Teacher Education
Ministerial Advisory Group
Issues paper
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The document must be attributed as the Teacher Education Ministerial Advisory Group Issues Paper.
Minister's Message

The Australian Government has a plan to put students first by improving education outcomes and schools. All students should have a quality education with access to the best teachers and an up-to-date and relevant curriculum.

Teachers must be developed and supported to have a positive impact on students and their educational outcomes.

Under the Students First approach, the Australian Government will work with states and territories, teachers and parents to focus on four key areas that will make a difference:

- Teacher quality
- School autonomy
- Engaging parents in education
- Strengthening the curriculum

The quality of teaching is seen as one of the most important determinants affecting education performance. The first step to achieving a quality education, which is so critical to the future of young Australians and our nation as a whole, is to strengthen and build on the quality, professionalism and respect for the teaching profession.

Enhancing teacher education and standards is at the heart of the Australian Government’s plans to lift the quality of and respect for the teaching profession.

I have established the Teacher Education Ministerial Advisory Group to provide advice on how teacher education programmes could be improved to better prepare new teachers with the practical skills needed for the classroom.

I have asked the Advisory Group to identify common components regarded as world’s best practice in teacher education, with a particular focus on:

- pedagogical approaches — the ways teachers are first taught to teach in our universities and elsewhere, and the way they then teach their students in schools, along with the different ways teaching and learning can occur,
- subject content — how well teachers understand the content of the subjects they are teaching, and
- professional experience — the opportunity for pre-service teachers to put theory into practice through quality in-school learning experiences.

I have instructed the Advisory Group to focus on measures that are practical and which will have demonstrable benefits for students.

I encourage you to take this opportunity to provide input to the consultation process. Your contributions to the Advisory Group will help inform the next steps the Government takes to ensure teacher education programmes better prepare new teachers with the practical skills needed for the classroom.

The Hon Christopher Pyne MP
Minister for Education

April 2014
Introduction

Teacher quality is a major determinant of the overall quality of Australia’s school system. Improved teacher quality can raise expectations and outcomes, and better support student learning.

Research shows that the quality of the teacher is the single greatest in-school influence on student achievement\(^1\). After analysing the world’s top performing school systems, McKinsey and Company (2007)\(^2\) concluded that the quality of an education system simply cannot exceed the quality of its teachers. By focusing efforts on developing and delivering the best quality teacher education, there is the potential to improve the effectiveness of Australia’s school system. To ensure teachers have the best start possible in their career, teacher education must be rigorous and informed by current evidence and research.

There is strong national and international evidence that a teacher’s effectiveness has a powerful impact on students. In the Australian context, it is conservatively estimated that a student with an effective teacher can achieve in three quarters of a year what would take a full year with a less-effective teacher\(^3\).

Improving student outcomes will require schools and teachers to provide challenging, supportive and stimulating learning environments where evidence-based practice is used, actively reflected upon and encouraged.

New teachers need to be ready for the rigour and demands of teaching in classrooms that are more challenging and diverse than ever before, particularly due to the growing number of children with special needs. Graduates need to be confident with the content of the subjects they are teaching and proficient in using the best strategies to ensure all their students benefit. The quality of teacher education graduates depends on a number of factors, including the quality of the programmes provided and the commitment of schools and school systems to deliver quality professional experience placements\(^4\).

Teachers share with parents and the community a significant responsibility in preparing young people to lead successful and productive lives. This responsibility places increasingly complex demands on schools and teachers. One of the challenges is attracting those most suitable to the profession.

Teachers need to be capable of preparing students to live, work and be successful in a society in which they will be required to solve problems, work collaboratively, and think creatively and critically. Students will also need to be self-directed learners, and be committed to life-long learning, in a rapidly changing world. One aspect to achieving this is active and strong partnerships between teacher education providers, teacher employers, principals and teacher regulatory authorities.

The Advisory Group acknowledges the delivery models for teacher education courses across Australia are varied. There have been many government inquiries into teacher education over the years, amid public concern that not all new teachers are being adequately prepared for the classroom. Despite this, there is currently limited evidence on what constitutes effective teacher preparation. Much of the research undertaken to date focuses on individual elements of teacher education programmes and the perceptions of graduate teachers, school leaders and higher education faculties, without focusing on the ultimate effects on student learning.

\(^2\) McKinsey and Company (2007), *How the world’s best performing school systems come out on top*.
\(^3\) Leigh, A. (2010), *Estimating teacher effectiveness from two-year changes in students’ test scores*, Economics of Education Review.
\(^4\) Australian Institute for Teaching and School Leadership (2011), *Accreditation of Initial Teacher Education Programs in Australia*.
The Advisory Group will work to bring together the available evidence-base, and the views of key parties sought through the consultation process, to develop strong and practical recommendations. The recommendations will be targeted to the three focus areas of professional experience, subject content knowledge and pedagogical approaches, with the clear aim of improving student outcomes.

