be able to pass on my experience of this project to the next teacher.

To assess the children's abilities I made a note of the key objectives most children will learn by the end of the project, according to QCA. As Jarvis (1993) suggests I also made a note of the specific learning objectives for each lesson (see lesson plans) and made the children aware of these at the beginning of each session. I tried to make brief notes at the end of each lesson recording which children exceeded the objectives I had set and those which had underachieved and why.

Jarvis (1993) explains that the National Curriculum Council recognises assessment in design and technology needs to be different to other subjects, the emphasis being on the processes and skills involved rather than the outcome. However, these processes and skills are hard to assess objectively and rely heavily on observation of all pupils and as explained this was very difficult for me to manage. The actual product made could be more subjectively assessed – Does it fit the purpose? Is it attractively finished? Did it meet cost and time constraints? Although the final product can indicate skills at the making stage I couldn't tell if the child had used the tools given successfully, or if the product was all the child's own work, or if the child had understood how and why they had made it?

I relied on a combination of notes after each session, designs and rough work the children had done and of course their finished products to make an accurate as possible assessment. Teachers can evaluate their own performance by assessment too, Jarvis (1993). This made me aware I had spent too much time helping rather than observing. I realise this was due to the fact that I had given the children tasks that were too difficult for them, in the first few lessons and now I know how to do this project I would not make this error again.