

CHANGES IN FACTORS INFLUENCING THE MARKETS FOR
STATE GOVERNMENT TEACHERS IN AUSTRALIA

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The objective of the research upon which this paper is based was to explore the relationships between the teacher supply policies of state education departments and changes in factors influencing the markets for government teachers during the period 1956-1978. The study advanced the argument that teacher supply policies of state departments of education were constrained by changes in the markets.

The context of this study was one in which employers of teachers were faced with the change from an apparent gross undersupply of teachers, to one of apparent over-supply of teachers, within a period of two decades. Data was derived from structured interviews with senior educational administrators from all Australian state departments of education, together with information sources such as annual reports of state ministers of education, published and unpublished reports and planning documents from planning and research branches of state and Commonwealth education authorities.

The study identifies two sets of factors and changes arising from the interviews with department administrators as having most important effects upon teacher supply policies. The first group summarizes the most commonly identified factors. The second group is important for the reasons that these factors or changes were given less emphasis in importance in the interviews, but from documentary evidence studied in each state, there appears to be some justification for including them as having particularly important effects upon state education department policies.

Group 1 Factors:

These are identified by interviewees as having the most important effect upon state education department teacher supply policies.

1. The autonomy of former state teacher training institutions and the subsequent perception of loss of control by state education departments over aspects of the supply side of teachers markets.
2. The growing influence of teachers' unions as a pressure group in department of education teacher supply policies affecting conditions of service and recruitment.
3. Major factors contributing to the change in market conditions from teacher shortage to teacher surplus in the period 1968-1978:
 - (a) Fluctuation in teacher resignation rates from a peak in the late-1960s to a trough in the period 1976-1978, caused largely by
 - (b) Economic trade cycle fluctuations from full employment in the late 1960s and early-1970s to recession in the period 1975-1978.
4. State government political policies and educational priorities made effective through budgetary and financial controls upon state departments of education.

Group 2 Factors:

These were given less emphasis by interviewees but other evidence suggests them to have had important effects upon state education teacher supply policies.

1. Demographic changes, specific to each state, which contributed to differential impacts upon school enrolments among states and affected policies in some state education departments more than in others.

2. Changes in teachers' salary levels during the period under review and the roles of Industrial Commissions and Tribunals.

3. Changes in regulations and attitudes surrounding the employment of female teachers.

The influence and operation of these factors upon teachers markets is discussed. This paper concludes with a comment upon the similarities and differences among States in the nature of the responses to changes in the markets for teachers.

Loss of Control by State Education Departments Over Aspects of Teacher Supply

At the beginning of the period, state education departments exercised sole control over the recruitment and training of government teachers. In every state government teachers market, it is concluded that there occurred a general loss of direct control by departments of education over recruitment and training of trainee teachers. From information supplied in interviews it is argued this was largely a consequence of the loss of control by the departments of teacher education institutions during the 1970s. This change in institutional relationships in the markets between state and Commonwealth government authorities is perceived as having had the greatest impact upon teacher supply policies. It caused departments of education to have decidedly less control over the teacher supply function and in some cases, no direct control at all after 1973, in relation to the number of teachers trained and the types of programs available.

Control over these latter policy areas passed to newly-established state Boards of Advanced (Higher) Education. These emerged as new institutions of control in the markets for teachers in the latter stages of the period reviewed.

The loss of policy control over the training and recruitment of teachers by state education departments in the period 1973-1978, led to a basic change in the selection of policies and processes for allocating teacher supply in the state markets. It is suggested that there was policy shift from one of teacher recruitment largely through bonded departmental training scholarships prior to the commencement of pre-service teacher education, to teacher selection and employment at the point of graduation from pre-service teacher education courses. This change shifted the emphasis of policy control from one port of entry to the market to another, over which the department of education had greater control.

The changed institutional relationships between education departments and training colleges and institutions following the loss of state education departmental control over teacher training after 1973, led to the selection of policies which contracted and finally abolished the training scholarship system in the majority of states.

The Influence of Teachers' Unions Upon Teacher Supply Policies

It is argued that the influence of teachers' unions as a pressure group in each state department of education affected teacher supplies in the areas of recruitment and conditions of service. The major changes in this factor affecting teacher supply policies related to the strategy and pressure of teachers' union bargaining, their increasing degree of militancy and their shift in industrial emphasis from a concentration upon salary issues in the 1960s, during the period of great teacher shortage, to an emphasis upon conditions of service, class size and pupil/teacher ratios, and entry qualifications in the 1970s as the markets changed to one of teacher over-supply.

