

Melbourne Graduate School of Education

Quality Initial Teacher Education Review

Response to Discussion Paper

18/07/2021

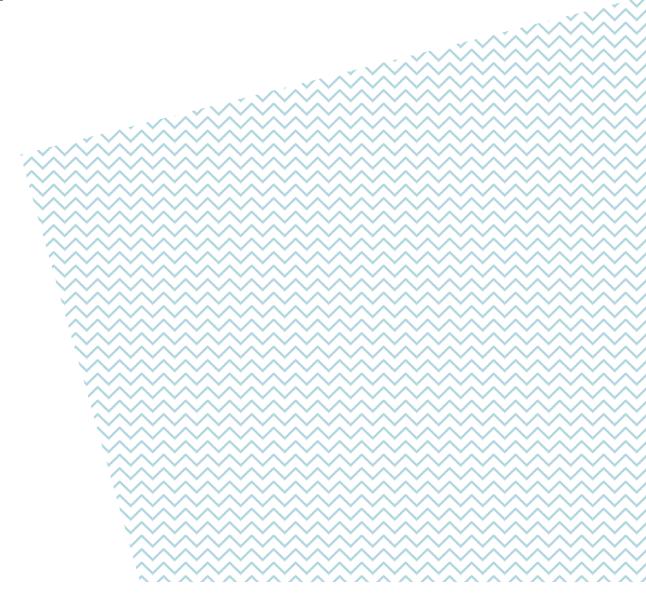


Table of Contents

Introduction	
Recommendations	4
PART A. Attracting high-quality candidates into ITE matters	4
PART B. Preparing ITE students to be effective teachers	4
PART C. Cross cutting recommendations	
Part A. Attracting high-quality candidates into ITE matters	6
1. Attracting High Impact Teachers	6
2. Multiple pathways and flexible access	7
3. The selection of ITE candidates	8
4. Understanding ITE program completion rates	10
5. The supply and demand of the teacher work force	
6. Retention of the teacher workforce & Mobility incentives	
Part B. Preparing ITE students to be effective teachers	13
1. The contemporary nature of the Australian Professional Standards for Teachers	13
2. ITE programs, curriculum and evidence-based teaching	
3. Professional practice and the role of schools	16
4. Classroom Readiness	17
5. The Education community's role in supporting the next generation of teachers	19
Part C. Cross cutting recommendations	20
1. Inclusion of Early Childhood Education	21
2. Simplifying and Aligning the Authorising Environment	21
3. Indigenous contexts and ITE	
4. Research and evaluation into teacher education effectiveness	
References	24

Introduction

The University of Melbourne's Graduate School of Education (MGSE) welcomes the opportunity to provide a response to the Discussion Paper of the Quality Initial Teacher Education (ITE) Review.

The MGSE is home to the Master of Teaching, a flagship graduate pre-service initial teacher education program. The program commenced in 2008 with the advent of the 'Melbourne Model', following the establishment of Education as a Graduate School. It represented a paradigm shift in the approach to initial teacher education. The Master of Teaching program encompasses five streams: Early Childhood, Early Childhood and Primary, Primary, Secondary and Secondary Internship which is an employment-based pathway option. In addition to the Master of Teaching suite of courses, MGSE also offers a Graduate Diploma in Early Childhood Teaching which is online and tailored for those already working in Early Childhood and Care settings.

As the Melbourne Master of Teaching moves into its next phase of reaccreditation we see this as an important opportunity to impact significantly on initial teacher education, challenge our thinking about our program and contribute to the ITE and education governance systems nationally. We also take a very firm stance that ITE teacher education does not need to be 'fixed' but enhanced and that there are quality programs across Australia.

This response does not address all questions posed in the Discussion Paper, rather, it focuses on the areas specific to enhancing the quality of initial teacher education. The submission centres on the following key ideas:

- Celebrating and raising the status of the teaching profession including initial teacher education
- A systems approach to understanding the teaching workforce across the teaching life cycle in the context of our diverse nation
- Selecting high-quality candidates using sophisticated methods that use both cognitive and disposition dimensions to support and encourage teacher self-reflection
- Multiple teacher education pathways of varying durations to attract and diversify the workforce and support a range of educational settings and contexts
- Rigorous assessment that supports pre-service teachers through their preparation
- Investment and resourcing in partnerships with schools and early learning centres, and education systems to promote a whole of education approach to raising quality for all
- A commitment to supporting ongoing whole of career development of teachers, and
- Monitoring, evaluation and research of the quality of our education system including our education standards.

We argue that our ITE system needs to be responsive to changes in education and consequently collaborating with ITE providers to develop a future focused ITE whole system that prepares every teaching graduate with the skills to adapt to a changing education environment is essential. We would argue that this future ITE system must be one that embraces, and reflects, our unique sociocultural context.

The submission is divided into three parts. Part A and Part B address selected questions of the Discussion Paper. Part C offers an MGSE perspective on cross-cutting areas that impact on the supply and demand of quality teachers and the role of ITE providers in their preparation.

Recommendations

PART A. Attracting high-quality candidates into ITE matters

Understanding the supply and demand dynamic of the teaching workforce and the teaching life cycle in the context of our diverse nation requires a systems approach and the teaching life cycle in the context of our diverse nation.

Recommendation 1: The MGSE recommends celebrating and enhancing teaching as a profession through social marketing and social media to demonstrate the benefits of teaching as a significant lifelong career.

