

EARLY MULTIPLE REGRESSION ANALYSIS OF HIGH SCHOOL SCIENCES EXAMINATION DATA: ASSESSING THE IMPACT OF LAPTOP USE ON STUDENT PERFORMANCE

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ABSTRACT

The Australian Digital Education Revolution in secondary schools ran from 2008 to 2012. Year 9 students in 'Round 1' schools, within the Catholic Education Office Sydney, each received a laptop from 2008. This was repeated for Year 9 students in 'Round 2' schools from 2009. Consequently, for the Higher School Certificate (HSC) examinations in 2011, students from Round 1 schools had been schooled for over three years with 1:1 laptops whereas the students from Round 2 schools had received traditional schooling. This unique dichotomous scenario is the context of this study, which builds upon prior research into the impact of 1:1 laptops and the Digital Education Revolution on teaching and learning in science (Crook, Sharma, Wilson & Muller, 2013; Crook & Sharma, in press).

This study reports on the preliminary multiple regression analysis of 521 students within subject using HSC examination result as the dependent variable and School Certificate result, gender, socio-economic status, science subject, teachers variables, student variables and schooling by laptop as independent variables. The early findings are interesting and perhaps controversial.

REFERENCES

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