Three factors stemming from changes in state teachers markets appear to have increased the teachers' unions' facility to constrain teacher supply policies during the latter stages of the period

reviewed.

1. Increased appeals by teachers' unions to industrial commissions and teachers' tribunals for arbitration on conditions and awards, binding upon departments of education.

2. The increased public and state government tacit acceptance of strike threats and strikes as a legitimate industrial weapon available to teachers. While governments and the community may have disapproved of the use of these tactics, they did not act to deny the rights of teachers' unions to strike. The increased use of strikes and strike threats by other trade unions in the community in the 1970s created an atmosphere and attitude in the public which in some ways may have led to the impression that if it is appropriate that other trade unions use these tactics to constrain employers' policies, why should not teachers' unions, also, use these tactics.

3. It is reasonable to assume that the teacher shortages in the 1960s created a climate which strengthened the bargaining powers of the teachers' unions.

The Impact of Economic and Demographic Changes Upon the Markets for Teachers

An analysis of the interview data strongly supported the argument that state education department policy reactions to changes in the markets for teachers during the period under review focused mainly upon ports of entry to the market, and the efforts of each state department of education to maintain control over these ports. The major factors which are claimed to have affected policy relating to the control by education departments of flows through the various ports of entry were:

1. The increase of the teacher resignation rate in the 1960s and its rapid decrease in the 1970s.¹

2. The rapid increase in school enrolments in the 1960s and the decline in the rate of increase in school enrolments in the 1970s²

Data from interviews suggested that the major factors contributing to the change in market conditions from teacher shortage to teacher surplus in the period 1968-1978, were:

1. Economic trade cycle fluctuations from full employment in the late-1960s and early-1970s, to recession in the period 1975-1978. This contributed largely to the fluctuation in teachers' resignation rates from a peak in the late-1960s to a trough in the period 1976-1978.

2. Demographic changes, specific to each state, which contributed to differential impacts upon school enrolments among states.

The ports of entry to the market which were subject to the greatest policy manipulation during the whole period under review were:

1. Entry to the Warranted sector (permanent teachers), of recruits bonded on education department scholarship courses at teacher training institutions.

2. Entry to the Unsecured sector (non-tenured teachers) of temporary, part-time, casual and relief, re-entrant teachers, the majority of whom were females.

The effect of policies to expand and contract flows through the scholarship entry port had a lagged effect upon the adjustment of teacher supply and control. This was not always precise because of the in-training wastage. However, through (2) above, it is argued that the state departments of education did exercise direct and effective control over the growth in the size of the stock of teachers in a manner which finely adjusted teacher supply to teacher demand in the short term.

Budgetary and Financial Controls

State government political policies and educational priorities bore greatly upon the selection by education departments of teacher supply policy options in the last stage of the period under review. Government budgetary and financial controls had the greatest influence upon teachers' college scholarships and the size of teacher stocks. An important finding was that, in the early part of the period under review, during teacher shortage, state government educational priorities financially favoured great expansion of teacher training institutions in the 1960s, during period of political pressure to reduce class sizes.

Identified by all interviewees as being the most common and most important source of constraint upon teacher supply policies in the latter stages of the period reviewed, state Treasuries restrained teacher employment policies in two areas:

- a. The total number of teachers employed in each year; and,
- b. the number of education department teacher education scholarships awarded each year.

In the former case, some state departments had financial limits placed upon the number of full-time permanent teachers employed, but not the number of part-time temporary teachers. Other differences among states were noted in the period of time Treasury restrictions had operated.

There was little doubt among interviewees that Treasury constraints increased as the market conditions for teachers changed from teacher shortage to teacher surplus during the period 1975-1978.

A related reason for increased Treasury constraints during the latter stages of the period reviewed may have been due partly to the considerable success state education departments had reducing pupil/teacher ratios and class sizes during the period 1973-1978. Once they had reached what was departmentally and politically acclaimed as being "highly favourable" levels, there was less incentive for ministers of education to continue to support teaching budgets for the employment of teachers. There was a great improvement in pupil/teacher ratios during 1973-1978.

The conclusions of the Australian Education Council Research Review Team on class size and staffing standards³ may have influenced policies restraining continued teacher recruitment in situations of continually reducing class sizes.

