International video study of mathematics teaching released

A major international video study in seven countries including Australia has identified no single best method of teaching eighth-grade mathematics in high achieving countries.

Teaching Mathematics in Seven Countries: Results from the Third International Mathematics and Science Study (TIMSS) 1999 Video Study was released in Washington in late March.

The study was conducted by LessonLab Inc., for the US National Centre for Education Statistics (NCES). The Australian component of the study was undertaken by the Australian Council for Educational Research (ACER) with funding from the Commonwealth, states and territories.

The study included 638 randomly selected eighth-grade lessons in Australia, the Czech Republic, Hong Kong SAR, Japan, the Netherlands, Switzerland and the United States. Lessons were videotaped for analysis and comparison across the countries involved to investigate similarities and differences in teaching practices.

ACER's chief executive officer, Professor Geoff Masters, said that the TIMSS Video study will make a valuable contribution to further research into features of teaching that most influence students' learning.
"The more educators and researchers can learn about teaching as it is actually practised, the more effectively educators can identify factors that might enhance student learning opportunities and, by extension, student achievement," Professor Masters said.

The report found that each country shared some general features of eighth-grade mathematics teaching. However, each country combined and emphasised instructional features in various ways, sometimes differently from all the other countries, and sometimes similarly to some countries.

A typical Australian lesson was found to begin with a review of previously learned content (an average of 36 per cent of lesson time), followed by the introduction of new content (30 per cent of lesson time), and the practising of this new content (26 per cent of lesson time).

Professor Masters said that although Australian students rank relatively highly in international achievement studies, the study findings suggest that we might do even better if we strengthened the mathematical content of our lessons and expected more of our students - in particular by setting more challenging problems.

ACER will release a national report focusing on the Australian findings on mathematics teaching later this year. A second international report on the study of science lessons is due to be released in 2004.

Further information on the TIMSS Video study can be found at the NCES Web site and the LessonLab web site.
National Awards for Quality Schooling

ACER is working with the Australian College of Educators, on behalf of the Commonwealth Department of Education, Science and Training, to implement a new initiative to provide recognition to teachers and schools through a national awards system.

The National Awards for Quality Schooling (NAQS) will see one million dollars in prize money awarded to Australian schools, teachers and school leaders for outstanding contributions to schooling. The Commonwealth Government initiative will recognise and support schools and teachers committed to sustainable school improvement.

"The NAQS provides schools with the opportunity to tell the story of their school improvement project and be recognised and regarded at a national level," said Peter Weddell, the NAQS Project Coordinator at the Australian College of Educators.

The award scheme will reward whole schools, teams of teachers, individual teachers and school leaders.

Prizes available include 12 national prizes of $24000 for whole schools and teams of teachers; 26 national prizes of $12000 for individual teachers and school leaders; and 50 minor prizes of $8000 for individual teachers, teams of teachers, school leaders and whole schools.

Applications can come from the pre-primary, primary and secondary levels of schooling in government, Catholic and independent school sectors. For 2003 the Priority Areas for school improvement projects are: Literacy and Numeracy, Safe School Environments, Values Education, School Leadership and Innovation in Science, Mathematics and Technology.

Lawrence Ingvarson and Elizabeth Kleinhenz from ACER have been responsible for developing the judging strategy for the awards. They have developed guidelines for schools to use in describing their school improvement efforts and criteria that indicate how their applications will be scored. ACER will train a team of peer-assessors, with expertise relevant to the priority areas, to use these criteria in selecting a short list of applications.
A second judging panel, also trained by ACER staff, will use the same list of criteria to assess these applications and select a final list of applications that will gain awards.

Lawrence Ingvarson points out that these awards are one way to recognise teachers who are making a difference in terms of student learning outcomes. The process will provide a fair, transparent and rigorous process to determine Award winners.

"There are many excellent teachers around, but too few mechanisms for giving teachers recognition for the value of their work."

All applications for the awards will be judged at a national level and must be submitted by 31 July 2003. Information and application requirements can be accessed via the National Quality Schooling Framework (NQSF)

The awards will be presented by the Commonwealth Minister for Education, Science and Training, the Hon Dr Brendan Nelson MP at a ceremony to be held in Term 4 2003.

For further information phone 1800 131 323 (toll free) or email (JavaScript must be enabled to view this email address).
Improving the Foundations for Lifelong Learning

What can secondary schools do to develop lifelong learning skills?

Research organised around this question has the potential to help transform the rhetoric surrounding lifelong learning into programs and strategies that schools can implement.

ACER conducted research into lifelong learning in 1999-2000 to identify key educational concepts that are argued to provide the foundations for lifelong learning. This work resulted in an 'issues' paper: The Era of Lifelong Learning: Implications for secondary schools.

Following on from that earlier study, ACER has produced a second report Engaging Secondary Students in Lifelong Learning that extends the research in a practical way by providing a set of case studies undertaken in a number of secondary schools in South Australia and Victoria. The report identifies ways that the foundations for lifelong learning can be built in secondary schools.

Download Full Report
ACER Research Conference 2003

ACER's annual research conference will this year focus on the theme of Building Teacher Quality. The conference will take place in Melbourne between 19-21 October. See Research Conference section for more information.
ACER UPDATE

Survey of emotional well-being
ACER is to collaborate with Professor Michael Bernard, Principal Fellow at the University of Melbourne and currently at the College of Education, California State University, to provide schools with surveys that measure students' social emotional well being. It is hoped to have the questionnaires available to schools within the next two months.

Test for the Foreign Affairs and Trade applicants
ACER has won the contract to deliver a cognitive abilities test to graduates seeking employment with the Department of Foreign Affairs and Trade. The test will be administered both in Australia and at Australian embassies around the world.

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