# Primary school principals and the purposes of education in Australia

Results of a national survey

Neil Cranston and Bill Mulford
Faculty of Education, University of Tasmania, Hobart, Australia
Jack Keating
University of Melbourne, Melbourne, Australia, and
Alan Reid

University of South Australia, Mawson Lakes, Australia

Purposes of education in Australia

517

Received December 2009 Revised February 2010 Accepted March 2010

#### **Abstract**

**Purpose** – The purpose of this paper is to report the results of a national survey of government primary school principals in Australia, investigating the purposes of education, in terms of the importance and level of enactment of those purposes in schools.

**Design/methodology/approach** – In 2009, an electronic survey was distributed to government primary school principals in Australia seeking their views on the purposes of education. The survey comprised 71 items of a closed format and three items of an open-ended format. Respondents rated first the importance they ascribed to particular purposes of education, then second the degree to which they believed these purposes were actually enacted in their particular school. Factor analyses were conducted on the item responses. Differences between importance and enactment of purposes are discussed together with reasons for these differences.

**Findings** – The findings overwhelmingly point to tensions between what they, the principals, believe ought to be the purposes of education and what the strategies to achieve those purposes might be, and the realities of what is actually happening. It could be argued that the results indicate a major shift away from public purposes of education to those more aligned with private purposes. Many of the barriers to achieving a greater focus in schools on public purposes are seen to be related to external (to the school) issues, such as government policy decisions, differential funding and resourcing across school sectors and emerging community and societal factors.

Research limitations/implications – This research complements other aspects of this project into the purposes of education in Australia. There are some limitations to the reported findings in so far as only government principals participated in the survey. Non-government school principals were invited but declined to participate.

**Originality/value** – This is the only piece of research of its kind in Australia and provides unique insights – those of principals – into what schools are focusing on and what the leaders think they ought to be focusing on. There are clearly policy and practice implications of the research.

**Keywords** Australia, Primary education, Principals, Educational policy

Paper type Research paper

The survey reported on this paper was part of a three-year Australian Research Council-Linkage project conducted with partners, the AGPPA and the Education Foundation.



Journal of Educational Administration Vol. 48 No. 4, 2010 pp. 517-539 © Emerald Group Publishing Limited 0957-8234 DOI 10.1108/09578231011054743



518

## Introduction and background

Historically, Australian schools have been seen as central to nation building. That is, as well as enhancing the life chances of individuals, schooling has had a number of public purposes that advance the interests of the society as a whole. However, in response to a variety of national and international forces (Mulford *et al.*, n.d.) in the early part of the twenty-first century, understanding around what is meant by public purposes has become less clear. Indeed, while there continues to be considerable investment of public funds in Australian schools, there are questions as to whether and how schools today are serving public purposes. This paper reports on the results of a national survey of a project funded under the Australian Research Council Linkage scheme looking into such questions[1].

The focus of this paper is on the first wave of results from a national survey of primary school principals in Australia[2]. The paper will provide a discussion of some of the key findings from the survey and raise some implications and possible recommendations flowing from these.

## Why an interest in the purposes of education?

A fundamental assumption underpinning this research is that because there is a considerable investment of public funds in schools in Australia, then it is to be expected that these institutions should be serving a number public purposes. Key questions that arise from this assumption, then are: how are these public purposes defined and understood, and how are they enacted in schools? The answers to such questions are not all that straightforward, because as we have pointed out earlier:

[...] (w)hilst it might seem obvious that schools should serve public purposes, such purposes are usually assumed rather than clearly articulated, and they seldom receive research attention or form the focus of public debate (Reid *et al.*, 2007b, p. 25).

Barber (2004) among others saw education as being inherently a public institution because of both its historical foundation and long-standing focus on citizenship, democracy and community building. Importantly, however, in the latter part of the twentieth century, under a range of political, social and technological influences, these purposes became disrupted and blurred. Indeed, Goodlad (1997) saw some of these influences as a raising tension between the notion that the public and democratic purposes of education are grounded in a positive agenda, while some current fear-based agendas contend that education is in crisis with solutions lying in responses such as high-stake testing.

Not long ago, Power (2005, p. 5) noted that education was "the engine for development" going on to explain that the focus of education as he saw it reflected the four pillars earlier identified by the Delors Report (UNESCO, 1996) as being about learning to know, learning to do, learning to live together and learning to be. At about the same time, an Australian report (Department of Education, Science and Training Curriculum Corporation, 2003) argued that "(e)ducation is as much about building character as it is about equipping students with specific skills" (p. 12). These articulations gives scope to a much wider notion of the purposes and direction of education than has been the case in recent years, where schooling has been equated to national economic prosperity and national curriculum and testing agendas seem to be concerned almost exclusively with what might be termed "the basics".

At an international level, a recent OECD (2007) report on social outcomes of leaning painted a much broader canvas of purposes of education, and identified that a general level of education was important in helping people to achieve good health and to become active citizens (p. 3). Indeed, the report argued that "(e)ducation affects peoples' lives in ways that go far beyond what can be measured by labour market earnings and economic growth" (p. 9). Significantly, consistent with the essence of the research reported here, the report asked the question, "How far is the goal of active citizenship recognised and implemented in educational practice?" (p. 9). That is, what do we know about the enactment of one of the fundamental public purposes of schooling?

In Australia, across recent years, there have been a number of well-publicised statements about schooling and education and their purposes. For example, the decade old *Adelaide Declaration on National Goals for Schooling in the 21st Century* (MCEETYA, 1999) which set out the goals of education and key areas for learning has more recently been revised in a sense by way of the 2008 *Melbourne Declaration* (MCEETYA, 2008) which suggested that the purposes of schooling should be seen more broadly and ought give attention on what are clearly public purposes of education.

At a state level, some state governments have attempted to articulate a broader inclusive set of goals or purposes of education. In Queensland, for example, the *What State School Value* statement (Department of Education, Training and the Arts, 2008) set out expectations of state schools to provide:

Opportunities to develop as creative, informed and healthy citizens with the skills to build positive human relationships and to accept a shared responsibility for developing the wellbeing of self, others and the larger living world.

Despite what might be seen as these positive trends towards a broader and inclusive view of the purposes of education, many critics have seen that under the influence of market ideology, "new right" politics and a more acute focus on links between education and a country's economic well-being, the notion of public purposes of education have been eroded (Ainley, 2004; Ball, 1994). Within the Catholic schooling sector, Grace (2001) has argued that such schools have a different ideology than the "new right" and that education is not a commodity to be offered for sale: that is, public purposes are evident – or should be evident – in these faith-based schools.