It is concluded that the changes in the market having the greatest influence in increasing Treasury constraints in the latter stage of the period under review were the development of economic recession in Australia, and the decline in the rate of increase in enrolments in most state government school systems.

Demographic Changes

From Table 1, showing population percentage growth rates for the intercensal periods from 1954 to 1971, a number of differences have been noted where their influences appear to have been unemphasized by education department administrators. Perhaps one reason for this is that administrators perceive this area of change as one over which they have no control at all. They may have taken this change for granted and accepted the inevitability of adjusting teacher supply to enrolment changes. Another reason may be that the effect of demographic change on teacher supply allows for more "lead time" for planning departments to adjust their teacher supply and demand projections than the more sudden and unpredictable influence of economic fluctuations upon teacher resignation rates. A number of interviewees commented on the change in demographic variables only as a factor in concert with declining resignation rates. The unique

coincidence within a five-year period of economic recession and the delayed (lagged) impact of birth rate changes on school enrolments in the period 1973-1978, becomes a more significant influence in producing teacher surpluses than each factor independently.

Changes in Teachers' Salary Levels

This was not perceived by the interviewees as having had as important an influence upon teacher supply policy as a number of other changes. One possible explanation for this perception may be that state education department administrators no longer have control over teachers' salary levels. A major institutional change in all the state markets for teachers over the last two decades has been the teachers' unions' pursuit of their salary policies through industrial and legislative means. Salaries in 1978 were decided by judicial and industrial arbitration processes. The unions and the State Public Service Boards became the central appellants in the process of salary adjustment, not the departments of education, directly. It is difficult to assess the extent to which increases in teachers' salaries have attracted or retained teachers in state education systems. When one considers the great increases in demand for teachers in the 1960s, and the inelasticity of supply of teachers (in the short term), it is not unreasonable to expect that market forces would operate to bid up the salaries of teachers (compared with other comparable occupations). The role of the teachers' unions in exploiting this situation of shortage was very important.

The Employment of Females

An area of policy over which state education departments did have control was the employment of females. The fact that in all state departments of education, policies surrounding the employment of married females and the allocation of scholarships for married females have been changed, is evidence of the reaction of state educational administrators (and governments) to changes in the markets. The extent to which these policy changes were more a result of teachers' union pressure than community and social attitude changes cannot be determined here. There is some evidence from the interviews supporting the effect of both these factors. Departments of education were cognizant of the greater immobility of teachers that occurred with increases in the proportion of permanently appointed married females in the teacher stock. The fact that legislation giving equal salaries for females increased the attraction of teaching as an occupation for females was acknowledged by interviewees. However, no data emerged from the interviews about the extent to which education department administrators influenced policy on equal pay for female teachers. It is suspected that this area of policy, like that of other teacher salary issues, was out of the control of the departments of education and within the province of the state public service boards and the industrial commissions.

Similarities and Differences Among States in the Nature of and Responses to Changes in the Markets for Teachers

Table 2 summarizes the major similarities and differences in state education department reactions to a selection of important changes in the market conditions and factors affecting the markets during different stages of the period under review. It describes the teacher supply policy options that were selected by each state education department as it responded to changes in the nature of the market itself and to changes in a selection of factors influencing the market. It is notable that there are a significant number of differences in responses to changes in school enrolments. This is because Western Australia and Queensland, particularly, had different demographic profiles which did not render them as

susceptible to the effects of reduction in the rate of increase of enrolments as the more populated states, New South Wales and Victoria. These latter appear to have suffered the most severe conditions of teacher surpluses, partly as a consequence of their demographic profiles. Tasmania is revealed as a very separate case because of the comparatively limited size of its school system, compared with the other states, and the history of slower population expansion at a time when the populations of other states were increasing rapidly. Its much higher teacher resignation rate had offset the impact of reductions in rate of enrolment increases in the last stage of the period under review. The large geographical areas of Western Australia and Queensland pose special problems of teacher mobility which prevent a simple generalization about the conditions of teacher surpluses in those states.