Recommendation 2: The MGSE recommends ensuring flexibility of access to the profession through providing multiple pathways of varying duration that respond to the needs of a diverse workforce across a range of educational settings.

Recommendation 3: The MGSE recommends ITE providers use comprehensive and validated measures of selection that include cognitive and disposition dimensions to encourage self-reflection by pre-service teachers and provide clarity about the requirements necessary to reach classroom ready status.

Recommendation 4: The MGSE recommends that attrition from ITE programs be determined by progressive milestones or exit points rather than program completion. Further, that ITE providers and schools collaboratively support pre-service teachers to complete their degrees.

Recommendation 5: The MGSE recommends whole of sector investment focus on increasing clarity and access to evidence relating to workforce shortages and potential supply. In addition, mechanisms to support staffing in hard to teach areas are necessary.

Recommendation 6: The MGSE recommends sources of workforce data (e.g., selection data, graduate destination and graduate teacher survey data) be linked to form a national database that can illuminate the career life cycles of teachers and inform decision making about incentives and support mechanisms across this diverse sector.

PART B. Preparing ITE students to be effective teachers

The preparation of pre-service teachers to be effective educators in the current competency-focussed context of increasing accountability remains a responsibility of the sector as a whole and requires multiple inputs in light of an increasing accountability and competency focussed educational environment.

Recommendation 7: The MGSE recommends that, given changes in contemporary educational research, the Australian Professional Standards for Teachers be updated to reflect changes to contemporary educational research and to reflect the need to incorporate new and developing competences, skills and knowledge for both teachers and students.

Recommendation 8: The MGSE recommends that ongoing support be provided to high-quality evidence-based teaching practices which seek to both integrate learning across disciplines, assessments and placement and support differentiated learning experiences across contexts.

Recommendation 9: The MGSE recommends enhancing partnerships between schools and ITE providers in developing the professional practice of pre-service teachers, including promoting the benefits of engagement with ITE providers for schools.

Recommendation 10: The MGSE recommends that comparable Teaching Performance Assessment (TPA) measures be embedded into ITE programs, and appropriate systems of cross-institutional moderation be

adopted to ensure sustainability and consistency of TPAs nationally. Further, consistent positioning of TPAs in regulatory systems, including national benchmarking, will ensure fidelity, consistency of implementation, and ultimately, impact.

Recommendation 11: The MGSE recommends that ITE providers deliver ongoing support for ITE graduates in the form of professional learning during induction, and simultaneously provide mentor teachers with professional learning in relation to the mentoring and assessment of pre-service teachers.

PART C. Cross cutting recommendations

MGSE posits that a number of cross-cutting areas impact on the role of ITE providers and the supply and demand of quality teachers.

Recommendation 12: The MGSE recommends that the Review reflects on the preparation of Early Childhood Educators as a specialised sector and take note of varying regulatory requirements, standards for teaching, pedagogical preferences, and working conditions in this context.

Recommendation 13: The MGSE recommends that the authorising environments at national, state and territory levels be reviewed, and mechanisms put in place to support consistent and less bureaucratic approaches to ITE provider reaccreditation.

Recommendation 14: The MGSE recommends the development of focussed standards and indicators that will guide ITE providers to embed and implement Aboriginal and Torres Strait Islander knowledge and pedagogies into their existing courses.

Recommendation 15: The MGSE recommends a consistent evidence-based approach to the capacity building of Teacher Educators be supported by the development of a repository of research into ITE. Aligned to this, it is suggested that data-linking across national and local datasets will support the ongoing monitoring and evaluation of teacher education programs and the development of professional learning for teachers.

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Part A. Attracting high-quality candidates into ITE matters

Focussed questions addressed:

- What can be done to attract more high-achievers and career changers to the profession?
- What features of the current ITE system may prevent high-quality mid- to late-career professionals transitioning to teaching? Has the move to a two-year Masters affected your decision to enter ITE?
- How could more high-quality candidates from diverse backgrounds be encouraged to consider a career in teaching?
- How could more Aboriginal and Torres Strait Islander peoples be encouraged and supported to choose a career in teaching?

Understanding the supply and demand dynamic of the teaching workforce and the teaching life cycle in the context of our diverse nation requires a systems approach. This section is divided into a number of distinct areas, attracting impactful teachers, the selection of ITE candidates, understanding ITE program completion rates, the supply and demand, and retention of the teacher workforce.

1. Attracting High Impact Teachers

Attracting and recruiting a diverse group of potential candidates into teaching has been a long-term policy goal. We would argue that attracting and recruiting require different approaches. Attracting a diverse workforce at its foundation means marketing teaching as an esteemed profession as is the case within Finland. Perception of our profession is variable within Australian contexts. Two international examples offer insights from reforms that effectively shifted the status of teaching. Finland has achieved a significant shift in the perception of teaching as a highly esteemed profession. Teaching has become the most sought-after profession after medicine, and many teachers pursue a PhD and then remain in teaching. Similarly, Singapore pursued reforms to explicitly redefine the role of teachers as requiring higher levels of expertise by creating a career ladder to provide for a variety of different kinds of leadership positions (in teaching, leadership, special domains) over the course of a teacher's career (Darling-Hammond, 2017; Ng Pak, 2017). To address this overall need, we suggest the consideration of number of areas.