While our discussion this far has been on public purposes, it is clear that as Levin (1999) has argued, education inherently serves both public and private interests:

It addresses public interest by preparing the young to assume adult roles that promote civic responsibility, embrace a common set of economic and political values, and share a common language. Education serves private interest in promoting individual development, understanding, and productivity that contribute to adult productivity and well being (p. 124).

Drawing on the ideas of Labaree (1997), our earlier work developed these notions of public and private purposes and set out the conceptual and theoretical framework for the research (Reid *et al.*, 2007a, 2008). This framework considers purposes such as democratic equality, social efficiency and social mobility, which, in turn, shape the modalities of schooling involving the curriculum, students, parents and community, staff, school processes and the organisation of schooling. The three purposes are defined as follows:



520

- (1) *Democratic equality* which is about a society preparing all its young people to be active and competent citizens. Since we depend on the collective judgment of the whole citizenry then an education based on the goal of democratic equality is clearly a public good and also involves notions of equity and social justice.
- (2) Social efficiency which is about preparing young people to be competent and productive workers. To the extent that we all benefit from an economy that is working well, then an education based on the goal of social efficiency is a public good. But it is a public good that also has a strong private purpose since it results in economic rewards for individuals.
- (3) Social mobility which is about providing individuals with a credential which will advantage them in the competition for desirable social positions. This goal constructs education as a commodity which can be traded in, say, the labour market. As such, an education based on a goal of social mobility is a private good which serves mainly private purposes.

It is clear then that some purposes are neither exclusively public nor others are exclusively private. We accept that is the nature of the issues we are researching. However, there are some purposes that are more clearly public or private and Labaree's notions provide a sound basis on which to structure our survey, and focus the analyses of the survey data.

This next section of the paper provides details of its development, structure, distribution and return rate of the national survey across primary schools in Australia.

## The national survey

Survey development

Because our in-depth case studies were undertaken in a limited number of best-practice schools across the country, one of the main underlying purposes of the survey was to give every school, via the principal, an opportunity to contribute to the research.

The survey was developed from the earlier conceptual, analytical and case study work outlined above undertaken in 2007 and 2008. A battery of items, illustrative of the three purposes of education and different modalities of schooling as identified in Labaree's (1997) work was generated related to the two notions of:

- (1) the level of importance of particular purposes of education; and
- (2) the level or extent of (actual) enactment of those purposes in practice.

These items were reviewed and refined as described below. The survey was designed such that principals rated these two notions on a five-point scale of importance from "very low" to "very high".

The draft items were reviewed and refined by the research team on a number of occasions before wider critique was provided by groups of principals. For example, in Queensland, the two principals involved in the in-depth case studies were provided with a copy of the draft survey and invited to complete it and then provide comments, while in Tasmania, a workshop of interested principals (including the case study principal and president of the state primary principals' association) was convened in a workshop to review the instrument. Through such processes, feedback was obtained on the logic and clarity of each item, on the instrument generally in terms of clarity of instructions and

Purposes of education in Australia

521

## Survey description

The final version of the 2009 survey comprised 71 items of a closed format and three items of an open-ended format. The first eight of the closed items addressed bio-demographic information, such as school size, gender of principal. The remaining closed items (nine to 71) required participants to rate first the importance they ascribed to particular purposes of education, then second to rate the degree to which they believed these purposes were actually enacted in their particular school. This set of closed items was clustered into a number of subsections, including items related to purposes of schooling and strategies to achieve purposes of schooling – the latter set of items was framed around issues such as the school curriculum, parents and community, staff organisational issues related to schools. The (optional) open-ended items allowed respondents to expand on a range of matters, including comments regarding any particular facilitators and barriers they saw for schools in achieving particular purposes.

It was anticipated the survey would take about 20 minutes to complete on-line (see below).

## *Survey distribution and return rate*[3]

The national survey was distributed in electronic format via membership databases provided by the Australian Government Primary Principals' Association (AGPPA) and its affiliated state and territory bodies. It was anticipated that the use of state and territory membership databases would maximise the return rate as it demonstrated to individual principals that their professional association was supportive of the administration of the survey and allowed individual states to undertake "local" strategies to urge members to complete the instrument. In some states, the presidents of the respective associations wrote directly to members encouraging them to complete the survey. It was also advertised in some state member publications. A commercial company with expertise in conducting large-scale electronic surveys was employed to manage and coordinate survey distribution and return under the guidance of one of the research team members.

In all, 1,071 completed surveys were received, representing an approximate 25 percent response rate. Some of the factors considered to mitigate against a higher rate included inaccurate e-mail address lists, slow download speeds in some remote areas and the fact that many principals were engaged in other priority activities at the time, such as completing national infrastructure applications. Table I summarises response rates by state/territory.

A majority of respondents provided comments via the open-ended written final three items. These were categorised under a number of broad headings. Many respondents provided more than one statement. Some of these comments are drawn upon in the discussion below to illustrate particular points.

#### Survey responses

Discussions of the survey responses are now presented in a number of separate sections. These include:



State/ territory	Supplied e-mail address lists (n) <sup>a</sup>	Corrected address list (n) <sup>b</sup>	Useable responses (n)	Response rate (%) <sup>c</sup>
ACT	116	107	13	12
NSW	1,877	1,736	377	22
NT	73	68	17	25
QLD	784	725	188	26
SA	388	359	69	19
TAS	182	168	57	34
VIC	763	706	197	28
WA	471	436	153	35
Total	4,654	4,305	1,071	25

**Table I.** Response rates for survey

**Notes:** <sup>a</sup>Supplied by each state/territory primary principals' association; <sup>b</sup>detailed analysis of one state (Tasmania) found a 7.5 per cent error rate in the supplied e-mail address list (as a result of principal reassignment, leave, retirement and resignation) and this has been applied to all states/territories; <sup>c</sup>as a percentage of the corrected address list; percentages are rounded

- (1) summary of respondent demographic characteristics;
- (2) individual item analysis (comparisons) noting the highest and lowest scoring items (by mean scores) direct quotes of principals are used to illustrate key points identified;
- (3) factor analysis of item responses with the identification of factors (cluster or grouping of items) for:
  - · purposes of education; and
  - strategies to achieve purposes.
- (4) comparisons of factors, with respect to the importance of the factor vs the actual enactment of the factor in practice, as reported by principals – purposes of schooling;
- (5) comparisons of factors, with respect to the importance of the factor vs the actual enactment of the factor in practice, as reported by principals strategies to achieve purposes of schooling; and
- (6) summary of categorised open-ended comment from principals with frequency of responses indicated.

