

On The Farm:
An Online Virtual Farmyard
for Pre-School and Primary School Children

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Certificate of Authorship/Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Abstract

This thesis presents a detailed description of the research project that provided the basis for the development of a children website and the conceptual framework that was put into place as a basis for the project development. The website is targeted at young children aged four to seven and is intended to facilitate children's learning about the ecology of farm animals, provide an understanding of farm animals' life cycles and to develop in young children an awareness of the role of farm animals in the production of our daily food.

The data based on surveys and interviews with children and teachers in two countries, Australia and Taiwan, are analysed on the first chapter and use to inform the project development. This section also includes a critical survey of the relevant literature relating to appropriate pedagogical frameworks, children's computer literacy and a review of current online resources about farm animals targeting young children. The examination of the relevant educational theory is presented as a foundation for the development process and a critical review of currently available children's learning resources about farm animals is also presented in order to establish best practice design principles for the website which is final called ON THE FARM.

This thesis traces the development of the project from these theoretical bases through to its implementation and initial evaluation. As well as a detailed description of the development process and the provision of an initial evaluation of the project, this thesis also suggests that the learning model of ON THE FARM can form the basis for the development of high quality applications in the future. The application of this data could be applied to new technologies such as Augmented Reality (AR) and could include survey results showing the entertainment preferences of young people and a

social-constructivist educational framework that was developed for the project. The final product provides a benchmark reference for the creation of online learning materials for young children, and has a rich potential for future development.

Keywords

Young Children, Farm Animals, Educational Websites, Online Learning, ON THE
FARM