POLICY ISSUES FOR AUSTRALIA’S EDUCATION SYSTEMS:

Evidence from International and Australian Research

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Policy Issues

- How do we compare internationally?
- Do factors such as gender, socioeconomic background and schools make a difference?
- How can we improve achievement levels?
- Do we need to raise participation levels?
Research Evidence: International

- Series of studies conducted by the International Association for the Evaluation of Educational Achievement

- Programme for International Student Assessment (PISA)
Research Evidence: Australian

1978-today  Youth in Transition (YIT)

1984-1997  Australian Longitudinal Survey (ALS)/Australian Youth Survey (AYS)

1995-today  Longitudinal Surveys of Australian Youth (LSAY)
Secondary Students’ Performance: The Evidence

- Australian secondary students’ performance in reading, mathematics and science is high by international standards.

However,

- There is no evidence that the performance of Australian students has improved over the last 30 years.
Secondary Students’ Performance: Policy Implications

- There are strong arguments to further increase students’ achievement levels.

- There is a need to lift the performance of weaker students *without* undermining the performance of other students.
Participation in Year 12: The Evidence

- Year 12 retention rates increased from 35% in 1980 to a peak of 77% in 1992.

However,

- Year 12 participation in Australian remains lower than that in many other countries.
The Case *Against* Increasing Year 12 Participation Rates

- The majority of non-completers leave school for positive reasons such as to get a job or apprenticeship … and most do obtain work.

- Relatively few say they left because they disliked school, or because of curriculum issues.
The Case For Increasing Year 12 Participation Rates

- The labour market outcomes of early school leavers are poorer than those with university qualifications.

- Comparisons between early school leavers and Year 12 graduates without additional qualifications are more equivocal.
The Case *For* Increasing Year 12 Participation Rates continued...

- **Barriers to returning to education exist.**

- **Costs to employers.**

- **Need to assist young people experiencing unsuccessful transitions from school.**
VET-in-Schools: The Evidence

- Substantial growth throughout the 1990s.
- Very little research evidence about benefits of VET-in-schools.
Participation in Higher Education: The Evidence

- Increasing levels of participation.

- Attrition and course withdrawal are of concern.
Should Higher Education Participation Rates Be Increased?

- **Issues for individuals**
  - Unmet demand
  - Labour market outcomes of graduates

- **Labour market issues**
  - Labour market demand for graduates
  - Increased skill requirements

- **Costs**
Post-Secondary Vocational Education and Training

- Participation
- Labour market outcomes
  - Unemployment
  - Income
- Changes in VET programs
- Issues to be debated
Differences in Educational Participation and Outcomes

- Equality of access or opportunity
- Equality of outcomes
- Differences according to …
  - Gender
  - Socioeconomic background
  - Ethnic and indigenous minorities
  - School sector
  - Individual schools
Gender: Educational Participation

- **Year 12**
  - 1970s: males more likely to complete
  - Early 1980s: females slightly more likely to complete (3 percentage points)
  - Late 1980s: females more likely to complete (gap increased to 10 percentage points)

- **Tertiary education**
  - 1970s: males more likely to participate
  - Early 1980s: no gender difference
  - Late 1980s: females more likely to participate (9 percentage points)
Gender: Educational Participation continued…

- **Completion of Tertiary Education**
  - First degrees- female graduation rates higher (58%)
  - Second degrees- female graduations rates slightly higher (52%)
  - Advanced degrees- females graduation rates lower (40%)
  - Overall, females more likely to complete an award course
Gender: Achievement Outcomes

- **Literacy**
  - Average (OECD countries) difference 32 points (1/3 sd) favouring females
  - Australian difference 34 points, favouring females
  - Decline in proportion of males achieving mastery

- **Numeracy and science**
  - 1994 TIMSS- no significant difference
  - 1999 TIMSS- no significant difference
Gender: Achievement Outcomes continued…

- Tertiary entrance scores
  - More females in top percentile bands (NSW, Vic, WA);
  - More males in lower percentile bands (Vic, WA);
  - Females outperform males in most subjects (NSW, Vic, WA);

However,

- Qld found more males in top and bottom bands, with more females in high and middle bands.
Socioeconomic Background

- International evidence: SES is associated with both educational participation and educational outcomes.

- Declining effects in Australia.

- But more can be done.
  
  In some other countries the influence of SES is weaker than in Australia.
Ethnic Minorities

Educational participation:
- often less early school leaving, and
- higher participation rates for Year 12 and higher education.
Ethnic Minorities continued…

- Achievement outcomes:
  - Students with LBOTE tend towards lower mean achievement at primary levels;
  - Minimal difference at middle school levels, but
  - Higher performance at secondary levels and for tertiary entrance.
Indigenous Australians

- Educational participation:
  - retention in middle school and higher secondary levels less than half the rate of non-Indigenous students;
  - only 2% of 20-24 year old Indigenous people hold a university qualification.
Indigenous Australians continued…

- Achievement Outcomes:
  - lower levels in reading literacy, mathematical and scientific literacy (PISA);
  - tertiary entrance scores are, on average, 11 points less than non-Indigenous students.
School Sector

- Shift from government to non-government schools:
  - 1984 - 75% of students enrolled in government schools
  - 2000 - 69% of students enrolled in government schools
  - Shift is greater in the secondary years
School Sector continued…

- Educational Participation:
  - Early 1980s- only 30% in government schools participated in Year 12 (Catholic schools- 44%; Independent schools- 88%);
  - Late 1990s- 71% in government schools participated in Year 12 (Catholic schools- close to Independent; Independent- unchanged).
Achievement Outcomes:

- Performance for Tertiary entrance (ENTER scores) are, on average, higher for students in Independent schools, followed by student in Catholic school and then government schools.
- Differences are reduced (by 20-50%) by controlling for prior differences in achievement (Year 9) and socioeconomic background.
School Effects

- Differences between schools in achievement outcomes are largely the result of differences between schools in the socioeconomic and academic mix of the students.

- Only in a minority of schools (11-17%) does the individual school significantly influence student performance net of other factors.

- Schools that succeed in lifting student performance above that expected given the social and academic intake, are labelled effective schools.
Characteristics of *Effective Schools*

- Strong educational leadership;
- Emphasis on acquisition of basic skills;
- Orderly and secure environment;
- High expectations of student achievement
  - Students
  - Parents
  - Teachers
- Frequent assessment of student progress
- Academic climate important for tertiary entrance performance
Concluding Comments

- How do we compare internationally?

- Do gender, socioeconomic background and schools make a difference?

- How can we improve achievement levels?

- Do we need to raise participation levels?