It should be noted that these represent a first set of analyses of the data, with further analyses underway. These will be reported at a later time.

## Demographic responses

Male and female primary school principals were equally represented across the respondents, nationally, although males were more highly represented in Queensland, and Western Australia and females in South Australia, Victoria and the Territories. Schools were predominantly primary (90 per cent), with a small number combined primary and secondary (6 per cent). Respondents were drawn from schools of a variety of sizes, ranging from those with 50 or less students to some of 750 or more. Respondents from the larger states (e.g. New South Wales, Victoria, Queensland) tended to draw from



The vast majority of principals (88 per cent) were aged 41 years or older (65 per cent were aged 51+) with almost half (44 per cent) having 11 or more years experience as a principal. Over half had been in their current school for more than four years.

Purposes of education in Australia

523

*Item analysis – individual items* 

(a) Item comparisons – highest, lowest mean scores. Table II contrasts the highest and lowest ratings of items (based on mean scores) for the importance of purposes and strategies to achieve the purposes as seen by principals.

The highest scoring items for both purposes and strategies seem clearly aligned with what we would describe as public purposes, or in Labaree's terms, democratic equality notions. In this regard, one principal noted:

Our schools promote equity, social cohesion and reconciliation, and continue to be a core institutional component of our democratic society.

By contrast, the cluster of lowest scoring items are aligned more closely with private purposes, or in Labaree's terms, social efficiency and social mobility. For example, one respondent was critical of:

A narrow focus on only academic learning and tests instead of on quality teaching and learning and relationships [...] A failure to recognise the importance of the social/emotional, i.e. relationships and trust building.

That is, this group of primary principals are clear that (democratic equality) public purposes ought be at the top of the agenda in determining what primary schools should be aiming towards and that (social mobility, social efficiency) private purposes should have much less focus. However, as the following response indicates, they were

	Highest scoring	Lowest scoring
Importance of purposes	Help students develop a love for learning Help students develop capacities to become active and responsible members of a democratic society	Start the process of sorting and selecting students into categories that help determine their life opportunities Strengthen Australia's economy
Importance of strategies to achieve purposes	Encourage students to accept responsibility for their own actions Encourage respect and cooperation among students Value and foster the professionalism of teachers Promote trust amongst students, staff and parents Make students the focus of what happens in schools	Mandate league tables based upon tes outcomes Mandate national testing programs Ensure that assessment and reporting approaches are used to sort students Make schools accountable for social outcomes Be focused on success in national literacy and numeracy tests

**Notes:** Level of importance of purposes and level of importance of strategies to achieve purposes; <sup>a</sup>each item was rated on a five-point scale – very high level of importance to very low level of importance

Table II.
Highest and lowest
scoring items
(mean scores)



524

not so confident that the purposes as they saw them were necessarily those shared by policy makers:

NAPLAN. We are told that our primary purpose is to get kids through this test! Sadly, this is where the real focus of schools is heading.

Table III contrasts the highest and lowest scoring items (based on mean scores) with respect to the enactment of the purposes and strategies to achieve the purposes as reported by the principals in their schools.

In terms of the actual enactment of purposes and strategies in their schools, principals, consistent with the results noted above, again identified what can be clustered as public purposes (democratic equality) to be the more important than those items related to mainly private purposes (social mobility, social efficiency). One principal noted the very negative impact of current national testing priorities on schools, the impact resulting very much from an emphasis on private purposes:

Schooling is being distorted by a national testing agenda – the curriculum is narrowed, opportunities for students to actively participate in curriculum decisions are narrowed [...] disadvantaged students and communities are funded so inadequately that these students have limited opportunities for success.

In one sense, principals are clear on what they would like to be doing and what they think they ought be doing, viz. public purposes, but in reality, circumstances are such that private purposes are dominant.

(b) Item comparison – purposes of schooling vs enactment of purposes. The mean scores are statistically significantly (employing two-tailed *t*-test related) higher for the level of importance of purposes compared with the level of enactment of those purposes on all but seven of the 63 items. On six items enactment is statistically significantly higher than importance and on one item there is no statistically significant difference

	Highest scoring	Lowest scoring
Enactment of purposes	Promote social cohesion Help students develop capacities to become active and responsible members of democratic	Start the process of sorting and selecting students into categories that help determine their later life opportunities
Enactment of strategies to achieve purposes	Australian society Encourage respect and cooperation among students Encourage students to accept responsibility for their own actions Involve staff in decision making and leadership Make students the focus of what happens in schools Value and foster the professionalism of teachers	Strengthen Australia's economy Mandate league tables based upon test outcomes Encourage parental involvement in delivering the curriculum Encourage parental involvement in negotiating the curriculum Allow for school autonomy from system/employer Ensure that assessment and reporting approaches are used to sort students

Table III.
Highest and lowest scoring items
(mean scores)

**Notes:** Level of enactment of purposes and level of enactment of strategies to achieve purposes; each item was rated on a five-point scale – very high level of enactment to very low level of enactment



(viz. start the process of sorting and selecting students into categories that help to determine later life opportunities).

Tables IV and V summarise the highest and lowest statistically significantly different items with regard to purposes and strategies to achieve those purposes with regard to their level of importance and their level of enactment – importance higher than enactment.

Principals report the highest difference between what they see as the purposes of schooling and the level at which they believe their school enacts those purposes as relating to helping students develop a love of learning and contributing to a sustainable society, both clearly public purposes. On the other hand, they feel they are contributing to their local communities (again a public purpose) while also contributing more generally to the economy of Australia (in Labaree's terms, economic efficiency) which may contribute to both public and private purposes.

That an item regarding helping students develop a love of learning is reported with such differences should cause some alarm.

All five items where there is the greatest difference between level of importance and level of enactment with regard to strategies to achieve the purposes of education are related to public purposes. Some of these are matters external to the school (e.g. funding) while others are matters perhaps more relevant at the local school level (e.g. collaboration and parental involvement). However, some of the principals'

Purposes – importance vs enactment

Help students develop a love of learning Contribute to an environmentally sustainable society

Lowest differences

Provide a resource for the local community
Strengthen Australia's economy

**Note:** Differences with respect to level of importance of purposes and level of enactment of those purposes

Table IV.
Comparisons of items
(mean scores)

	Highest differences	Lowest differences
Strategies to achieve purposes – importance vs enactment	Fund schools on a needs basis Ensure school involvement in developing education policy	Give priority to academic learning in schools Give parents the right to choose a
	Support schools to collaborate with each other Promote collaboration rather than competition amongst	school for their children Have enrolment policies and practices that result in a diverse mix of students Employ democratic decision making
	schools Encourage parent	Have goals and priorities that primarily reflect the interests of

**Note:** Differences with respect to level of importance of strategies to achieve purposes and level of enactment of those strategies

society as a whole

involvement in delivering

the curriculum

Purposes of education in Australia

525

Table V.
Comparisons of items
(mean scores)



526

open-ended comments suggest that collaboration between schools is now being moderated by broader societal values:

Lack of agreed collaboration between community members and school staff, competitiveness between community groups and their schools, single-mindedness of schools, parental and community groups (not my kid's school, not my business) fostering an unwillingness to share.

