

Trends in Year 9 Students' Mathematics and Science Achievement

*Results from New Zealand's participation in the repeat of the
Third International Mathematics and Science Study*

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Overview

The aim of this report is to present a descriptive summary of the findings from New Zealand's participation in the repeat of the Third International Mathematics and Science Study (TIMSS-98/99). In addition, it will provide trend achievement information for New Zealand Year 9 students in mathematics and science in the years 1994 and 1998.

This report is the first of a two-part series. The focus of this report is on student achievement and their beliefs and attitudes towards mathematics and science, within a national and international context.

This report is divided into six sections:

Chapter 1 presents an overview to the study design, key findings pertaining to New Zealand from TIMSS-94/95, and some technical information about sampling and how student achievement scores are presented.

Chapter 2 describe the mathematics and science achievement of New Zealand Year 9 students in an international context.

Chapter 3 examines Year 9 students' mathematics achievement in 1998 in the New Zealand context, with a particular focus on comparisons with their Year 9 counterparts in 1994.

Chapter 4 examines Year 9 students' science achievement in 1998 in the New Zealand with a particular focus on comparisons with their Year 9 counterparts in 1994.

Chapter 5 provides a brief description of the demographics of the New Zealand Year 9 student group involved in TIMSS-98/99. In addition, their aspirations, beliefs, and attitudes are examined within New Zealand and international contexts.

A brief summary of the main findings concludes this report.

The second report (forthcoming) will examine the context of mathematics and science achievement in terms of classroom environment, as well as the beliefs and attitudes of the teachers of the Year 9 students involved in TIMSS-98/99. School environment, as well as an overview of curricula differences across countries will also be presented.

