

**STUDENT INVOLVEMENT IN SCIENCE IN  
THE JUNIOR PRIMARY SCHOOL: A  
VIDEO-ANALYSIS OF A MULTI-GRADE  
CLASSROOM SETTING IN IRELAND**

By

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**MASTER OF SCIENCE**

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## **ABSTRACT**

This classroom based research project focuses on participation rates of children in the junior primary school during science classes and from the information gathered attempts to identify how a teacher can encourage optimal participation from all children. Factors which influence participation rates and factors which have no influence on participation rates are discussed in relation to the results. These factors include gender, the role of the teacher, teaching styles, gender and groupings and academic ability as an influence in science learning. The position of the Irish Revised Primary School Curriculum for science in effecting participation levels is also discussed. The classroom in which the research takes place is a multi-grade class with an age range of four years old to eight years old. Multi-grade classes place added demands on the teacher's time and as the researcher is also the class teacher video recordings of the lessons were utilised to facilitate the gathering and analysis of data.

The findings of the research indicate that the content of the Revised Primary School Curriculum for science provides highly appropriate and enjoyable content for this age group. It also indicates that the majority of children maximise their participation within their own class and age groupings. Altering these groups is generally counter-productive. One notable exception for altering the groups is when academically low achieving children fail to try to participate due to a lack of self-esteem. These children respond positively to less competitive groupings.

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## **ETHICAL CONSIDERATIONS**

During the course of the research it was important to the researcher to maintain a high standard of ethics and to make certain that all research was conducted in an appropriate manner. In order to ensure that this was the case permission to conduct the research project in school within normal teaching duties was received from the Principal and also the Chairman of the Board of Management. The identities of all the children involved in the research are protected by the use of pseudonyms throughout the thesis.