The open-ended comments provided by principals on the survey provide some useful elaborations on these findings from the first sections of the analysis. Overall, there are two very powerful messages that emerge from the item responses and these comments. The first is that there is insufficient attention to, and funding for students with socioeconomic disadvantage and/or learning needs. The government schooling sector in particular is seen to be carrying significant responsibilities regarding these students without adequate or equitable funding. Principals' comments illustrate where they see funding priorities ought to be:

Funding schools on a basis of need should ensure that all schools receive adequate funding to meet the needs of their students and those with additional needs and challenges receive additional funding accordingly.

Inadequate funding of differential support for students with special educational, social, emotional or welfare needs. Schools that cater for "more difficult to educate" students need to be recognised and funded to continue this work.

The second message seen to underpin these findings is linked to the current focus on national testing:

League tables and comparisons  $[\ldots]$  that (do) not take into account the clientele of a school will create angst, division, disparity between schools  $[\ldots]$  and, ultimately destroy the morale of the teaching service.

Table VI summarises the highest significantly different items with regard to purposes and strategies with regard to their level of importance and their level of enactment – enactment higher than importance.

It is clear here that principals see assessment, testing and accountability agendas as taking on a higher prominence than they, the principals think should be the case. This is reflected in some of the comments made by principals already noted above. Apart from the item "make schools accountable for social outcomes", there is no sense of public purpose in the other items. Even for the "social outcomes" item, several of open-ended

	Highest differences
Purposes and strategies – enactment vs importance	Mandate national testing programs  Mandate league tables based on test outcomes Be focussed upon success in the national literacy and numeracy results Make schools accountable for social outcomes Make schools accountable for academic outcomes Ensure that assessment and reporting approaches are used to sort students

**Table VI.**Comparisons of items (mean scores)

Note: Differences with respect to level of enactment and level of importance of purposes and strategies



Purposes

of education

in Australia

comments suggest that this is more about principals feeling their schools are being required to "pick up" responsibilities for the social, emotional development of young people more than they might like and in areas that might otherwise have been the remit of someone else, e.g. parents. In terms of schooling sectors, many suggest that government schools are carrying the dominant load in this regard in comparison with non-government schools. The following comments illustrate these points:

Overwhelming expectations on schools – seen as the social clearing house for every issue of society.

Society keeps "dumping" problems into schools for them to solve or teach, e.g. sex education, bike education, non-sexist education, healthy eating [...]

Government schools carry too large a percentage of students from poorer backgrounds, with learning and social issues and disabilities compared with the private system [...]

The next section discusses a series of factor analyses undertaken on the survey data with the intentions to reduce the large data sets to a more manageable size and assist in the search for key trends.

## Data reduction: factor analysis

In order to "produce a manageable number of factor variables to deal with" (Gay et al., 2006, p. 2004) rather than the larger number of survey items, factor analysis of the survey responses was undertaken using Statistical Package for the Social Sciences Statistics Version 17. The factor analyses of the survey responses employed the principal component analysis extraction with varimax rotation (Tabachnick and Fidell, 2001). Eigenvalues greater than one were used to get a sense of how many factors and items were deleted, especially for the strategy factors, where they did not load highly and/or clearly on one factor.

The results of the factor analysis are considered first in terms of the items related to the purposes of schooling, then to the items related to the strategies to achieve those purposes.

(a) Purposes of education. Four clusters or groupings of items (factors) were found to account for 60 per cent of the variance (Table VII). These were assigned labels (variables) as follows:

- (1) student love of learning and responsible citizens for democracy and common good (33 per cent);
- (2) community development and resource (11 per cent);
- (3) social justice (8 per cent); and
- (4) sorting for employment and the economy (8 per cent).

Factors 1-3 are considered public purposes, while Factor 4 is considered a private purpose.

It is clear that the respondents to this survey gave a priority to public purposes over private purpose – over 50 percent of the variance is accounted for in the three identified public purpose factors. Even item 10, Help students develop basic knowledge and skills for employment, might be considered to have some public purpose orientations in so far as assisting students move successfully into later carer choices. In Labaree's terms, this is about social efficiency which can serve both public and private purposes.



JEA 48,4	Item no.	Item	Factor weightings <sup>a</sup>
	1. Student l	ove of learning and responsible citizens for democracy and common good	
	(public purp	ose) – 33%	
	9	Help students develop a love for learning	0.677
528	13	Help students develop capacities to become active and responsible	
	_	members of Australian democratic society	0.677
	11	Help students learn to value diversity	0.656
	15	Reflect and sustain democratic values of society	0.649
	14	Contribute to an environmentally sustainable society	0.642
	12	Promote social cohesion	0.574
	2. Commun	ity development and resource (public purpose) – 11%	
	17	Assist in the development of their local communities	0.857
	16	Provide a resource for the local community	0.846
	3. Social jus	tice (Public Purpose) – 8%	
	19	Compensate for disadvantage among students	0.838
	20	Lay the foundations for a more socially just society	0.729
	4. Sorting fo	or employment and the economy (public purpose) – 8%	
	18	Start the process of sorting and selecting students into categories that	
		help determine their later life opportunities	0.713
/D 11 X/II	10	Help students develop basic knowledge and skills for employment	0.657
Table VII.	21	Strengthen Australia's economy	0.650
Factors – how are the purposes understood?	Note: <sup>a</sup> A to	tal of 60 per cent of variance accounted	

This situation, not surprisingly, is consistent with the discussions above and in many ways runs counter to the prevailing priorities currently in evidence in schools and education across Australia today.

- (b) Strategies to achieve purposes. Six clusters or groupings of items (factors) were found to account for 52 per cent of the variance (Table VIII). These were assigned labels (variables) as follows:
  - (1) foster professional and student trust and collaboration (24 per cent);
  - (2) value and resource difference and disadvantage (8 per cent);
  - (3) community resource, development and involvement (6 per cent);
  - (4) emphasise diversity within and between schools (5 per cent);
  - (5) student involvement in curriculum (4 per cent); and
  - (6) national "basics" tests to sort students and schools (5 per cent).