The Australian Government acknowledges that in the last few years, several state and territory governments have conducted inquiries and announced changes to education policy, some of which include new approaches to teacher education.

The following is an overview of the most recently announced jurisdictional reforms relevant to teacher education.

**New South Wales’** *Great Teaching, Inspired learning: Blueprint for Action* provides a set of 16 reforms across the career cycle of a teacher that aim to improve teacher quality in the state. Key reforms aim to ensure:

- Entrants into teacher education will be high academic performers, have well-developed literacy and numeracy skills and show an aptitude for teaching;
- Teaching attracts more of the brightest and motivated school leavers and career changers;
- Teacher education programs produce high quality graduates with personal attributes suited to teaching;
- All teacher education students receive high quality professional experience; and
- All beginning teachers receive high quality induction and support for their entry into the profession.

**Victoria’s** strategy *From New Directions to Action: World class teaching and school leadership*, aims to raise the quality and status of teachers, school leaders and education professionals. The first of its three broad categories focuses on attracting great people into teaching and improving their preparation. As part of this strategy Victoria plans to:

- Conduct a review of Victorian teacher education courses;
- Make entry simpler for strong candidates from diverse backgrounds;
- Develop a Talent Strategy, including a career planning framework to support new entrants; and
- Establish stronger relationships and partnerships between schools and universities.

**Queensland’s** strategy *A Fresh Start: Improving the preparation and quality of teachers for Queensland schools*, plans to introduce:

- Professional Experience Partnership Agreements between all higher education institutions and schools;
- A Professional Experience Reporting Framework for the assessment of placements;
- Strengthened governance of initial teacher education programs; and
- Annual reviews of initial teacher education programs.

**South Australia’s** vision for a high-quality public education system, set out in *Building a Stronger South Australia: High Quality Education*, includes a plan for all new South Australian teachers to hold a master’s qualification from 2020.

The Advisory Group Terms of Reference acknowledge there are opportunities in identifying best practice principles in the design, delivery and assessment of teacher education programmes internationally.
Particularly in articulating the features of teacher education programmes which will most effectively support successful transition to effective practice in the teaching workforce within the Australian context.

The Advisory Group will seek to ensure its recommendations support and encourage innovative teacher quality reforms at jurisdictional levels.

Teacher Education in Australia

Teacher education programmes in Australia currently are offered in a variety of forms to cater to a diverse range of pre-service teachers who will go on to teach a wide range of students.

Undergraduate teaching qualifications are offered either as a four-year Bachelor of Education degree or a four-year double degree comprising a discipline specific degree (such as a Bachelor of Science) and a Bachelor of Education. They are designed to integrate the acquisition of subject knowledge (the “what” to teach) with pedagogy (the “how to teach”).

Graduate-entry teaching qualifications generally build on previous undergraduate study in which the student has acquired a specified level of subject knowledge or other prerequisites. Graduate-entry teaching qualifications can include a 12-18 month Graduate Diploma of Education, a Graduate-Entry Bachelor of Education (two years) or a Masters of Teaching degree (two years). Some flexible pathways or employment-based models are also available to those pursuing a career in teaching.

When considering potential improvements that could be made to teacher education in Australia, it is helpful to understand the breadth of programmes and the number of pre-service teachers involved. There currently are around 400 accredited teacher education programmes from which aspiring teachers can choose, and these are delivered across 48 different higher education providers. Of the 400 existing programmes, 251 are at the undergraduate level and 149 are at the postgraduate level. In 2012, there were around 76,000 domestic pre-service teachers enrolled in these programmes - 62,000 in undergraduate programmes and 14,000 in postgraduate programmes.

Higher education providers use a range of mechanisms to select entrants to teacher education programmes, aiming to capture candidates’ capacity to undertake and be successful in the programme of study and to develop the necessary skills and knowledge to contribute to the teaching profession. In addition to prior academic achievement, some universities consider different information such as workplace or community learning and experience, and personal statements on the applicants’ motivations for wanting to become a teacher.

The vast majority of teacher education programmes are offered in public universities. Almost all students enrolled in a teacher education programme in Australia are in a ‘Commonwealth Supported Place’, which means the Australian Government subsidises the cost of their tuition. They are also required to make a contribution to their tuition, for which eligible pre-service teachers may utilise the ‘Higher Education Loan Program’ to help meet their share of the cost.

