

Developing cross phase support material – my story



Gatsby Teacher Fellow

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I was delighted to be awarded a Gatsby Teacher Fellowship that I applied for last year. Along with the award came funding to devote to a project and an honorarium. This allows me to buy the most precious commodity of all - time, in order to develop my project on 'Fairgrounds' to support cross phase work.

Fairgrounds feature in the QCA scheme of work and is aimed at Year 6 pupils as a transition unit. Many of the feeder schools that I work with were interested in doing this project, but found it difficult to overcome the technical aspects of the project, such as making a circuit and appropriate mechanical parts. Some primary teachers do not look forward to teaching Design and Technology to their pupils, they find it complicated and challenging and difficult to plan. I wanted to make their lives easier! I intended to create a whole package for my feeder primary teachers that included photographs taken at a local fair, teacher notes, a scheme of work, visual stimulation materials and a kit of parts with instructions to make a skeleton model that worked.

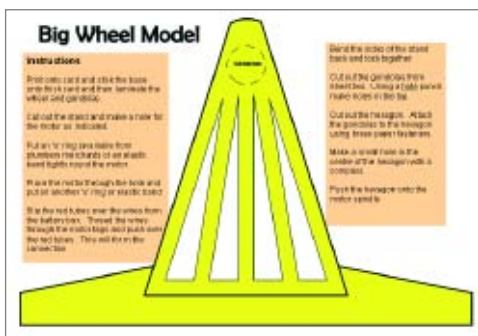
I decided to produce a range of support materials and bring them together in the form of a CD-ROM. I spent time at our local fair, which takes place in October, taking photographs and video footage. The video sequence has had the most impact in the classroom helping with the aid of interactive whiteboards to bring to life the sights and sounds of the fair and to really appreciate the forces and movement involved.

What I did

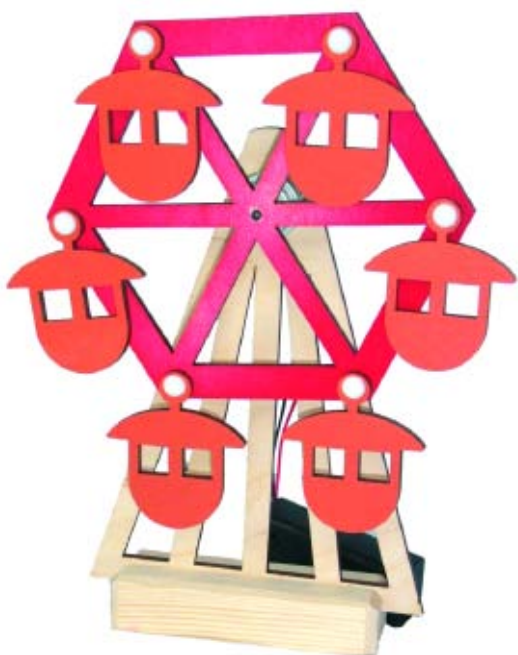
At the beginning of my Gatsby year I went to Hull Fair to make video clips of rides that rotated. I experimented with the video editing suite at school and produced a DVD that I have used at Tickton Primary school as inspiration for their design work. I subsequently used Windows movie maker to produce the clips for my PowerPoint based resource which is easy to use. During the course of the project I devised a simulation game based on a 'human' car wash to help teach the pupils about computer control and videoed the pupils performing it. I have written up the instructions for the game which went down really well – it was great fun! To complement this I have produced a scheme of work, teachers' notes and updated a student workbook. I have created a library of photographs from the fair and a PowerPoint to introduce the project to the pupils.

I have been experimenting with developing a range of demonstration models that would be used by the teacher to teach computer control. I have also been developing models aimed at KS1 for use with the Learn and Go system and the TEP IQ2 controller and tried these out with Y6 at St Nicholas' Primary in Beverley. I have also experimenting with super capacitors.





Details from the DVD/CD-Rom



Teaching the whole curriculum through D&T!

I believe that there are many opportunities to teach the whole curriculum through D&T so with these resources I was very keen to see how many curriculum areas I could include. On the CD-ROM I include a History section, Maths exercises and a whole section on the Science of Fairground rides. I have encouraged the pupils at Tickton School to carry out their own family history of the fair and this has proved really interesting.

What I did next!

After meeting my LEA advisor for D&T, we decided to devise a course for Primary teachers called 'Move it and Control it' where we would give away the CD-ROM and offer a making service for kits for making fairground models. After this the CDs will be distributed to 140 schools in the East Riding. The advisor, David Bowes was also invited to give a presentation on Maths and Science links in D&T at the recent NAAIDT conference. He showed the CD-ROM and invited comments from the audience. I received some very positive comments and some useful indicators to perfect it further.

I developed, with TEP help, demonstration models to include the 'charge and go' super capacitors from TEP which are an environmentally responsible alternative to batteries. TEP supplied the then all-new IQ2 controllers which I am packaging as a low cost option that could be offered to our feeder primaries. I have also developed card models as demonstrators for teachers that are easily assembled and above all cheap and the plans for these are included on the CD-ROM.

Evaluating the outcomes/impact on pupils engagement

I took the materials along to two schools that are not in our cluster group as an evaluation exercise and the children responded really well to the stimulation materials especially the video sequence. Having shown our school governors the work too, they were really impressed, both with the quality of the resources and models, and the response from our feeder primaries. It has prompted a discussion in the school to consider becoming a manufacturing and training centre for local schools and providing a 'proper' service for them.

Personal Reflections

I have found the whole experience of the Gatsby Fellowship inspiring. It has been a real 'shot in the arm' and has prompted me to enrol for an MA at Sheffield Hallam University, itself a centre of excellence for Design and Technology projects. Many of the ideas that have been developed for this project can be used for my assignments at SHU. I very grateful to Gatsby for the support I have received over the year.

All of the support files and 2D CAD drawings are available for download from the TEP website under the News and Views support tab