



ESRI Research Bulletin

Multigrade Teaching and Age Composition of the Class: The Influence on Academic and Social Outcomes Among Students

Amanda Quail and Emer Smyth

The *Research Bulletin* provides short summaries of work published by ESRI staff and overviews of thematic areas covered by ESRI programmes of research. Bulletin articles are designed to be easily accessible to a wide readership. A reference or references to the full publication is included at the end of each Bulletin article.

An archive of bulletin articles will be found at www.esri.ie/bulletin

Multigrade Teaching and Age Composition of the Class: The Influence on Academic and Social Outcomes Among Students

Amanda Quail and Emer Smyth¹

Multigrade teaching occurs where two or more year groups (for example, second and third class) are taught together by one teacher in the same classroom. A multigrade setting may pose challenges for teachers in catering to a wide mix of ages. For children, it means mixing with their older and/or younger peers. Multigrade classes are common in many developed and developing countries but are especially prevalent in Ireland where a third of primary school children are taught in such classes. It is surprising, therefore, that there has been no Irish research on the potential impact of multigrade teaching on how children get on in school.

A recent study by Amanda Quail and Emer Smyth aims to address this gap in research using data on 8,568 9 year old children from the *Growing Up in Ireland* study, a major longitudinal study of infants and children in Ireland. The data are a rich source of information on the situation of nine-year-old children in Ireland and draw on the perspectives of the child's teacher, principal, parents and the children themselves. Over one third (35%) of these children were taught in a multigrade setting. Among this group, 47% were taught with older children, 42% with younger children and 11% with both older and younger children. Not surprisingly, children attending small, rural schools were more likely to be taught in a mixed-age setting.

The research looked at both academic and social outcomes. Children's academic outcomes were assessed by their scores on the Drumcondra Reading and Maths tests. Their social outcomes were measured using the internationally renowned Pier-Harris self-concept questionnaire, which assessed how they saw their behaviour, intellectual/school status (that is, how they rated their own academic abilities) and their popularity with peers.

The analyses took account of a range of background variables, including social background, the social and gender mix of the school, class size and teacher experience, so that we could compare 'like with like' in assessing the effects of being in a multigrade class.

¹ amanda.quail@esri.ie; emer.smyth@esri.ie

Overall, the research found that children in multigrade classes did not perform any better nor any worse than children in single-grade classes. However, the effects of being in a multigrade class were different for girls and boys and also depended on the age mix of the class as a whole.

Being in a class with older children was linked to more negative outcomes for girls but not for boys. Girls taught in a class with older children had lower Reading and Maths test scores than similar girls in single-grade classes. They also had poorer behaviour and were more negative about their academic abilities and their popularity than girls in single-grade classes. Girls taught with younger children also had a more negative view of their abilities and popularity. In contrast, we find very few differences in outcomes for boys. The exception is that boys taught in classes with younger peers tend to have poorer behaviour.

What accounts for these gender differences? It appears that girls make more comparisons with their peers than boys and as a result feel more negative about their abilities. They compare themselves to students at very different levels (older and/or younger) and therefore judge their own performance negatively. This negative view of their abilities may then affect their actual academic performance. Children tend to make friends within their own age-group so this may limit girls seeing themselves as popular across the different age-groups within their class.

This study adds to the existing body of international research on multigrade teaching by using Irish data to examine how the specific age composition of the multigrade class influences academic and social outcomes for boys and girls. The negative effects found in this research, especially for girls and their self-concept, indicate additional challenges for teachers in dealing with the gender dynamics of multigrade classes. The findings point to the need to develop innovative ways to engage students, manage classroom interaction and discipline, and provide feedback to children in such a way as to prevent potentially negative effects on girls' self-image and achievement.

REFERENCES

Quail, A. and Smyth, S. (2014) "Multigrade teaching and age composition of the class: The influence on academic and social outcomes among students", *Teaching and Teacher Education*, Volume 43, Pages 80-90. <http://dx.doi.org/10.1016/j.tate.2014.06.004>.