Chapt r 13

Reporting TIMSS 2003 Questionnaire Data

María José Ramírez and Alka Arora

13.1   Overview

The purpose of TIMSS is to provide information that policymakers, curriculum specialists, and researchers can use to understand better the performance of their educational systems. With this aim, TIMSS collects data on hundreds of contextual variables from nationally representative samples of students,

13.3   Methods for Reporting Background Data

This section describes the specific methods used to report TIMSS 2003 questionnaire data: the direct reporting men   n   rt tind   ta   tngt t

responses were recoded as necessary, with items coded so that high scores were associated with the response category indicating higher levels of the

example is students' *Use of Computer.* Students were asked if they use a computer "at home," "at school," "at a library," "at a friend's house," "at an Internet cafe," or "elsewhere." The reporting categories for this derived variable were "use computer both home and at school," "use computer at home but not at school," "use computer at school but not at home," "use computer only at places other than home and school," and "do not use computer at all."

13.3.2.3 Summary of Derived Variables in the TIMSS 2003 International Reports

The TIMSS 2003 International Reports in mathematics and science each present some 60 exhibits with background information, providing data on some 250 indicators. The mathematics report presents data on 17 derived variables and the science report on 16; each report includes 11 indices. Exhibits 13.1 and 13.2 list the indices computed for the TIMSS 2003 International Reports in mathematics and science, respectively. Exhibit 13.3 lists the other derived variables presented in the mathematics and science reports. The name of the indicators i   so   s   he°   c–   s   he s   cqt 9c-

Exhibit 13.1   **Summary Indices in the TIMSS 2003 International Mathematics Report**

Index	Analysis Method
Exhibit 4.7 Index of Time Students Spend Doing Mathematics Homework (TMH)	Index based on students' reports on the frequency and amount of mathematics homework they are given. High level indicates more than 30 minutes of mathematics homework assigned 3-4 times a week. Low level indicates no more than 30 minutes of mathematics homework no more than twice a week. Medium level includes all other possible combinations of responses.
Exhibit 4.9 Index of Students' Self-Confidence in Learning Mathematics (SCM)	Index based on students' responses to four statements about mathematics: 1) I usually do well in mathematics; 2) Mathematics is more difficult for me than for many of my classmates (Reversed); 3) Mathematics is not one of my strengths (Reversed); 4) I learn things quickly in mathematics. Average is computed across the four items based on a 4-point scale: 1. Agree a lot; 2. Agree a little; 3. Disagree a little; 4. Disagree a lot. Students agreeing a little or a lot on average across the four statements are assigned to the high level. Students disagreeing a little or a lot on average

Whenever possible and relevant, the International Reports included trend data from 1995 (fourth and eighth grades) and 1999 (eighth grade only). Significant differences between the percentages of students having a given trait in each cycle were indicated. In other exhibits, data were displayed separately for boys and girls, and significant differences were also indicated.

In the science report, eighth grade background information was reported separately for the integrated science countries and for the separate science countries. The integrated science countries were reported in a "General/Integrated Science" panel. The separate science countries were reported in four different panels: Biology, Earth Science, Chemistry, and Physics.

The exhibits in the International Reports contained special notations

References

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