Greater promotion of the requirements of effective teaching and teachers would increase the community's awareness of the teaching profession and may assist with the celebration of the profession. The perception of teaching and teachers has moved within COVID-19 pandemic and may be an advantage. During COVID the high levels of expertise needed to be a teacher were realised (Jensen, 2020). Our research also suggests that potential candidates and in fact the community has little understanding of teacher quality Hattie et.al. (2014).

MGSE's Teacher Capability Assessment Tool (TCAT) data yields a large database of over 20,000 records illustrating who is applying to become a teacher as well as their perceptions of the nature of an effective teacher. Generally, the data tells us that potential PST candidates believe effective teaching is about loving children and less about developing knowledge, skills and an evaluative mindset (Clinton, et.al., 2021). TCAT supports the idea of self-reflection to ensure that decisions about choosing teaching as a career are informed.

To understand the relationship between active recruitment of diverse cultural groups and particularly our Indigenous communities into teaching (but also issues relating to retention) and specific workforce disciplines the development of a social marketing strategy at a national level is essential. Without explicit information about need and local contexts policies about supply and demand are fruitless. Social marketing is an approach used to develop activities aimed at changing or maintaining people's behaviour for the benefit of individuals and society as a whole. The principles of social marketing are centred on consumer contact that is targeted, local, credible, and continuous. This would be advantageous for example in understanding appropriate targeting of undergraduate discipline as well as industry groups such as science, health and engineering to ensure a pathway into graduate teaching programs.

Recommendation 1: The MGSE recommends celebrating and enhancing teaching as a profession through social marketing and social media to demonstrate the benefits of teaching as a significant lifelong career.

- Develop a national social marketing framework based on working with children, growing expertise as a teacher, and opportunities to specialise.
- Develop a social marketing campaign to take into account specialised disciplines and contextual areas of need.
- Segment populations through a social marketing process to ensure rural and remote areas of need and hard to fill subject domains are targeted.
- o Explicitly target and celebrate teachers at a local level.
- Co-design the social marketing campaign with ITE providers in particular to target undergraduate disciplines.

2. Multiple pathways and flexible access

It is argued that our recruitment processes are restrictive and not appealing for the Australian diverse population. The challenge of attracting high quality teachers, and teachers with post ITE specialisations is particularly prevalent in low SES areas or hard to teach areas. Multiple pathways that provide for a diverse range of candidates with variable duration of programs would ensure mid-career professionals move into the teaching profession and in addition, provide the opportunity for more Aboriginal and Torres Strait Islander peoples to gain entry into a teaching program. Noting that quality is a priority, the reduction of years for graduate ITE programs could have great implications for schools, pre-service teachers (PSTs) and programs. However, there is some evidence to suggest that alternative pathways are beneficial, for example the University of Melbourne has the Secondary Internship stream of the Master of Teaching offering an employment-based pathway into hard to staff schools.

The Master of Teaching (Secondary Internship) has been offered by MGSE since 2015 for individuals who have strong discipline backgrounds and who aspire to become teachers. Interest in the Internship has continued to be very strong with high quality candidates entering the program as a career change. The Internship has worked to place Interns in 95 hard to staff schools across Victoria over the last 5 years significantly impacting the staff profile of schools in regional, rural and remote areas.

The Internship program at the MGSE represents an alternative pathway for teacher training. Interns are employed to teach at a school while they study to attain a teaching qualification. This approach gives them flexibility to combine academic studies with employment that is relevant to their learning, allowing them to learn on the job and earn a salary at the same time.

These programs emphasise the importance of the research evidence-base as a foundation for excellent educational practice, as well as developing Interns' capacity for critical inquiry and professional reflection. Special emphasis is placed on an Intern's capacity to teach a diverse range of students and to promote equity in education.

On completion of the two-year program, Interns will have attained 200 credit points (equivalent to two years' full-time study) and are eligible for full teacher registration status with the VIT, provided they complete the Inquiry Process to demonstrate proficiency against the Australian Professional Standards for Teachers (APST).

We would suggest that that ITE providers have explore several options to explore:

- Pathways for alternative entry, for example pre-ITE programs (e.g., TAFE) are potentially viable
 options for those diverse candidates where traditional entry is not possible.
- Internationally Residency programs have demonstrated some success and are worthwhile pursuing (Cochran-Smith, 2021).

- Local pathways into the profession are also noted as valuable in particular programs within the US (Podolsky, et.al, 2019) have adopted a grow your own policy with some success.
- Procurement partnerships with Departments of Education or authorised agencies and ITE providers for specialised programs or programs in specific contexts.

Systems and the authorising environment need to be flexible enough locally and nationally to support this range of pathways. Consideration of additional categories of permission to teach (beyond to address workforce shortages or pathways to registration) or expansion of the specified conditions within these categories may pave the way for innovative alternative 'hybrid' pathways into teaching co-designed and co-delivered by ITE providers in partnership with schools which could include a 'fast track option' for high achievers who can commence teaching after one year of full time study and complete the remainder of their studies whilst employed within a school. These pathways could be designed to address specific community and educational needs and offer greater diversity to the current employment-based pathways, while still maintaining entry and exit requirement.

