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Planning a stronger teacher workforce

Geoff N. Masters AO
Australian Council for Educational Research (ACER), geoff.masters@acer.edu.au

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Geoff Masters (/columnists/geoff-masters)
Chief Executive of the Australian Council for Educational Research

Planning a stronger teacher workforce

Ongoing improvements in educational performance in Australian schools depend on continual improvements in the quality of classroom teaching.

Australia faces a number of challenges over the next decade in planning the future teacher workforce. Some of these challenges were helpfully outlined by Dr Paul Weldon in a recent issue of **Policy Insights (http://research.acer.edu.au/policyinsights/2/)** and are well worth rehearsing here.

At the present time, the supply of teachers in Australia is not well matched to demand. As a nation we do a poorer job than some other countries in ensuring that we prepare an appropriate number of teachers in the areas in which they are most needed.

In some areas we have a significant *undersupply* of teachers. This is true in the area of language teaching, but also is true for the teaching of secondary mathematics, physics and chemistry. We also have an undersupply of appropriately qualified teachers in some regional and remote parts of Australia.

A consequence of undersupply is a growing number of teachers teaching 'out-of-field'[1]. It is estimated that 20 per cent of secondary mathematics classes and a similar percentage of physics classes are now taught by teachers who are teaching out-of-field. In geography, 40 per cent of classes involve out-of-field teaching.

On the other hand, Australia has a considerable *oversupply* of generalist primary teachers, with a marked oversupply in some states, including Victoria, South Australia and New South Wales.

There are also many thousands of Australian teachers who are registered to teach but who are not in the teaching workforce. Very little is known about this pool of registered teachers – including the areas in which they were trained or their availability for employment.

Planning for the teacher workforce is complicated by a number of other changes that are occurring in both the demand for, and supply of, future teachers.

First, there will be an increase in the number of teachers required over the next decade.

In the first decade of the 21st century, all Australian states except Queensland and Western Australia saw declines in their populations of primary students. This trend is being reversed in the second decade, with almost all states experiencing significant growth in student numbers. Particularly strong growth is being experienced in New South Wales, Victoria, Queensland and Western Australia.

As an illustration of this turnaround, the primary population in New South Wales declined by 9000 students in the decade to 2010, but in the decade to 2020, is projected to increase by 92 000 students.

Secondary schools will see this increase flow through from 2018.

A simple way of estimating the number of new teachers required to service this growth is to assume an average class size of 24 students. By this reckoning, the four most populous states between them will require an additional 1627 classes each year for at least the next ten years.

Second, important changes are occurring within the existing teacher workforce.

An important change over the past three decades has been a decline in the percentage of male teachers in secondary schools. Although the gender mix in primary schools has been fairly stable (with 80% of teachers being female), the percentage of male teachers in secondary schools has declined from a majority (55%) in 1981 to a minority (42%) currently.

At the same time, the teacher workforce is aging, particularly in some areas. In secondary schools, more men than women teach subjects such as physics (75% male), mathematics, chemistry and computing, but the average age of teachers of these subjects is increasing, with 50% of male mathematics teachers and more than 40% of male physics teachers now over fifty years of age.

And a growing number of teachers are choosing to work part-time. The percentage of part-time employment is particularly high among older teachers. Across the age range, 27% of all primary teachers and 20% of all secondary teachers now work part-time.

Third, growing numbers of teacher education students are being drawn from lower ATAR bands.

Important changes also are occurring on the supply side. With the Commonwealth Government no longer controlling the maximum number of funded places in initial teacher education programs, there has been strong recent growth in the numbers of students enrolling in initial teacher education.

Associated with this growth has been an increase in the number of students entering teacher education with relatively low ATARs. There is also evidence that the number of university applicants identifying teaching as their first preference has been quite stable over recent years, suggesting that a growing number of students are entering teaching after failing to obtain a place in their course of first choice.

This trend is of concern because we know that high-performing countries draw their teachers from the top third (and in some cases, the top 10-15%) of school leavers. Students entering teacher education directly from school in Australia tend to be drawn from the middle third of the student distribution. As the Teacher Education Ministerial Advisory Group observed recently, high academic achievement is only one requirement of future teachers. However, high-performing countries tend to require high academic achievement of entering teacher education students, and then select on the basis of skills and personal attributes required for effective teaching. These include interpersonal and communication skills, literacy and numeracy skills and a commitment to teaching as a career.

Planning ahead

Australia currently has an undersupply of teachers in some areas and an oversupply of teachers in others. There are also important changes occurring in the demand for teachers, the nature of the existing teacher workforce, and the cohort of students being prepared to become teachers.

Under these circumstances, it is essential that we have excellent data for workforce planning and a good understanding of developments and trends that will shape the teacher workforce of the future.

The overarching challenge is to ensure that Australia has the numbers of future teachers it requires and is not training too few or too many teachers; that we have teachers in the areas in which they will be required – geographically, by stage of schooling and by subject specialisation; and that we work to ensure Australia's future teaching workforce is drawn from the best and brightest of our school leavers.

Footnotes

[1] Teachers are assumed to be notionally qualified if they have studied a subject for at least one semester at second year tertiary level or have trained at tertiary level in teaching methodology in the subject concerned.