Summary of Cases Where State Education Department Policy Reactions to Changes in Market Conditions have been Similar:

- a. During the period of rapid enrolment increases, all states increased the number of teacher education scholarships available and the number of places available in teacher education institutions by expanding existing colleges and building new ones.⁴
- b. During the period of acute teacher shortages, common to all states between 1965-1970, all departments of education pursued a policy of increasing the percentage of casual, temporary and part-time teachers employed. These re-entrants were largely female teachers and comprised the Unsecured sector of the market.
- c. During the onset of teacher over-supply conditions, 1975-1978, all departments of education followed a common policy of reducing the size of the Unsecured sector by not re-employing as many re-entrants.
- d. In the above mentioned stage, most departments of education followed a policy of giving priority of employment to education department scholarship holders as they graduated from pre-service courses. This contributed to the pressure to reduce the size of the Unsecured sector of teachers, as declining teacher resignation rates accentuated the market conditions generating the climate for teacher over-supply.
- e. During the period of greatest teacher shortages, all departments of education actively re-recruited trained teachers from other countries.

Cases Where Differences Occurred in State Education Department Policy Responses to Changing Market Conditions:

- a. Because some market changes had a greater impact upon some state systems than upon others, not all states discontinued their teacher training scholarship systems. While Victoria, Queensland and South Australia were early to abandon this policy, New South Wales greatly reduced the scheme in 1978 but retained it for selected secondary school subject specializations. Western Australia and Tasmania reduced the number of scholarships available but retained a modified version of the system, partly because of the special demographic circumstances of these states.
- b. Not all state education departments experienced teaching staff ceilings as a reaction to the decrease in the rate of enrolment growth. Western Australia and Tasmania did not appear to have experienced the same degree of financial restraint upon staffing as did the other states.
- c. Because each state education department's relationship with its teachers' union was different, partly through circumstances of its historical development and partly through the different statutory authorities regulating industrial conciliation among states, there has been no uniformity in education department reactions to teachers' union initiatives. It is an exaggeration to use the term teachers' union "militancy" as an accurate description of their behaviour in general across all states. While in New

South Wales and Victoria, particularly, teachers' unions may fairly be described as having pursued their policies "militantly" with a greater degree of strike action than in other states, it would not be an accurate description of teachers' union behaviour in Tasmania or Queensland.

d. Although the Commonwealth Government legislation to assume financial control of all state teacher education institutions became effective in 1973, formally utilizing state Boards of Advanced Education as the state liaison body with the Commonwealth Commission on Advanced Education on matters of teacher education policy, some states had created statutory authorities for the co-ordination of teacher education prior to this date.

e. Regulations governing the employment of females differed among the states. There was no co-ordinated policy among state education departments regarding the employment, promotion and recruitment of females to teaching or the training and employment of married females. For example, in Queensland and Western Australia, it was not until the mid- and late-1960s that the status of married female teachers was changed from temporary to permanent, to allow for full rights for promotion.

Conclusions

The results of the study are relevant to policy making in the area of teacher supply policies in state education departments. An awareness by administrators of the relationships between the economic characteristics of teacher markets and their institutional characteristics may provide a sounder basis for decision-making in this area. This point is particularly relevant at the moment, as the Australian economy begins to move from a period of economic recession to a period of economic boom expected in the mid 1980s. If this eventuates, it may have a highly significant influence upon the resignation rate of teachers. If resignation rates of teachers rise to the limits they reached at the height of the 1969-1970 economic boom, then serious shortages, in secondary schools at least, may be a high probability.

Notes and References

1. Documented in such sources as Tertiary Education Commission, Working Paper on the Supply of and Demand for New Teacher Graduates in the 1980s. Canberra: October 1979. Committee of Enquiry into Post Secondary Education in South Australia, Teachers in South Australia, Occasional Paper No.,1., Adelaide: 1978. Tertiary Education Commission, Report for 1982-84 Triennium, vol 1., part 5. Appendix O.
2. First Report of the National Population Inquiry, Population and Australia, Canberra: AGPS, 1975. Priorities Review Staff, Report on the Borrie Report, Canberra: AGPS, August 1976. The Supply of and Demand for Teachers in Australian Primary and Secondary Schools 1978-1985, Report of the Australian Education Council Working Party, Canberra: AGPS, 1978.
3. Report of the Australian Education Council Research Review Team on Class Size and Related Issues, Staffing Standards in Government Schools in Australia, (C. Beltz, Chairman), Canberra: 1977.
4. Evidence for this is to be found in the Annual Report of the Minister of Education in each state respectively for the period under review.