Government funding for teacher education is calculated giving consideration to the costs of the delivery of the professional experience component of programmes, including costs associated with organising placements, liaising with schools and visiting pre-service teachers on placement.

Graduates of teacher education programmes need to be prepared to teach effectively in a diverse range of settings as every school has a unique demographic profile. For example, when they graduate, teachers could be dealing with student populations from very diverse cultural backgrounds or with special needs. Likewise, they could be working in a small, rural Government school, or a large, metropolitan Independent school.
New teachers also need to be of the quality and quantity required to meet the greater demands now being made of Australian schools for improved student performance, including the need to engage with and meet the expectations of local school communities.

**Recent reforms**

In 2013, a national approach to teacher education to drive quality and a degree of consistency in the preparation of new teachers was collaboratively developed with employing bodies and other key education stakeholders, and introduced through the *Accreditation of Initial Teacher Education Programs in Australia: Standards and Procedures* (Accreditation Standards). The Accreditation Standards set requirements for teacher education programmes, while allowing higher education providers the flexibility to design and deliver their programmes in ways that best meet local needs and contexts.

Ensuring that all new teachers meet the Graduate career stage of the *Australian Professional Standards for Teachers* (Professional Standards) is the primary aim of the Accreditation Standards. The Professional Standards set out what teachers should know and be able to do across different stages of their career, describing the knowledge, practice and professional engagement required to be an effective educator.

The development of the Accreditation Standards and Professional Standards was led by the Australian Institute for Teaching and School Leadership (AITSL), in close collaboration with teacher employers and key education stakeholders. AITSL is a national body positioned to provide leadership for the Commonwealth, state and territory governments in promoting excellence in the profession of teaching and school leadership. AITSL is responsible for driving rigorous professional standards and supporting high quality professional practice, in collaboration with teacher employers and teacher education providers.

AITSL is also progressing three additional initiatives in the area of teacher education and has been asked to do so in close collaboration with Universities Australia, the peak body representing Australian Universities, and thus the primary source of future teachers:

- national selection guidelines for admission into initial teacher education,
- national approach to professional experience, and
- national literacy and numeracy assessment for teacher education students.

It is important that in this context reform does not become confused with regulation. There is a need to ensure that national and state initiatives work harmoniously, and that desirable innovation and diversity in teacher education programmes is not inhibited.

**Practicalities**

Throughout these discussions, certain practicalities must be kept firmly in mind.

The first is that teaching is one of Australia’s most vital professions, with the future of millions of young Australians depending upon the production of a teaching workforce that is both high in quality and of an appropriate size. Any proposed reform must assure the continuation of this professional workforce commensurate with the demand of schools and students.

The second is cost. Money spent improving the quality of teaching is an investment in the future, but any proposal for reform must be cost effective in terms of supporting the high quality, critical teaching workforce required by Australia.
Areas for Discussion

In light of the work that has been occurring at a national and jurisdictional level aimed at improving the quality of teaching in our schools, it makes sense to examine our teacher education programmes to ensure they are equipping new teachers with the knowledge and skills they need to be effective in the classroom. Pedagogical approaches, subject content knowledge and professional experience are interconnected and are all key dimensions that need to be examined.

The remainder of this paper sets out a number of specific areas for discussion and questions to help guide the preparation of comments and submissions. The four high level questions posed are:

- What characteristics should be fostered and developed in graduate teachers through their initial teacher education?
- What teaching practices should be developed in graduate teachers through their initial teacher education?
- What level of integration should there be between initial teacher education providers and schools?
- What balance is needed between understanding what is taught and how it is taught?

More detailed questions are posed under each of these. Overall, the Advisory Group particularly welcomes practical ideas and solutions that can suggest better ways of working that will ultimately benefit students. Details about how to make a submission or become involved in the review are set out at the end of the paper.

What characteristics should be fostered and developed in graduate teachers through their initial teacher education?

Teachers need a broad range of skills and characteristics to maximise the learning of diverse student populations. Research shows that attributes such as interpersonal and communication skills, resilience and flexibility, the ability to self-reflect and a passion for teaching and learning also influence teacher effectiveness. Strong literacy and numeracy skills also are important for teachers to meet the demands of teaching.

Students should be taught by committed professionals who have a passion for the work that they do, who are able to inspire students to seek out knowledge and who instil in students a love of learning. Teachers need to actively reflect on their practice and continually strive to improve using the data and research available to them. Similarly, teacher educators should also be committed professionals who utilise the most current research in their practice.

The potential of pre-service teachers needs to be fostered through their teacher education programmes, to ensure that all graduates have the characteristics needed for effective teaching.