Program length is an important consideration. Our review of the MGSE Master of Teaching suggests that while for some the 2-year program has had some negative impact on access for mid-career candidates. We would argue that the 2-year graduate program is still a viable option for some candidates. Our view is the practice of teaching is not intuitive it must be learned and understood no matter who you are or what knowledge and experience one possesses. It is suggested that while there is potential for 1-year programs and other alternative pathways provided the prospective candidates can demonstrate prior knowledge and experience. Assessing a candidate to understand their learning needs as they enter the profession is essential.

Multiple pathways are intricately related to the notion of attracting a diverse workforce into the teaching profession as well as selection systems and completion rates. We would argue that providing feedback to candidates about their pre-dispositional suitability and desire to enter the teaching profession assists not only in career choice but also allows the candidates and the ITE provider to make decisions about choice of education pathway.

Recommendation 2: The MGSE recommends ensuring flexibility of access to the profession through providing multiple pathways of varying duration that respond to the needs of a diverse workforce across a range of educational settings.

- Ensure all potential candidates are aware of what they need to achieve to attain classroom readiness.
- ITE providers can be encouraged to explore pathway options to suit targeted populations.
- Programs of variable length options are an important consideration for ITE providers.

3. The selection of ITE candidates

Focussed Questions addressed

- Should more be done to identify suitability for a career in teaching earlier in the degree or before entry to ITE? What might this look like?
- What evidence is there that the introduction of assessments of non-academic characteristics has had an impact on admission, progress, completion, and retention of ITE students?

A highly competent teacher workforce is essential to support children's educational outcomes (Hattie, 2012). Preparing graduates for teaching diverse student cohorts is not only a matter of providing them with knowledge and skills. Part of achieving optimum preparation of teachers in order for them to cater for a

range of diversities is to increase the diversity of the PST cohort. One way to achieve this is to ensure that the selection of teacher candidates is more reflective of broader society than is currently the case.

Considering the dispositional characteristics of the teacher is considered essential (Bowles et.al., 2015; Clinton & Dawson, 2018). Effective teachers possess a range of characteristics and importantly the capability to enact a range of teaching strategies while extending their educational knowledge, building positive relationships within the school and education community (Clinton et.al., 2018). The importance of measuring the dispositions of teacher candidates cannot be understated (Saltis, Giancaterino & Pierce 2021). Teacher candidate dispositions have been correlated with teacher success and are one of the most important factors in a student's education (Baumert & Kunter, 2013). Evidence suggests that particular dispositions contribute significantly to successful course completion, (Clinton & Dawson, 2018).

In 2013 after reviewing the evidence on the methods of selection into professions which demonstrates that interviews and recommendation provided little predicative validity for course completion of professional success, the MGSE chose to build a valid and reliable evidence-based measure to support decisions about selection in the MGSE Master of Teaching. This measure sits alongside grade point average as required by the University of Melbourne and English language requirements for offshore international ITE candidates.

The Teacher Capability Assessment Tool (TCAT) is an evidence-based approach to the selection and development of pre-service teachers. The tool takes a life cycle view to pre-service teacher development from selection and entry into initial teacher education programs through development of the teaching professional into teaching employment. Embedded within the tool are assessments focusing on a range of factors including motivations for teaching, cognitive reasoning skills and non-cognitive domains. TCAT also leverages the power of feedback and self-reflection by providing a personalised learning environment for the developing teacher. At selection and entry, the TCAT model comprises two core and two extended components. The two core components are: Informed Self-Selection, and Cognitive and Non-Cognitive Skill Assessment. In addition, the assessments explore the reasons why people are applying to enter different teacher education programs, understand their concept of effective teachers as well as explore a number of psychosocial characteristics such as cultural competency and resilience of the candidates.

Benchmarks for entry are set annually across the dimensions of the assessment and all candidates are required to sit the assessment. The assessment has been utilised internationally and various states nationally.

TCAT results have demonstrated a significant predicative relationship with completion, course weighted averages and significantly with the MGSE clinical praxis examinations (Clinton, 2016; Clinton & Dawson, 2018). Dispositional measures combined with a grade point average score is a powerful predictor of success in an ITE program. Recently we have demonstrated significant correlations with the AfGT as a measure of teacher performance (Clinton et.al., 2019). It should be noted that it is not possible to relate TCAT to practicum as practicum has such limited variance as a binary measure. TCAT is also significantly related positively to LANTITE.

Recommendation 3: The MGSE recommends ITE providers use comprehensive and validated measures of selection that include cognitive and disposition dimensions to encourage self-reflection by preservice teachers and provide clarity about the requirements necessary to reach classroom ready status.

- Provision of self-review entry assessments would ensure candidates are informed about the characteristics necessary to develop as successful teachers.
- Establish a national program of research focused on understanding the benefits of teacher selection assessments.
- O Develop a research program that investigates links between data (e.g., PST entry assessments (TCAT), TPA outcomes, the AfGT, student outcome data, teacher workforce data).

4. Understanding ITE program completion rates

Focussed questions addressed:

- Are low completion rates an issue? What is the impact? Can low completion rates be addressed?
- What are the main reasons ITE students leave an ITE course before completion?
- Is the degree of variability in completion rates between providers ideal? What could be done to address this?

Completion rates reflect the educational challenge of initial teacher education that is to transition a diverse cohort of PSTs into contributing members of the teaching profession. Completion rates are indicative of the admissions processes and standards applied, which connect with the level of difficulty of the learning task faced by an incoming candidate, and the level of support able to be provided through the ITE degree. Not all PSTs will be successful and exit from a program will occur throughout the life of the program.