Factors 1-5 are considered public purposes, while Factor 6 is considered a private purpose.

Again, public purposes dominate, with the five public purpose factors accounting for most of the variance. The sixth purposes factor, National "basics" tests to sort students and schools, accounts for only 5 per cent of the variance.

It is important to note that while Labaree's (1997) framework of democratic equality, social efficiency and social mobility is basically confirmed by our factor analysis the modalities of schooling involving the curriculum, students, parents and community,



Item no.	Focus <sup>a</sup>	Item wording	Factor weightings <sup>b</sup>	Purposes of education
1. Foster	profession	val and student trust and collaboration – 24% of variance (public pa	urbose)	in Australia
51	ŚT	Involve staff in decision making and leadership	0.674	
50	ST	Value and foster the professionalism of teachers	0.668	
48	ST	Promote trust amongst students, staff and parents	0.639	529
49	ST	Practice decision making processes that are democratic and	0.000	323
10	0.1	transparent	0.625	
55	SP	Foster an open and collaborative teaching culture	0.591	
42	S	Encourage students to accept responsibility for their own actions	0.590	
41	Š	Encourage respect and cooperation among students	0.582	
54	SP	Employ democratic decision making	0.543	
52	ST	Foster staff discussions about the purposes of schooling	0.508	
		1 1	0.506	
		rce difference and disadvantage – 8% (public purpose)		
40	S	Allocate extra resources for programs for students with specific	0.001	
00	0	or extra learning needs	0.691	
38	S	Include measures to cater for students with diverse interests and		
		needs	0.681	
37	S	Have interventions to help compensate for disadvantage	0.674	
39	S	Value differences amongst students	0.662	
34	C	Promote respect for and understanding of difference	0.586	
25	C	Be flexible enough to cater for the needs, interests and abilities of		
		all students	0.515	
3. Commi	ınity resoi	urce, development and involvement – 6% (public purpose)		
46	P	Be a community resource	0.776	
57	SP	Contribute to the development of the local community	0.741	
47	P	Encourage wider community involvement in the school	0.723	
44	PC	Encourage parents in negotiating the curriculum	0.551	
45	PC	Encourage parent involvement in delivering the curriculum	0.547	
	sise diners	sity within and between schools – 5% (public purpose)		
61	0	Give emphasis to diversity within schools	0.704	
60	Ŏ	Give emphasis to diversity within schools	0.638	
59	Ö	Give parents the right to choose a school for their children	0.627	
		pent in curriculum – 4% (public purpose)	0.021	
23	C	Encourage student participation in delivering the curriculum	0.794	
22	C	Allow students involvement in negotiating the curriculum	0.781	
		' tests to sort students and schools – 5% (private purpose)	0.761	
			0.750	
29	C	Be focussed upon success in national literacy and numeracy tests	0.758	
64	0	Mandate national testing programs	0.723	
32	С	Ensure that assessment and reporting approaches are used sort	0.610	
		students	0.613	
65	O	Mandate league tables based on test outcomes	0.560	
SP, school	processes	ion in survey, i.e.: C, curriculum; S, students; PC, parent and commus; O, organisation of schooling; <sup>b</sup> only those items loading at 0.500 or be variance accounted for	mity; ST, staff; nigher – a total	Table VIII.  How are the purposes enacted (i.e. strategies)?

staff, school processes, and the organisation of schooling were not with items from these modalities spread among the factors.

In the following sections, the factors identified above are used to examine comparisons of how principals reported the importance vs their actual enactment in practice, for both purposes of schooling and the strategies to achieve those purposes.



530

(c) Comparisons of importance and enactment factors for purposes of schooling. Table IX compares the level of importance and level of enactment for the four broad purposes of Australian primary schooling factors identified via the factor analysis.

The highest scoring importance factor (using means) was student love of learning and responsible citizens for democracy and common good, followed by social justice, community development and resource, and sorting for employment and the economy. The highest scoring enactment factor was student love of learning and responsible citizens for democracy and common good followed by social justice, sorting for employment and the economy, and community development and resource.

All differences in means between importance factors and enactment factors were statistically significant (employing two-tailed t-test - related) with importance being higher than enactment, except for sorting for employment and the economy where enactment was higher than importance. The largest difference in means between importance and enactment was community development and resource followed by student love of learning and responsible citizens for democracy and common good, social justice and sorting for employment and the economy.

In summary, it could be argued that, generally, while principals saw public purpose factors as priorities in terms of level of importance in absolute terms, they were not able to translate those into practice (enactment) to that same degree. Indeed, this was emphasised with the private purpose factor, sorting for employment and the economy, being enacted to a higher degree than was its assigned level of importance. There are clear tensions here between what principals think ought be the priorities of schooling, and what those priorities translate into in practice in their schools.

Contributing to the development of the community and making the school a community resource was seen by principals as the most significant area for action – the level of enactment fell well below its assigned level of importance.

(d) Comparisons of importance and enactment factors for strategies to achieve purposes of education. Table X compares the level of importance and level of enactment for the six strategies to implement the purposes of schooling factors.

The highest scoring importance factor (using means) was foster professional and student trust and collaboration followed by value and resource difference and disadvantage, community resource, development and involvement, emphasise diversity within and between schools, student involvement in curriculum, and National "basics" tests to sort students and schools. The highest scoring enactment factor was foster professional and student trust and collaboration followed by value and resource difference and disadvantage, emphasise diversity within and between schools,

		tance	Enact	ment	Difference		Significant	
Factor (variance accounted for)	Mean	SD	Mean	SD	Mean	SD	(two-tailed)	
Public purposes 1. Student love of learning and responsible citizens for democracy and common good (33%) 2. Community development and resource (11%) 3. Social justice (8%) Private purpose 4. Sorting for employment and the economy (8%)	4.43 3.70 4.10 3.05	0.45 0.81 0.73 0.66	3.93 2.66 3.75 3.22	0.57 0.72 0.77 0.57	0.50 1.05 0.35 - 0.17	-0.12 0.09 -0.04 0.09	0.000 0.000 0.000	