How can those best suited to the teaching profession be identified?

What are the skills and personal characteristics of an effective beginning teacher? How can teacher education courses best develop these?
What teaching practices should be developed in graduate teachers through their initial teacher education?

Improvements in teaching cannot happen without the development of effective teaching practices\textsuperscript{5}. However, there is a lack of agreement about the effectiveness of the various teaching methods used in Australian schools, and limited discussion has occurred about the teaching practices that should be taught to beginning teachers through their teacher education programmes.

Some pre-service teachers and teacher employers have expressed concern that certain teaching practices being taught in teacher education programmes may not be up-to-date with current research findings, and that current, evidence-based approaches may not be well understood by those teaching them\textsuperscript{6}. There are also concerns that many teaching practices used in schools are not informed by evidence-based research\textsuperscript{7}. There can be a lack of clarity as to what constitutes evidence-based research, and how this translates into student outcomes. All this has clear potential implications for student outcomes and is contributing to the current situation in which the gap between the most effective and least effective teaching strategies is perceived to be widening\textsuperscript{8}.

All teachers, particularly beginning teachers, need to have a clear understanding and knowledge of teaching strategies and techniques that will improve student learning and help to create an environment in which teachers and the profession are respected.

How can the teaching practices that produce the best student outcomes be identified?

How can teacher education programmes encourage teachers to reflect on evidence to support their choice of teaching practice?

How does reflection on evidence translate into student outcomes?

What level of integration should there be between initial teacher education providers and schools?

The Government recognises that the professional experience component of teacher education programmes is critical in providing the opportunity for pre-service teachers to put theory into practice. What is not clear, however, is which approaches to professional experience provide the best outcomes, how the supervision of pre-service teachers can be best managed and how effective teacher education provider and school partnerships can be encouraged.

Professional experience, as it relates to teacher education, is pre-service teacher engagement with workplaces and communities as a formal part of the teacher education programme\textsuperscript{9} and can include

\begin{itemize}
  \item Stigler, J.W. and Hiebert, J. (1999), \textit{The Teaching Gap - best ideas from the world’s teachers for improving education in the classroom}.
  \item National Inquiry into the Teaching of Literacy (2005), \textit{Teaching Reading Report and Recommendations}. Canberra, Australia: Department of Education, Science and Training.
  \item Smigel, H. & Harris, J. (2008), \textit{Audit of work-integrated programs at Flinders University}. Adelaide: Flinders University.
\end{itemize}
experiences such as supervised practicum, internships, observations and community placements. Professional experience in schools is a requirement of all teacher education programmes in Australia and reflects the differing needs of each sector of schooling; typically described as early, primary, middle and secondary.

The professional experience component of teacher education programmes provides a prime opportunity for greater integration between teacher education providers and schools in the preparation of new teachers. Professional experience provides a valuable opportunity for pre-service teachers to develop their skills by applying what they learn in their degree to real school situations.

Professional experience in Australian teacher education is not without its issues. One is cost, with education systems, schools and universities sometimes claiming difficulty in funding their programmes. A related issue is whether the concept of professional experience could be widened beyond the physical school community to take advantage of technological and pedagogical advances.

**What evidence is there that effective integration achieves good teaching practice? What are the most effective types of integrated experiences in preparing new teachers?**

**What are the cost implications of more integrated professional experience? Are there more effective ways in which professional experience might be funded?**

**What other methods, or combination of these methods could achieve better outcomes than the current approach to professional experience?**

Effective partnerships between teacher education providers and schools are important in managing the complexities of professional experience and the integration of theory and practice. It has been claimed that some partnerships are currently inadequate in addressing the increasing demand for placements, and in facilitating a useful and reciprocal feedback loop. There is also concern about the selection and preparation of mentor teachers who support and assess pre-service teachers undertaking their professional experience.

**How can partnerships between teacher education providers and schools be strengthened to make teacher education more effective?**

**How can teacher education providers and schools best work together to select and train mentor teachers to effectively support pre-service teachers on professional experience?**

Consideration should be given to the models of professional experience that are the most effective in preparing pre-service teachers for the classroom, acknowledging that a variety of models may be viable to meet the diverse school settings within an Australian context. Further, the rigour of the assessment of pre-service teachers undertaking professional experience across different higher education institutions has been criticised with some arguing for greater consistency in assessment of classroom readiness.

Teacher education providers and schools have an interrelated and shared responsibility for the delivery of quality professional experiences for pre-service teachers, helping them gain the practical skills needed for the classroom with the support of highly effective teachers. Having a strong university and school partnership is seen as a critical component of effective professional experience in teacher education.