Reasons for candidates leaving an ITE course before completion (attrition) often revolve around the capacity of the PST (with everything that is going on in their lives and the backgrounds they bring to their degree) to meet the expectations required of them through the degree, by both ITE providers and schools/centres.

Podolosky et.al., (2019) along with Darling-Hammond (2017) cite a number of reasons for career decisions at this early stage of teacher education, primarily teacher preparation quality, costs of entry, prospective career pathways, working conditions and salaries, induction and support for new teachers.

Attrition data for the field of Education for Postgraduate coursework used by the Higher Education Information Management System (HEIMS) (i.e., mandatory reporting), does not provide a useful data set to understand attrition patterns specific to teacher education programs. MGSE has undertaken analysis of attrition and withdrawal reasons for each course of the Master of Teaching. Data demonstrates the exit points and withdrawal reasons which offer insights to common exit milestones and the most cited reasons which include unsatisfactory academic progress (including LANTITE), personal reasons, study transfer, dissatisfaction with the course or placement, or a disconnect between their perception and the reality of teaching which makes entering the teaching profession no longer attractive to them.

The variable that can be most readily influenced here by ITE providers, if there is a wish to maintain intake numbers, is the amount of support which can be offered through the ITE degree to assist PSTs who experience moments of struggle. "Above all, the 'recruit – burnout – replace' model must be replaced with an 'educate – mentor – nurture' model" (Gordon, 2020: p.672). Suitability for a career in teaching could be

inclusive of a much wider population of people, if the supports are in place through the ITE degree to cater to the diverse population of applicants, which requires more investment than is being offered currently.

The MGSE can illustrate the worth of pre-entry assessments by demonstrating the predictive relationship between entry measures (TCAT) that are both cognitive and dispositional, and completion, course weighted average and the Teaching Performance Assessment (AfGT) and suggest that rigorous assessment such as the clinical praxis examinations and linking of information throughout the duration of the program allows candidates and teacher educators to make informed decisions about appropriate exits and potential pathways into other programs and careers for non-completing PSTs.

Recommendation 4: The MGSE recommends that attrition from ITE programs be determined by progressive milestones or exit points rather than program completion. Further, that ITE providers and schools collaboratively support pre-service teachers to complete their degrees.

- ITE programs through the provision of rigorous assessment (clinical praxis exams) and opportunities for self-reflection and professional responsibility (TCAT profile, Clinical Teaching Specialists, English Language Support).
- Ensure that a key element of ITE program's design and delivery mitigate attrition risks and offer replicable solutions such as on-campus support.
- Investment in extensive in-field support and supervision through partnerships between school mentor teachers and university academics engaged as Clinical Teaching Specialists who visit preservice teachers during professional experience placements.

5. The supply and demand of the teacher work force

Focussed questions addressed:

- Does the supply of teachers entering the workforce match areas of need?
- Should something be done to match the supply of teachers from ITE providers with the demands of jurisdictions and sectors? What would this look like?

A highly competent teacher workforce is essential to support children's educational outcomes. Teacher shortages generally accrue in specific geographical areas when the supply of teachers, in a particular work focus category (early childhood, primary, secondary, subject areas) is insufficient to deliver the number of graduates required to create a situation where the flow of graduates can spread across all regions. Internationally there is a shortage of teachers in rural and remote and disadvantaged areas as well as in teaching fields such as maths, science and special education. We would argue that the education workforce is not just about supply and demand, it is also about quality which must be considered in this complex system. Further, while recruiting and attracting high quality candidates is essential, retaining high quality candidates is critical. It is therefore an issue for the whole sector.

Environmental forecasting by states and territories with implications for supply and demand would be useful. Workforce data needs to be accessible to enable ITE providers to promote places in certain courses/disciplines to meet workforce demand. Understanding the relationship between attraction, recruitment and workforce needs through a social marketing lens would ensure a precise approach to teacher supply. Ongoing monitoring of programs through data linking is much more viable to ensure continuous quality assurance processes are in place. Our understanding of the Australian teacher workforce data suggests this is the optimal process to improve workforce planning, and we would hope to learn about

the need for specific disciplines etc., that could become the focus of attracting candidates into ITE, and help frame our courses to optimally lead to more graduates in harder-to-fill and needed areas.

Recommendation 5: The MGSE recommends whole of sector investment focus on increasing clarity and access to evidence relating to workforce shortages and potential supply. In addition, mechanisms to support staffing in hard to teach areas are necessary.

- Research utilising modelling techniques applied to linked data bases is essential to inform decisions about the teaching workforce.
- Applying a social marketing lens to understanding the relationship between attraction, recruitment and attrition could provide a more precise approach to teacher supply.
- ITE providers need access to reliable data to enable future predictions (at least 3-5 years) of workforce demands and to plan associated marketing and recruitment strategies.

6. Retention of the teacher workforce & Mobility incentives

Focussed Questions:

Are there examples of incentives that have successfully worked to attract quality teachers in areas of shortage?
 How could these be rolled out more broadly?