**Table IX.**Comparisons of level of importance and level of enactment for four purposes of schooling factors



Purposes of education in Australia

531

Factor (variance accounted for)	Importance Mean SI	ance SD	Enactment Mean Sl	nent SD	Difference Mean S	ence SD	Significant (two-tailed)
Public strategies 1. Foster professional and student trust and collaboration (24%)	4.64	0.33	4.16	0.51	0.48	-0.18	0.000
<ol> <li>Value and resource difference and disadvantage (8%)</li> </ol>	4.56	0.40	3.99	0.62	0.57	-0.22	0.000
<ol> <li>Community resource, development and involvement (6%)</li> </ol>	3.83	0.57	3.00	89.0	0.83	-0.11	0.000
<ol> <li>Emphasise diversity within and between schools (5%)</li> </ol>	3.70	0.79	3.28	0.79	0.42	0.00	0.000
5. Student involvement in curriculum (4%) <i>Private strategy</i>	3.51	0.81	2.87	0.79	0.64	0.02	0.000
6. National "basics" tests to sort students and schools (5%)	2.72	0.61	3.03	99.0	-0.31	-0.05	0.000

Table X.
Comparisons of level of importance and enactment for six strategies to achieve the purposes of schooling factors

National "basics" tests to sort students and schools, community resource, development and involvement, and student involvement in curriculum.

All differences in means between importance factors and enactment factors were statistically significant (employing two-tailed *t*-test related) with importance being higher than enactment, except for National "basics" tests to sort students and schools where enactment was higher than importance. The largest difference in means between importance and enactment was community resource, development and involvement, followed by student involvement in curriculum, value and resource difference and disadvantage, foster professional and student trust and collaboration, emphasise diversity within and between schools, and National "basics" tests to sort students and schools.

Similar comments to those made above are relevant here. That is, while principals clearly noted strategies to achieve public purposes as having high levels of importance, they were not enacted (in practice) to the same level. The exception, similar to that noted above related to national testing where that was enacted to a higher level than its perceived level of importance. Many principals' open-ended comments related to matters concerning the national testing program — all of these were negative.

Again, the largest difference for importance over enactment was evident in areas related to community resource and development – with embedded notions of public purposes.

As noted earlier, at the end of the survey, principals were invited to provide comments on a number of matters raised in the survey. These are examined in the next section.

- (e) Open-ended responses. Analysis of 950 open-ended comments provided by principals regarding what they saw as the barriers to schools focusing on and achieving pubic purposes indicated that the main elements were related to (number of comments relevant to each point are noted):
  - inadequate, inequitable facilities and resourcing (n = 235);
  - unsympathetic, divisive, fragmented and expedient political processes and policy (178);
  - mistaken belief that public schools can fix all societal problems (129);
  - negative media and political portrayal of public schools (127);
  - competitive national testing and league tables (68);
  - unfair enrolment policies and practices (59);
  - poor teachers, curriculum and school organisation (39);
  - negative and incorrect public perceptions about the quality of public education (and the consequent residualisation of public education) (38);
  - teacher and principal quality, income, workload, planning time, administrative demands, training and access to quality professional development (35);
  - societal issues and fragmentary change, e.g. individualism (23); and
  - lack of principal and school autonomy, e.g. to hire and fire staff, resource use (21).

Principals also were asked to indicate those elements that might help promote public purposes. Some 900 comments were provided and these have been categorised into eight areas:



- (1) adequate, equitable resourcing and support (n = 292);
- (2) belief in students, partnerships and diversity (210);
- (3) sympathetic political processes and policy (168);
- (4) positive media and school promotion (142);
- (5) address societal problems and believe in public education (128);
- (6) quality teaching and learning (119);
- (7) transparency and accountability for funding (23); and
- (8) public perception, understanding and knowledge about education and schooling (19).

General discussion

These preliminary findings from the national survey of (government) primary school principals overwhelmingly points to tensions between what they, the principals, believe ought be the purposes of education and what the strategies to achieve those purposes might be, and the realities of what is actually happening. It could be argued that the results indicate a major shift away from public purposes of education to those more aligned with private purposes. Using Labaree's terminology[4], democratic equality orientations are diminished relative to those associated with social efficiency and social mobility.

It is noteworthy from the open-ended responses that barriers "external" to the school dominate (at least 80 per cent of responses). Inadequate resourcing and support, unsympathetic politicians and bureaucracies, broader societal problems laid at the school door, and a negative media are seen by the principals as contributing to an uneven and unfair playing field, especially in comparison to the non-government schooling sector. Principals also identify challenges in successfully catering for a diverse student population and facilitating a socially just, equitable, cohesive, and inclusive society. A good number of the facilitating factors also are related to "external" issues. However, there are certainly some, such as belief in students, partnerships and diversity and quality teaching and learning that are clearly the remit of individual schools-principals, teachers and school communities. It might well be argued that many schools are "managing" the "external" barriers such they are able to ensure that the public purposes of education are not swamped private purposes. In these schools, principals are able to work within the existing constraints to work towards democratic equality goals for their students. Our case study work[5] with a number of schools across the country confirms this – the key values driving such schools and the day-to-day practices are highly consistent with public purposes of education. In these schools, principals accommodate "external" demands within the existing culture, without allowing them to dominate these values and practices.

There is another reason why giving priority to public purposes is a good strategy and that is because of recent Australian research which has found both that (Mulford and Edmunds, 2009, p. 177):

[...] the most direct route for a school to achieve academic success [or, private purposes] for their students is the indirect route through the fostering of student empowerment and social development [or, public purposes].

Purposes of education in Australia

533

And that (Mulford and Edmunds, 2010, p. 149) "such empowerment and social success is closely related to the principal's contribution to, and the congruence between teacher and principal perceptions of, school capacity building".

However, the responses in this survey suggest a sense that many principals write with a level of anger and perhaps despair at the lack of fairness they claim abounds in the management and treatment of public education in Australian society. Indeed, the social mobility notion becomes strongly evident in the open-ended responses of many principals when they draw stark contrasts between the government and non-government sectors. To be noted in considering this point is that the survey made no attempt to overtly draw distinctions across the schooling sectors, nor even invite respondents to make any such comments. However, the extent of the comments in this regard cannot be ignored. Many of the comments reflected views that highlighted two particular issues. The first of these related to what was considered to be unfair funding patterns across the schooling sectors, a matter of considerable debate in Australia in recent years. One principal's comment is illustrative of this:

A huge resourcing divide still continues to exist between government and private school sectors. A more serious attempt must be made to ensure all students have access to the same educational opportunities in facilities that are of equal standard.

Even a recent change of government at the federal level in Australia – to one with claims to social democratic principles – has see no change in the funding arrangements for government (state) and non-government (private) schools. It might be, then, that schools and school leaders in particular need to draw on the strategies adopted by those in our case study schools referred to above to "manage" the perceived inequities in funding and retain a focus on public purposes in their schools.