**How can consistency of good practice and continuous improvement across teacher education providers and schools be assured?**
What balance is needed between understanding what is taught and how it is taught?

To ensure all students have a quality education, access to an up-to-date and relevant curriculum is essential. A focus on the subject content being taught has been identified as a critical feature of teacher education programmes which impacts on teacher preparedness and effectiveness\(^{10}\).

Recent debate has focused on the level of subject content teachers should be required to have, both for primary and secondary teaching and the implications this may have for particular subject areas of specialisation. A deep understanding of subject content is often stated as the basis for effective teaching. Improving teacher quality and raising learning outcomes for students is dependent on equipping teachers with both the subject content knowledge and the subject specific teaching strategies which will allow them to effectively address the learning and development needs of the wide variety of students with different levels of ability and aptitude.

The achievement levels of Australian students in basic literacy and numeracy has also been the focus of recent discussion. Debate has centred on how to best address improving the literacy and numeracy of students and whether teachers are appropriately prepared to address these challenges.

What is the desirable interaction between content knowledge and teaching practice for developing teachers? What is the difference for primary and secondary teaching? Why is there a difference?

Should there be explicit training in how to teach literacy and numeracy in all teaching courses?

A teacher is required not just to know the content to an appropriate level, but to know how to communicate that content in a way that can bring students from an introduction to a concept through to deeper understanding of the concept. Teachers need to be able to help students relate one idea to another, and address any misunderstandings, which means teachers need to know and understand how individual students best learn specific subjects.

Teachers also need to know how students learn. Teaching is more than a mere exercise in communication. It involves understanding how a message is to be effectively conveyed and received in highly individual and variable contexts.

The balance between knowing what is taught and how it is taught is vital in making ideas accessible to students and making connections to their everyday life.

How can the balance between the need for subject specialisation and a generalist approach in primary teaching qualifications be addressed?

What, if any, changes need to be made to the structure of teacher education courses? Should content be studied before pedagogy (i.e. should ‘what’ to teach be studied before the ‘how’ to teach)?

What barriers are there to restructuring teacher education courses to ensure they address these concerns, and how may they be overcome?

Schools and communities report that, at times, they are limited in the subjects that schools are able to offer because of unfilled teaching positions, with the biggest impact often being felt in rural and remote areas. There is concern that the quality of teaching and therefore student outcomes is affected if schools have to reduce the curriculum on offer or employ less qualified teachers. There is also concern about the long term impact this may have on generating student interest and a desire to undertake further study in these areas.

The participation rate of Australian students studying foreign languages is small and has fallen in recent times. Between 2000 and 2008, the share of Australian students learning a tertiary accredited language other than English in year 12 dropped in a time where overall student numbers increased by almost 9 per cent.  

The Australian Government has made a commitment to improving the take up of foreign languages in Australian schools. The target is, within a decade, that up to 40 per cent of year 12 students are once more studying a foreign language.

If this target is to be met, then teacher education programmes for the preparation of language teachers will need to be examined to ensure that Australia is producing and keeping quality languages teachers. This is particularly important given one of the common issues identified as contributing to the declining participation rates of students undertaking study in foreign languages is a shortage of qualified teachers.

Similarly, there has been a declining participation in higher-level mathematics and physical sciences at upper secondary level. Students who do participate tend to enrol at the elementary level, rather than the intermediate or advanced level. In part, this decline has been attributed to a shortage of teachers with appropriate training to be able to teach science, technology, engineering and mathematics subjects at the secondary level.

Increasing the availability of appropriately qualified teachers in these subject areas will be critical to halting the decline in student participation and in improving student outcomes. Teacher education programmes need to ensure new teachers enter the classroom with strong subject content knowledge, as well as competence in the underlying teaching strategies that will allow them to be effective teachers from their first day and then enable them to continuously improve.

Why does Australia face a shortage of maths, science and language teachers?

What can be done to encourage teaching students to develop a specialisation in these areas?

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13 Australian Department of Education, Employment and Workplace Relations (2008), *Opening up pathways: Engagement in STEM across the Primary-Secondary school transition*.

More information

In response to this Issues Paper, the Advisory Group is looking for creative ideas from a wide range of people to give a variety of perspectives. Ideas presented should be evidence-based practical solutions, suggesting better ways to inform and deliver teacher education programmes.

The Advisory Group is also conducting additional international research to inform the recommendations.

Submissions will be accepted until 5.30pm AEST 13 June 2014.

Go to www.studentsfirst.gov.au/teacher-education-ministerial-advisory-group to find out how you can make a contribution.