Retention is a major concern. 'Teachers who leave the profession prematurely hurt students learning and cost taxpayers' (Ronfeldt, Loeb & Wyckoff, 2013). There is also little doubt that there is a shortage of teachers in those locations where wages and working conditions are less than attractive (Sutcher, Darling-Hammond & Carver-Thomas, 2019). Podolosky et al. (2019), demonstrated that there were several reasons why teachers prematurely leave teaching. While there are a number of characteristics that relate to life circumstances, the majority of the reasons for leaving the profession relate to the school system for example, dissatisfaction with school teaching as a career, lack of influence and autonomy over the classroom, compensation, working conditions, school accountability and testing systems, quality of support and teacher input into decision-making. More broadly the research suggested that hiring processes, quality of preparation and support for new teachers also determined career choices.

Research suggests that preservice teachers often stay in the area where their practical experience occurred or with partnership schools as a consequence of the relationship with the ITE provider. Providing varied placement opportunities will diversify PST capabilities and may result in teaching opportunities upon graduation. Incentives in terms of funding, resources, housing and other support mechanisms are necessary to attract quality teachers to our rural, remote and disadvantages areas. MGSE's engagement in rural and remote communities has demonstrated success in placing graduate teachers in vulnerable communities with many taking up teaching contracts upon completion of their studies.

Encouraging graduates to physically move from their place of usual residence to an area where there may be a teacher shortage requires incentives, preparation and ongoing support. The act of moving to a new community, perhaps leaving behind one's regular social support framework, is not simple or easy.

A graduate being open to such a move does not mean that the move will be successful. Supports, such as quality mentoring, need to be put in place in regions to enable the graduate to successfully transition.

Research (Darling-Hammond, 2017; Overschelde & Wiggens, 2020) suggests that better support of students through an education program will assist with reducing non-completions, this is also true for in-service teachers increased working conditions. Furthermore, it is also interesting to note that alternative certification programs are less likely to retain teachers in the early years of teaching than the traditional initial teacher

education programs (Overschelde & Wiggens, 2020). Understanding the connection between ITE programs, teacher retention and effectiveness in the Australian diverse context is essential for further policy decisions.

Recommendation 6: The MGSE recommends sources of workforce data (e.g., selection data, graduate destination and graduate teacher survey data) be linked to form a national database that can illuminate the career life cycles of teachers and inform decision making about incentives and support mechanisms across this diverse sector.

- Research focused on understanding the relationship between entry, selection and retention is vital.
- Provide ITE candidates with debt relief from loan schemes which create a division between candidates from low social economic and high socioeconomic backgrounds.
- Improve teacher retention through longer term contracts, more opportunities for leadership, and incentive pathways for teachers.
- Other retention strategies include increasing teacher salaries, offering housing incentives, offering career advancement opportunities, increasing induction support for new teachers and incentivising professional development strategies for experienced teachers.

Part B. Preparing ITE students to be effective teachers

The preparation of pre-service teachers to be effective teachers is a responsibility of the sector as a whole and requires multiple inputs. This section explores a number of distinct areas, the contemporary nature of the Australian Professional Standards for Teachers, ITE programs, curriculum and evidence-based teaching, professional practice and the role of schools, classroom readiness and accreditation and finally, the education community's role in supporting the next generation of teachers.

1. The contemporary nature of the Australian Professional Standards for Teachers

Focussed questions addressed:

- Are the Australian Professional Standards for Teachers (Teacher Standards) fit for purpose in identifying the key skills and knowledge pre-service teachers need to be ready for the classroom? Do the Teacher Standards adequately reflect the role of teachers in supporting pre-service and graduate teachers? See: https://www.aitsl.edu.au/teach/standards for more information.
- Are ITE programs preparing graduates for teaching diverse student cohorts, including through cultural competency and inclusive education?

Through its internal research and evaluations, the MGSE has found that the Australian Professional Standards for Teachers (APST) have been accepted as (and to some extent are still) broadly fit for purpose. However, given that the education sector is ever evolving, accordingly, the Australian Professional Standards must evolve with it (Clinton et.al., 2015).

While the APST identify the key skills and knowledge PSTs need to be ready for the classroom, it is our view that they are not sufficiently detailed to understand the variation and nuances of classroom readiness. It could be argued the APST are not actual standards, as indicators or benchmarks have not been applied. This is a concern in an ever-increasing accountability environment.

ITE providers need to ensure that their curriculum prepares PSTs to meet each of the standards during their program study and beyond as they enter the teaching profession. For instance, students undertake core subjects which develop their knowledge and skills regarding effectively interacting, working, and developing meaningful relationships with people of diverse cultural backgrounds and traditions. Concomitantly, we suggest that ITE providers need to provide opportunities for their PSTs to take subjects specifically aligned with key principles of diversity and inclusion including First Nations' perspectives. PSTs require specific training in these areas, so they can undertake their in-school experience with the requisite knowledge and skills necessary for success.

Making an on-balance decision about achievement of such standards requires clear and applicable indicators of success. Currently, the notion of success is up to the interpretation of the ITE institutions and regulatory bodies across the country, hence, there are variable levels of classroom readiness. It is acknowledged that the TPAs have gone some way to resolving this issue, however, there are approximately 15-20 individual assessments of classroom readiness, based on the APST nationally, all measuring different elements with different modes of assessment and different interpretation of success.