The second key point of difference made by many principals between the sectors related to the student "clientele" present in the respective government and non-government schools. Many respondents saw that government schools enrolled "all comers" and particularly catered for those from more challenging social-economic backgrounds compared with the non-government school sector:

Public schools are inclusive. We do not judge students on entry, rather we accept every child who walks through the door as an individual who has individual educational needs.

Again, there is no doubt that many government schools are able "manage" this challenge, and for some, indeed it emphasises the very essence of the public purposes of schooling, where equity and social justice resonate in the ethos of such schools. What the expectations on non-government schools might be in this regard are matters for on-going discussion.

## Concluding comments

The research reported here provides evidence that while there are many educational purposes, only a limited number are actually given priority and support in Australia, certainly as reported by the principals in the government schools involved in this survey. Overall, the results of this national survey echo a deal of pessimism if we believe schools do have roles and responsibilities in addressing public purposes of education. There are clearly reported tensions, as expressed by primary government school principals, that schools are not orientated towards public purposes to the degree

they think they should, nor are they enacting practices that support public purposes. Many of the barriers to achieving a greater focus in schools on public purposes are seen to be related to external (to the school) issues, such as government policy decisions, differential funding and resourcing across school sectors and emerging community and societal factors. In making this reference to "external" barriers, it is important to be mindful of the comments made above that there are schools that successfully manage these barriers and maintain a focus on public purposes. There are leadership implications here.

Despite the rhetoric evident in policy documents and in policy maker pronouncements of what is important in education[6], only a limited number of purposes are evaluated in any detail, such as national tests of literacy and numeracy. While not denying the importance of these outcomes for students, these publically evaluated, and therefore valued, areas continue to heavily favour the private purposes of education.

While some might suggest that aspects of public purposes may be too hard to evaluate, we would argue that educational goals should be defined and framed on their underlying importance, not by whether or not they can be easily measured, nor by a belief that a focus on the "basics" (such as literacy and numeracy) represents priority of what is important in education. We would argue that we should measure what we value not value what we think we can easily measure.

This narrow, top-down approach in Australia (from the state/territory and increasingly federal level) to the purposes of education and the strategies employed to enact them is not defensible. Support for this position can be found in the recent, large and extensive study of contemporary leadership conducted in England. In this longitudinal study, Day *et al.* (2009) focused on schools that had significantly raised pupil attainment (key stage national assessment tests and General Certificate of Secondary Education results) over a three-year period. The research concluded (Day *et al.*, 2009, p. 195) that in meeting the challenges facing education, mainly as a result of large-scale, extensive and changing policy reform over recent years:

[...] most success has been achieved as a result of the quality of leadership at the school level, rather than the direct influence of policy [...] [In brief] the image that we see emerging from this research on successful schools is of individual leaders working to transform a system that for some time has been based on prescription to one where "professionalism" provides the basis of a new approach.

We are not the only ones arguing for much greater attention to be paid to the importance and ways of enacting public purposes. In the USA, Glass (2008, pp. 237-8) notes the demise of a sense of community and the sense of common purpose and interconnectedness that supports public purposes in a country's institutions (such as schools):

The more people there are who live in gated communities, the fewer there are who care about supporting a police force. The more families there are who drive two and three cars, the fewer families there are who care about public transportation. The more people there are who drink only Evian, the fewer people there are who care what comes out of other people's faucets.

Glass (2008, pp. 249-50) warns that this move to private from public could result in some schools increasingly becoming the province of the poor and minorities, particularly in metropolitan areas, and a dangerous separation of liberty and justice. There are clear warnings here for Australia. Our research would suggest that we have



potentially started along a "journey" similar to the USA and elsewhere. As the private purposes take greater prominence over public purposes, as evidenced in the findings of this national survey, the roles and place of Australian schools in nation building and the advancement of the interests of the society as a whole as we noted in our opening paragraph to this paper are under challenge.

The wider importance of quality primary schooling education to individuals as well as society more generally is highlighted in the recent comprehensive and independent six-year Cambridge Primary Review (Alexander, 2009) in the UK into the condition and future of primary education. The review found England's primary schools under intense pressure, but in good heart and in general doing a good job. Primary schools represented, for many, stability and positive values in a world where much else is changing and uncertain. The review proposes a framework of 12 aims grounded in evidence on the imperatives of childhood, society and the wider world today. The re-emphasis in this framework on the public purposes of education and their enactment is very clear[7] with the aims grouping around three areas: individual well-being with its engagement, empowerment and autonomy; self, others and the wider world with its encouraging respect and reciprocity, promoting interdependence and sustainability, empowering local, national and global citizenship, and celebrating culture and community; and, learning, knowing and doing with its exploring, knowing, understanding and making sense, fostering skills, exciting imagination, and enacting dialogue. The report argues that these aims should drive rather than follow curriculum, teaching, assessment, schools and policy.

We conclude this paper with the thoughts of two principals which illustrate and summarise many of the issues raised in this paper. They present as matters warranting debate among policy makers and practitioners if we are to move (back) to a situation where schools are seen as central to nation building and to the wider benefits and quality of our society as a whole:

Our history will reflect a time of wasted opportunity and social divisiveness due largely to our failed approach to schooling and the provision of education in the second half of the 20th century. Unless we agree as a nation to bring together all those involved in policy making and develop a bipartisan approach to the provision and funding of education, Australia as a nation will continue to slide further down the list of advanced countries. How can we possibly expect to remain a highly advanced futuristic nation with our current haphazard, highly political approach to education?

Narrow understandings of the nature of schooling in the 21st century on the behalf of politicians, influential community members and educational bureaucracies continue to hamper the work of schools, the learning of young people and the development of productive community/school partnerships [...] Schools must be better resourced to manage the diversity of students and communities. We have 21st century needs, but are funded on a model that does not understand the nature of our student need. Inadvertently schools then become the scapegoats for all that is amiss in society. Schools can do better for the common good- no doubt about it — but we need to be resourced and supported to respond to contemporary needs, not those of a bygone era.

#### **Notes**

1. A discussion of the shifting purposes of education in Australia as influenced by politics was the focus of an article in an earlier issue of this journal (Cranston *et al.*, 2010). Other aspects of the project are being reported elsewhere. These include an examination of the forces



impacting on education nationally and internationally today (Mulford *et al.*, n.d.), philosophical and historical aspects of the purposes of education, and the development of professional development materials. Other writings will report on a series of Australian-wide in-depth case studies of primary schools examining how purposes of education are understood by teachers, principals and parents and actually enacted in practice, and analyses of systemic policy statements and media reporting and in-depth interviews with systemic and strategic policy makers from across Australia, relevant to the purposes of education.

