AUSTRALIAN CAPITAL TERRITORY

COMMENTS ON THE SCHOOLS EDUCATION POST-COMPULSORY ENROLMENTS CONSULTANCY FOR THE 2010 REVIEW

April 2009

ACT COMMENTS ON THE POST-COMPULSORY SCHOOLS EDUCATION CONSULTANT'S REPORT

Background

The Commonwealth Grants Commission (Commission) has welcomed States' comments on the consultant's report *'Modelling of post-compulsory enrolments'*.

The ACT would like to take the opportunity to comment on the report given that the treatment of post-compulsory enrolments was a major issue for the Territory in the 2004 Review, and remains a major issue for the 2010 Review.

Introduction

The ACT welcomes the initial report and considers that Professor Stephen Lamb is eminently qualified to provide expert advice to the Commission on the extent to which policy and non-policy impacts drive differences in States' post-compulsory participation rates for schools education.

The consultant has provided a range of expert advice, and various qualitative work and quantitative modelling techniques have been undertaken to determine the factors driving differences in State post-compulsory participation.

It is noted that the Commission has requested Professor Lamb to undertake further work on the extent to which policy and non-policy influences impact on individual States' post-compulsory participation - in order to calculate assessed enrolments. The ACT will review this work when provided to the States.

In the meantime, the ACT broadly supports the initial findings of the consultancy report which recommends an increase in the non-policy influences driving State differences in post-compulsory participation rates for Australia as a whole, from around 70% in the 2004 Review to 80% in the 2010 Review.

Also pleasing is that the report suggests that the variance in school participation rates due to non-policy influences account for nearly all of the effect for the ACT. This generally accords with the ACT's view, demonstrated via research in the 1999, 2004 and 2010 Reviews, that its above average post-compulsory participation is fully explained by non-policy influences.

Non-policy variables

While the non-policy variables included in the model are generally supported, it is not clear why the decision was made to exclude the non-policy variable 'school sector' (proportion of students in the non-government sector) from the model.

Evidence from a range of education researchers indicates that the higher the proportion of students in non-government schools, all else being equal, the higher the post-compulsory participation. The 'school sector' variable has been found to be significant in all of the models examined.

For example, in the recent report conducted for the Queensland Department of Education and the Arts: *Staying on at school: Improving student retention in*

Australia [1], it was stated in regard to the regression analysis undertaken to explain differences in States' retention rates that the school sector was one of the four key influences affecting differences in State retention – the others being socio-economic status (SES), remoteness and Indigenous population. [2]

The report also noted that:

> *"….school-effects studies support the view that school sector exerts an influence on retention and post-compulsory participation beyond the effects of intake differences. The effects are far less pronounced on achievement and learning progress, but substantial in terms of participation and retention. Given the differences across states in sector enrolment shares, it is important to include sector in the modelling of student retention."* [3]

The ACER research titled *Participation in Education and Training 1980-1994* investigated the impact of a range of variables such as students' gender, parents' occupation and education, family wealth, urban/rural background on patterns of educational participation over time. It highlights the positive effect that enrolling in non-government schools has on participation:

> 96% of students in an Independent school completed year 12 compared to 83% for those students in a Catholic school and 74% for those in a government school. [4]

Attachment A provides some other examples that 'school sector' has on post-compulsory participation.

Importantly too, the proportion of students enrolled in the non-government sector for primary and secondary is disproportionately spread across the States - from a low of 24.4% for the NT to a high of 41.7% in the ACT as shown in the following table.

FULLTIME ENROLMENTS, BY SCHOOL SECTOR, BY STATE, 2007

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Govt	737637	535883	478883	229611	163904	58926	34617	28916	2268377
Non-govt	371566	297970	219020	114977	87545	22933	24780	9355	1148146
% non-govt	33.5%	35.7%	31.4%	33.4%	34.8%	28.0%	41.7%	24.4%	**33.6%**

Source: Derived from 4221.0 - ABS Schools Australia 2007, Table 6.

This variation can be expected to be exacerbated between the States as students age given that non-government enrolments are disproportionately higher in secondary schools and higher again in upper secondary school.

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[1] *Staying on at school: Improving student retention in Australia by Stephen Lamb, The University of Melbourne Anne Walstab, The University of Melbourne Richard Teese, The University of Melbourne Margaret Vickers, University of Western Sydney, Russ Rumberger, University of California, Santa Barbara, Centre for Post-compulsory Education and Lifelong Learning, The University of Melbourne, August 2004.*

[2] Ibid, page 121.

[3] Ibid, page 113.

[4] Participation in Education and Training 1980-1994, Australian Council for Educational Research, Michael Long, Peter Carpenter, Martin Hayden, September 1999, Table 13, page 103.

While including the non-policy variable 'school sector' in the model may present endogeneity and/or multicollinearity issues, other researchers have effectively addressed these matters in their model specifications. Such issues are present in the consultancy and have been addressed by Professor Lamb to date.

It is noted that non-policy factors which purportedly lead to higher year 12 completion rates in non-government secondary schools include religious affiliation, the location of non-government schools and parents wanting to see a return for their fees. [5] These variables are not included in the model. On the other hand, personal and family background (including SES) also drives non-government enrolments and this variable is already included in the model via the SEIFA index.