In addition, a review elaborating on the dimensions in relation to the standards would be welcomed. In particular to ensure they take into account the requirements of the role of the teacher within the profession for the present and beyond 21st skills especially in light of the increase in expectations and opportunities for teacher leadership (Acquaro, 2019). Presently, the standards reflect a traditional measure of education success, whereas the educational environment is undergoing a revolution with greater expectations of parents, industries and communities of school education (World Youth Economic Forum, 2017; Clinton, 2017). Currently the OECD are revising measures of success to include new competencies such as thriving or flourishing (Allen et.al., 2021). The MGSE has a program related to the development of measures of new metrics and related professional learning for schools (Milligan et.al., 2021). There are moves internationally to include more in relation to competencies across diverse contexts, the digital environment and sustainability. Ensuring that our interpretation of successful classroom readiness includes contemporary demands is crucial as we educate our new teachers.

Ensuring a national perspective in relation to the standards while maintaining local and contextual characteristics of ITE programs is also important however, it is recognised that this is challenging.

Recommendation 7: The MGSE recommends that, given changes in contemporary educational research, the Australian Professional Standards for Teachers be updated to reflect changes to contemporary educational research and to reflect the need to incorporate new and developing competences, skills and knowledge for both teachers and students.

- It is recommended that a regular cycle of review and implementation related to the APST Standards be established (for example, every 5 years).
- o Increase the number of Standards that pertain to place and culture, in particular, to Aboriginal and Torres Strait Islander people.
- Elaborate Standards that connect diversity and inclusion to the curriculum.
- Apply clear and applicable definitions, and indicators that relate to the APST to mechanisms such as TPAs etc.

2. ITE programs, curriculum and evidence-based teaching

Focussed questions addressed:

• Do the current course accreditation arrangements support ITE students being taught evidence-based highimpact teaching strategies? How could this be improved?

Evidence-based reform in education refers to policies that enable or encourage the use of programs and practices proven to be effective in rigorous research (Slavin, 2019), this reform internationally has had enormous impact on the practice of teaching and subsequently ITE. Still the notion of evidence-based practice (EBP) is still somewhat complex, with some viewing it as practices that have a foundation of rigorous evidence to support worth, and others seeing evidence-based practice as ensuring that teachers use some form of evidence to determine the on-going needs of their students. Some believe both concepts hence there are number of challenges (Slavin, 2017; Dresden & Thompson, 2021). The question that spurs on the debate in education is what constitutes credible evidence.

While acknowledging these challenges, we would argue EBP is essential in relation to ITE. Developing teaching approaches that have a foundation in EBP, ensuring that PSTs are exposed to a process which enables valuable feedback so that they can critically reflect, reset, and eventually progress learning is the foundation of the Master of Teaching at MGSE. We also note the lack of a robust data set of evaluations of ITE programs across Australia and further support and funding for the improvement in our profession.

Similarly, we believe that preparing graduates for teaching diverse student cohorts, including cultural groups and inclusive education requires the candidate to develop an understanding of their own cultural responsiveness. We argue ITE providers must provide opportunities for the development of awareness, knowledge and skill base on practice and evidence in multiple contexts. This should be deemed a continuous improvement construct for teachers such that they develop an evaluative mindset so as to constantly reflect and grow professionally throughout the whole of their career.

The Master of Teaching at MGSE continues to rest on the foundation of EBP, our Melbourne model of teaching brings practice and evidence together. However, its approach and foundation has been adapted to ensure contemporary thinking by building on the previous evidence of implementation and success. Our approach to ITE has been expanded and it has become much more transformative and nonetheless built on the evidence established for effective quality teaching.

It continues to ensure that research practice nexus is present and obvious. It works at integrating the disciplines and associated evidence, and importantly evidence for practice. The Melbourne Master of Teaching allows our PSTs to expand the view of diagnosing to consider the notion of discovery for students and teachers, it expects the teachers and students will analyse the needs and challenges in relation to context to consider a more targeted and precise approach for the group, as well as focussing on differentiating for individual needs across the classroom.

The model promotes the idea of implementing what works, utilising contemporary thinking and evidence while it takes into account current environmental needs. As implementation begins so does the critical reflection of content and process to understand the teaching and learning in process. This allows the teacher to understand the factors impacting on the student, the potential for success, and the pedagogies needed to advance the student's learning (Rickards, Hattie, & Reid, 2020).

The enhanced Melbourne model of teaching now supports the teacher and the student to explore context without hindering growth and supports the notion of collective efficacy both for teachers and students. This model supports and aligns with the MGSE view that quality teaching is about career long professional growth. Teachers must consider the context, in which they are teaching, and their students are learning, continue to use evidence and knowledge to ensure the merit, worth and significance of their teaching impact is apparent.

MGSE recognises that teaching is a complex and challenging profession that requires high calibre individuals. For this reason, MGSE has created the Teacher Capability and Assessment Tool (TCAT) to aid candidate selection and leads the AfGT consortium. These tools support a rigorous and multi-dimensional selection assessment processes that assesses a candidate based on their likelihood of academic success and on their possessing the professional competencies and the dimensions of classroom readiness that is required for effective teaching. Both tools generate feedback which is made available to PSTs to ensure and enable continuing self-reflection.

Recommendation 8: The MGSE recommends that ongoing support be provided to high-quality evidence-based teaching practices which seek to both integrate learning across disciplines, assessments and placement and support differentiated learning experiences across contexts.