- 2. Australia comprises six states (New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania) and two territories (Northern Territory, Australian Capital Territory), each with its own government and separate from the national or federal government. The states and territories hold responsibility for local educational policy making, funding and implementation, while the federal government carries some policy and funding responsibilities across all eight jurisdictions. While each state and territory holds constitutional legislative power over education in its own jurisdiction, in recent years the *locus* of these funding and policy responsibilities has become blurred, a situation exacerbated when political parties of different orientations hold power across the various federal, state and territory governments.
- 3. It is important to note that every effort was made by the research team to include schools beyond the state/government sector in the survey. Invitations to participate were extended to the non-government sector (including faith-based sectors) through various avenues, including the national cross-sector principal body, the Australian Primary Principals' Association. These invitations were made across the "life" of the project and paralleled efforts by the research team to keep all primary school sectors informed of project developments. In the end the non-government sector chose not to participate.
- 4. Given the lack of surveys in the area, we suggest that our four factor purposes (student love of learning and responsible citizens for democracy and common good; community development and resource; social justice; sorting for employment and the economy) and six factor strategies to achieve these purpose (foster professional and student trust and collaboration; value and resource difference and disadvantage; community resource, development and involvement; emphasise diversity within and between schools; student involvement in curriculum; national "basics" tests to sort students and schools) provides a useful starting point both for further empirical analysis in the area and for use by schools and their communities.
- In-depth case studies have been completed in Victoria, Queensland, South Australia and Tasmania – a report of these in preparation.
- Reports of analyses of state and national policy documents and the views of key educational and community leaders are in preparation.
- 7. As are the similarities with Tasmania's now "defunct" Essential Learnings Curriculum.

#### References

Ainley, P. (2004), "The new 'market-state' and education", *Journal of Educational Policy*, Vol. 19 No. 4, pp. 497-514.

Alexander, R. (Ed.) (2009), Children, Their World, Their Education: Final Report and Recommendations of the Cambridge Primary Review, Routledge, London.

Ball, S.J. (1994), Education Reform: A Critical and Post-Structural Approach, Open University Press, Buckingham.



- Barber, B. (2004), "Taking the public out of public education", The School Administrator, Vol. 61 No. 5, pp. 10-13.
- Cranston, N., Kimber, M., Mulford, B., Reid, A. and Keating, J. (2010), "Politics and school education in Australia: a case of shifting purposes", *Journal of Educational Administration*, Vol. 48 No. 2, pp. 182-95.
- Day, C., Sammons, P., Hopkins, D., Harris, A., Leithwood, K., Gu, Q., Brown, E., Ahtaridou, E. and Kington, A. (2009), *The Impact of School Leadership on Pupil Outcomes*, Research Report DCSF-RR108, Department for Children, Schools and Families, London.
- Department of Education, Science and Training Curriculum Corporation (2003), *The Values Education Study Executive Summary Final Report*, Department of Education, Science and Training Curriculum Corporation, Carlton South.
- Department of Education, Training and the Arts (2008), What State Schools Value: Active and Informed Citizens for a Sustainable World, Queensland Government, Brisbane.
- Gay, L.R., Mills, G. and Airasian, P. (2006), Educational Research: Competencies for Analysis and Applications, 8th ed., Pearson, Columbus, OH.
- Glass, G. (2008), Fertilizers, Pills and Magnetic Strips, Information Age Publishing, Charlotte, NC.
- Goodlad, J.T. (1997), In Praise of Schooling, Teachers College Press, New York, NY.
- Grace, G. (2001), "The state and Catholic schooling in England and Wales: politics, ideology and mission integrity", *Oxford Review of Education*, Vol. 27 No. 4, pp. 489-500.
- Labaree, D.F. (1997), "Public goods, private goods: the American struggle over educational goals", *American Educational Research Journal*, Vol. 34 No. 1, pp. 39-81.
- Levin, H.M. (1999), "The public-private nexus in education", *American Behavioural Scientist*, Vol. 43 No. 1, pp. 124-37.
- MCEETYA (1999), Adelaide Declaration on National Goals for Schooling in the 21st Century, Ministerial Council on Education, Employment, Training and Youth Affairs, Adelaide.
- MCEETYA (2008), available at: www.mceetya.edu.au/mceetya/melbourne\_declaration,25979.
- Mulford, B. and Edmunds, B. (2009), Successful School Principalship in Tasmania, Faculty of Education, University of Tasmania, Launceston, available at: http://fcms.its.utas.edu.au/educ/educ/
- Mulford, B. and Edmunds, B. (2010), Educational Investment in Australian Schooling: Serving Public Purposes in Tasmanian Primary Schools, Faculty of Education, University of Tasmania, Launceston, available at: http://fcms.its.utas.edu.au/educ/educ/
- Mulford, B., Edmunds, B., Cranston, N., Reid, A. and Keating, J. (n.d.), "The forces impacting upon Australian schools and some implications for school leaders", in Columbus, F. (Ed.), *Educational Change*, Nova Science, New York, NY.
- OECD (2007), Understanding the Social Outcomes of Learning, Centre for Educational Research and Innovation, Organisation for Economic Co-operation and Development, Paris.
- Power, C. (2005), *Towards 2010: Australian Education in an International Context*, Occasional Paper Series, Bassett Oration, Australian College of Educators, Brisbane.
- Reid, A., Cranston, N., Keating, J. and Mulford, B. (2007a), "Researching the public purposes of education in Australia", paper presented at the Australian Association for Research in Education (AARE) Conference. Fremantle, Western Australia.
- Reid, A., Cranston, N., Keating, J. and Mulford, B. (2007b), "What are the public purposes of education?", *The Queensland Principal*, Vol. 33 No. 3, pp. 24-5.

Reid, A., Mulford, B., Cranston, N. and Keating, J. (2008), "Public purposes of schooling: the logic of the project", unpublished project paper.

Tabachnick, B.G. and Fidell, L.S. (2001), *Using Multivariate Statistics*, 4th ed., Allyn and Bacon, Boston, MA.

UNESCO (1996), Learning: The Treasure Within, Report to UNESCO of the International Commission on Education for the 21st Century, United Nations Educational, Scientific and Cultural Organization, Paris (Chair: J. Delors).

Purposes of education in Australia

539

## Corresponding author

Neil Cranston can be contacted at: neil.cranston@utas.edu.au

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.