Foundation stage curriculum in design and technology

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Introduction

The following study is designed to be a very brief introduction to one distinct area of the Foundation Stage Curriculum. It would be impossible to fully discuss all the issues which have been raised by my study, nonetheless, it will attempt to provide a succinct introduction to each of the main points.

Rationale

I have chosen to research the Designing and Making aspect of Knowledge and Understanding of the World from the Foundation Stage Curriculum (DFES 2000, 91). I have chosen this particular area of Learning because I feel that I have had limited experience of teaching Design and Technology at any point in the Primary age range, and as such wish to develop extend and develop my understanding through further research. The Foundation Stage Curriculum could be considered to be the basis for all other learning throughout a child's life, and as such a thorough grounding in teaching and learning Knowledge and Understanding of the World, should provide a sound

basis for teaching Design and Technology in other phases of the Primary school, as this quote demonstrates:

‘ In this area of learning, children are developing the crucial knowledge, skills and understanding that help them to make sense of the world. This forms the foundation for later work in science, design and technology, history, geography, and information and communication technology (ICT).’ (DFES 2000, 82)

In addition to the reason given above, I am also unsure how to best support a child as they develop designing and making skills at such a young age, with regard to providing them with a wide range of opportunities, yet taking health and safety into consideration.

‘ Understanding design work will come from using a variety of joining methods and materials,’ (DFES 2000, 82), yet how should these methods be taught to best effect? It is also difficult to know which specific designing and making skills will be useful to the child, and what range of skills should be taught to the child. Should each child be taught a range of skills which are specific to them?

My final reason for choosing to study this particular aspect of the Foundation Stage Curriculum has been derived from looking at the Ofsted Subject Reports for 1999-2000 (Ofsted 2000). *‘ In one quarter of schools standards and the quality of D&T have risen markedly since the previous inspection, but in one school in six D&T provisions have deteriorated,’* (Ofsted 2000, 1), this shows that although the provision of design and technology has improved in a quarter of our primary schools, it has either stayed the same,

or deteriorated badly in three quarters of primary settings. This would seem to support the assertion that the provision of good quality design and technology teaching and learning, should be of paramount importance to out schools, starting with facilitating children as they access the Knowledge and Understanding of the World portion of the Foundation Stage Curriculum. A solid base on which to build, as discussed above, should ensure that children are better placed to access the design and technology curriculum as they progress through school.

Evidence

The following is a summary of the evidence collected concerning the teaching of designing and making skills in the Foundation stage settings of two different Primary schools. The schools will henceforth be referred to as School A and School B.

School A is a large Primary school with an integrated Foundation Unit. The majority of the staff in the Foundation Unit are ‘ High/Scope’ trained and as such the setting follows the High/Scope daily routine, as outlined by Hohmann and Weikart (2002, 151-165).

‘ *In the High/Scope approach to early childhood education, adults and children share control. We recognize that the power to learn resides in the child, hence the focus on active learning practices. When we accept that learning comes from within, we achieve a critical balance in educating young children. The adult’s role is to support and guide young children through their active learning adventures and experiences. I believe this is what makes our program work so well.’*

(Hohmann and Weikart 2002, 3)

The above quote neatly summarises the main reasons which prompt different settings to adopt a High/Scope or ‘ active learning,’ approach to the Foundation Stage Curriculum, the main idea being that children learn best from first hand experiences and from self-generated learning opportunities. This idea is further supported by the Curriculum Guidance for the Foundation Stage, for instance, *‘ they learn effectively by doing,’* (DFES 2000, 82).

I observed a plan-do-review session, as part of the daily routine at School A. During such sessions the children choose where they wish to work, for example in the water area, and formulate a plan which they will execute once they start work in their chosen area. Following the main, ‘ doing,’ part of the session the children are encouraged to ‘ review,’ what they have done and comment on the relative success or failure of the plan. In this way the children are encouraged to learn from their mistakes, and also to gain encouragement from their successes, (Hohmann and Weikart 2002, 167-243).

I observed one child during the aforementioned session, Child A, and followed her through the entire process. She had planned to work in the construction area with the large bricks, and had decided to build a boat. Before beginning work she collected a piece of paper and a pencil and sat down to plan her boat. Child A worked for some time on this design before starting work. She used the large bricks to build her boat and then started to collect other equipment from around the setting to place ‘ onboard,’ including large quantities of plastic food from the role play area. When asked

about this Child A explained that she was going on a long journey and needed to take lots of food with her. During review time Child A explained to the rest of her group and the adults who were present, that she felt she had successfully carried out her plan, however, she would have preferred to build a boat that would float. The class teacher explained to her that this might be possible in the following plan-do-review session. Indeed for the following session, the teacher collected lots of materials, such as plastic bottles and corks to give Child A the scope to build her own floating boat:

‘ *When adults seek out and support children’s interests, children are free to follow through on interests and activities they are already highly motivated to pursue. They are also willing to try new things and to build on what they are already doing.’*

(Hohmann and Weikart 2002, 55)

The evidence outlined above shows a good example of how children can be supported in developing their own designing and making skills, and indeed can be highly motivated to do so. Child A was given the opportunity to meet an early learning goal through the medium of play:

‘ *Provide opportunities for children to practise their skills, initiate and plan simple projects and select, choose and devise their own solutions in design and making processes....’*

(DFES 2000, 91)

In School B, I was able to observe the teaching of designing and making skills in a completely different way to that outlined above. I observed a Reception

teacher leading a planned lesson in which the aim was for each child to produce a money box. The children were taken in small groups to sit with a classroom assistant to make their money boxes, while the rest of the children played. The children were asked to assemble the net of a box, which had already been cut out for them, by gluing the flaps and sticking them together. They were then permitted to decorate their boxes as they chose. It was difficult to assess whether any true learning had taken place during the lesson as the children were all producing exactly the same piece of work, and in many cases much of the actual assembly work was carried out by the teaching assistant.

School B does not appear to have embraced the key features of the Foundation Stage Curriculum as outlined by Tassoni (2002, 1) in Appendix I, as such the children are unlikely to meet the Early learning goals for designing and making skills, one of which is detailed above (DFES 2000, 91). They would benefit from developing a child initiated approach to teaching design and technology in the early years, as advocated by the High/Scope approach (Hohmann and Weikart 2002) and the Foundation Stage Curriculum (DFES 2000). It is obvious from the evidence given that no real learning took place in the design and technology lesson which was observed in School B. Such a directed activity can leave no room for the child’s initiative and the development of their individual designing and making skills.

Conclusion

In conclusion, the evidence outlined above has led me to conclude that designing and making skills can be best taught through child initiated

learning. The adult can support the child's learning by providing further opportunities and materials once they have highlighted the child's own interests. A directed approach to teaching design and technology in the Early Years does not follow the guidance given in the Foundation Stage Curriculum (DFES 2000), and as such should have no place in our schools as it does nothing to further the children's learning. I now feel more confident that I would know how to approach the teaching of designing and making skills if placed in a Foundation Stage setting.

Appendix I

' Key Features of the Foundation Stage:

- *Recognition that young children need to learn through practical experiences rather than being taught.*
- *Play is emphasised as the vehicle of learning for children.*
- *The importance of working from children's interests and needs is highlighted.*
- *It is the first curriculum in England to cross the divide between pre-schools and schools.*
- *Personal, social and emotional development of children is recognised as providing the backdrop for other learning.*
- *The role of parents is promoted as that of being an equal partner.'*

(Tassoni 2002, 1)

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