TABLES

Table 1: Growth Rates of State Populations (Percentages)

State	Intercensal Growth %		
	1954-61	1961-66	1966-71
New South Wales	14.4	8.1	8.6
Victoria	19.5	9.9	8.8
Queensland	15.2	9.5	9.1
South Australia	21.6	12.6	7.2
Western Australia	15.1	13.6	21.5
Tasmania	13.5	6.0	5.1

Sources: First Report of the National Population Inquiry, Population and Australia, op. cit. p. 138. Australian Bureau of Statistics, Year Book Australia, No. 62, 1977 and 1978, Canberra: 1978.

Table 2: State Education Department Reactiveness to Major Changes in Market and Factors Influencing State Teacher Market During Period Under Review

MARKET CHANGES AND CHANGES IN FACTORS INFLUENCING MARKET	N.S.W.	VICTORIA	QUEENSLAND	N.A.	S.A.	TASHANIA
Rapid Enrolment Increases 1956-1970	Increases in T.C. and University places and scholarship awards.	Increases in T.C. and University places and scholarship awards.	Increases in T.C. and University places and scholarship awards.	Increases in T.C. and University places and scholarship awards.	Increases in T.C. and University places and scholarship awards.	lesser increases in enrolments than other States. Increases in scholarship awards.
Treasury Restrictions 1970-78 (related to development of teacher surpluses)	Reduction of scholarships after 1976.	Abolition of Ed.Dept. scholarships. Staff ceilings after 1976.	Staff ceilings 1977-78. Entry quotas on T.Ed. courses. Abolition of scholarships.	Not as greatly affected by Treasury restrictions as other States. No staff ceilings as in other States.	Staff ceilings on employment and re-employment of teachers. Abolition of bonds and discontinuation of scholarships.	Reduction in number of studentships awarded - but retention of Scholarship Award system.
Conditions of Teacher Shortage 1965-70 during period of rising resignation rates of teachers	Increased percent of casual and part-time teachers employed - Overseas recruitment. Employment of untrained grads.	Overseas recruitment of teachers, increased percent of re-entrants and p/t temp. teachers employed - employment of untrained grads.	Overseas recruitment of teachers, increased percent of temporary p/t and casual teachers employed.	Overseas recruitment of teachers and increases in numbers of temp. and p/t teachers employed. 1971 - offer of scholarships to married females.	Increases in percent-ago of part/time and casual teachers employed. Overseas recruitment of teachers.	Increased recruitment of temporary and p/t casual teachers. Overseas recruitment. Mid-year intakes in T.Ed. courses.
Change from Conditions of Teacher Shortages to Teacher Surpluses 1975-78	Reduction in number of T.Ed. Scholarships. Reduction in percent of casual and temp. teachers re-employed. Priority of employment to bonded ex-students.	Reduction in percent of temp. and casual teachers re-employed. Pref. employment to scholarship holders. Change in re-employment and re-entry rights for teachers going overseas.	Not as greatly affected as other States by conditions of surplus. Reduction in temp. teachers and part/time.	Contraction in size of "unsecured" section; policy to reduce class size and p/t ratios during this period. Reduction in scholarships awarded, but system retained. Not as greatly affected by teacher surpluses as NSW and Victoria.	Use of p/t teachers to meet short term demand changes. Priority of employment for scholarship holders.	The effect of a teacher surplus offset by staffing agreement between Teachers Union and State Government.
Decline in rate of increase of enrolments 1975-78	Caused significant readjustments in staffing and recruitment. Enabled significant reduction in Primary P/T ratios.	Great effect upon staffing and Pupil/Teacher ratios.	Not as great impact upon staffing policy as in N.S.W. and Victoria. Enrolment did not decline as in Victoria and N.S.W.	Situation of enrolment variations quite different to Victoria and N.S.W. Did not decline to same extent.	Affected staffing readjustments - S.A. relinquished N.T. schools staffing from 1973.	Effect of declining rate of enrolments was offset by higher resignation rates of teachers.
Teachers Union Initiations	Had great influence upon class size policy, salaries, and appointment and promotion policies.	Had great influence on staffing policy, entry qualifications, salaries and pupil/teacher ratio policy.	Not as militant as in N.S.W. and Victoria.	Not as militant as Union in N.S.W. and Victoria but has had significant effects upon class size and changed employment conditions for females.	Has had particular effect in employment conditions for females.	Because Union is greatly represented on Department committees, it has not been militant, but has had very powerful effects on staffing.