Despite this, however, there are grounds for including 'school sector' as students in non-government schools exert an influence on post-compulsory participation, even after controlling for variables such as SES. For example, according to the *Participation in Education and Training 1980-1994* study:

> *"Even so, the observed differences in Year 12 completion rates among the three types of schools were still relatively large in 1994. Much of this difference, however, is due to differences in personal and family background and to levels of school achievement and post-school expectations. After removing these influences, however, there was still an identifiable effect of the type of school attended in the early years of secondary school on the likelihood of completion of Year 12."* [6]

The ACT considers there are grounds for including 'school sector' as a non-policy variable within the model for the reasons outlined.

Policy variables

In terms of policy influences, it is considered that Professor Lamb is correct to decrease the extent of policy influences to at least 20% as the methods employed in the modelling produce estimates at the 'upper limit' for policy effects.

However, the ACT considers that a 20% figure still overstates the impact of policy influences given that:

- the 'school sector' has not been included as a non-policy variable in the model;
- the 20% contains some other unmeasured non-policy influences (such as those linked to population); and
- age-grade differences, which appear to be the largest component of policy influences in the model, will converge over the next few years as all States with the exception of the NT move to, or have already, adopted 'earning or learning' leaving age legislation with most students now required by legislation to stay at school until 17 (the ACT's schools education submission to Position Paper

[5] For example, see Participation in Education and Training 1980-1994, Australian Council for Educational Research, Michael Long, Peter Carpenter, Martin Hayden, September 1999, page 102.
[6] Participation in Education and Training 1980-1994, Australian Council for Educational Research, Michael Long, Peter Carpenter, Martin Hayden, September 1999, pages 109-110.

2008/16 contains a detailed outline and comparison of leaving ages across the States).

Once these impacts are adjusted for, the expectation is that the 80% non-policy figure will increase.

Way Forward – application of model outcomes

For the 2010 Review, the Commission intends to use the actual split of government and non-government school students to determine relative State funding needs, given that the proportion of students in each sector, and relative funding of students, varies significantly between States.

In this context, the ACT requests that the model be re-run to include the impact of 'school sector', with the resultant higher non-policy influenced component (which might be say around 90%) being applied to derive assessed post-compulsory government and non-government enrolments (noting that it appears the Commission is proposing to assess post-compulsory enrolments on an individual State basis rather than on an Australian average basis).

Additionally, the Commission needs to be cognisant of the fact that leaving age legislation will compress age-grade differences over time. Thus the policy / non-policy split used to derive assessed post-compulsory students in the 2010 Review should not be locked-in. It is suggested that Professor Lamb be engaged to re-run the model using updated 2011 Census data which could be applied to the 2012 Update.

Alternatively, if the Commission intends to maintain the policy / non-policy split as a constant for future Updates, allowance should be made now to accommodate the compression of policy differences since 2006.

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ATTACHMENT A

OTHER EXAMPLES OF THE IMPACT THAT THE 'SCHOOL SECTOR' HAS ON POST-COMPULSORY PARTICIPATION.

1. School Non-completers: Profiles and Initial Destinations, Australian Council for Educational Research (LSAY Research Report No 54)

An examination of the characteristics of non-school completers in this 2008 ACER LSAY report also demonstrates that those attending non-government schools had higher participation rates than those in government schools:

> *"Throughout the period under consideration, school non-completion was substantially more common among those who attended government schools during their middle schooling than among those who attended Catholic or independent schools. Conversely, school non-completion was least common among those who attended independent schools, except for a brief period in the late 1990s when non-completion rates in the independent and Catholic sectors converged.*
>
> *In the early 1980s, 67 per cent of male Year 10 students attending government schools did not stay on to complete Year 12, compared with only 21 per cent of males in independent schools, a gap of 46 percentage points. This gap narrowed to 19 percentage points by the late 1990s and then remained relatively stable into the early 2000s."* [7]

2. Patterns of Participation in Year 12, Australian Council for Educational Research (LSAY Research Report No 33)

This ACER LSAY report demonstrates that those attending non-government schools have relatively higher participation rates. The study looked at the effect of various influences on year 12 participation over the period 1980-2001. Participation in year 12 for Catholic and independent schools, relative to government schools, were generally significant to highly significant, as shown in the following table.

Table 3 Logistic regression coefficients for effects on Year 12 participation, 1980-2001

Cohort	Born in 1961	Born in 1965	Born in 1970	Born in 1975	Year 9 in 1995	Year 9 in 1998
Year Participation Measured	*1980*	*1984*	*1989*	*1994*	*1998*	*2001*
Intercept	-1.25***	-1.59***	-0.46**	0.48***	0.74***	0.85***
School sector (relative to government)						
Independent	2.20***	1.98***	1.88***	0.98***	0.45***	0.35***
Catholic	0.46***	0.47***	0.35*	0.21	0.62***	0.33**

*Note: Unstandardised logistic regression coefficients. * p < 0.01, ** p <0 .05, *** p < 0.001*

The report noted that: "School sector is confirmed in the multivariate analysis as having a significant influence on participating in Year 12." [8]

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[7] School Non-completers: Profiles and Initial Destinations, Australian Council for Educational Research (LSAY Research Report No 54), October 2008, David D. Curtis, Julie McMillan, pages 23-24.

[8] Patterns of Participation in Year 12, Australian Council for Educational Research (LSAY Research Report No 33), July 2003, Susan Fullarton, Maurice Walker, John Ainley, Kylie Hillman, page 22.