- PSTs and new graduates must have access to evidence about what works across a range of teaching strategies and approaches.
- o PSTs and new graduates' understandings of how to teach, what to teach, and how to build an evaluative mindset must be evidence-based.
- PSTs and new graduates learn how to collect evidence about the impact of their teaching on their students.
- New capabilities necessary for the 21st century, including technological innovations, must be considered in terms of curriculum and strategies.

3. Professional practice and the role of schools

Focussed questions addressed:

- Do the current professional experience arrangements support the preparation of ITE students for the classroom and school environment? How could these be improved?
- How can professional experience be delivered in a more efficient way for school systems and higher education providers?

The current professional experience support arrangements for ITE students are variable at both a school and classroom level. Much more can be done to improve the process. We believe that the assessment of placement needs greater attention, as do mentor teachers' capacity and capability to work with PSTs. Our analysis of the relationship between our TCAT assessment on entry demonstrates that PST placement has no variance and acts as a discrete variable in any analysis.

Assessment of the professional practice component is focussed on the APST graduate standards and relies on mentor teacher interpretation which is variable. The MGSE is working to design an assessment framework with a set of assessment principles and best practices to support the transformation of assessment of professional practice. This framework is currently being piloted and is expected to improve the assessment capability and practices of Clinical Teaching Specialists and school-based mentor teachers. This project will

also incorporate staff peer-reviews to enhance assessment capability and quality and provide formative, coherent and consolidated feedback to Master of Teaching candidates.

School-university partnerships are essential in delivering high quality professional experience for PSTs however these vary across ITE providers and geographical areas. Broad reforms are required to streamline partnership placement processes enabling equal engagement with diverse schools. Mentor teacher payments and other incentives also need to be considered particularly where mentor teachers do not directly benefit from payments received by schools.

We would argue currently that professional experience systems particularly for rural and remote areas are expensive and the workload is intensive. Greater resourcing for ITE providers to partner with schools to deliver ITE programs in regional areas is required to provide access to teacher training to local communities who could not otherwise access programs in metropolitan areas. Additionally, utilising technology and innovative programs such as MGSE's Visible Classroom (https://visibleclassroom.com) would go some way to alleviating some of the issues.

Thinking more broadly about opportunities that include mentor teacher training, school systems being registered or certified to accept PSTs and clarity around expectations and assessment (including classroom observations and feedback) of the placement experience might go some way to improving the system.

Recommendation 9: The MGSE recommends enhancing partnerships between schools and ITE providers in developing the professional practice of pre-service teachers, including promoting the benefits of engagement with ITE providers for schools.

- Develop national policies to guide the process of professional experience across Australia.
- Develop national standards applicable to ITE providers and to schools relevant to the process of professional practice.
- Update field experience processes and regulations to include innovative and improved assessment of the practicum and mentoring experiences.
- o Promote the benefit for schools of their engagement in fostering PSTs' professional practice while providing incentives for mentor teachers (e.g., career compensation and professional learning).
- Support the development of a research platform providing for a systematic review of and support for improved assessment systems utilised in the practicum experience.

4. Classroom Readiness

Focussed questions addressed:

- What are the benefits and costs of the number of TPAs in operation?
- How could the TPA endorsement process be improved? Are the current arrangements leading to quality outcomes?

The TPAs have the potential to ensure continual improvement for ITE providers as they focus on gathering evidence of impact, as well as providing the candidate with the information *where* they need support in the professional development cycle. Stacey et al. (2019) suggests that TPAs internationally cover elements such as planning and preparation, observations on and evidence of teaching practice, and student work samples, from which a set of guiding principles were developed to support the development and implementation.

MGSE has good evidence that indicates TPAs are impactful and valued by the candidate, ITE providers and schools. The process of completing the TPA can activate and reinforce pre-service teachers' reflection and professional reasoning and expands their knowledge of how their teaching improves their students' learning (Kriewaldt et al., 2020).

The MGSE leads and hosts the Assessment for Graduate Teaching (AfGT) consortium which was founded in 2017 as part of an AITSL-seed funded project to develop a teaching performance assessment (TPA). It is now as a self-governed and self-funded body that comprises of 14 ITE providers. The AfGT was able to be designed through strengthened collegial relationships with colleagues in different parts of the country, in institutions with different program types, delivery models and histories (McGraw et al., 2021). It has been found to be a valid and reliable assessment that was also illustrated as flexible while maintaining its psychometric properties in implementation in the current pandemic. The AfGT is fully embedded into a program of study and has demonstrated positive impacts on the quality of programs. Entire programs of study are impacted by the introduction of the AfGT, including in the program design, and importantly the introduction of the AfGT has also led to strong connections being made by PSTs between theory and practice. The most powerful attribute is the collective across-institution moderation of standard setting to ensure all ITE providers work to the same level of Classroom Readiness, and that all academics in the programs have a grounded and high level of these standards. However, it must be acknowledged the preparation, support and assessment of the TPA generally has increased the workload of teacher educators (Keamy & Selkrig, 2021) and subsequent and ever-increasing costs for implementation and maintenance for sustainability all fall back on ITE providers. The AfGT has found little evidence of negative impact on the workload for schools.

The endorsement of TPAs through the national EAG body has been variable and fraught with challenges from commencement of the system, the current standard for endorsement is extremely broad with very few achievement indicators specified. Hence, the development of transparent and in-depth indicators and benchmarks is essential. Continuous monitoring and national benchmarking would improve the system over time, however, clarity about the utilisation of the data, findings and emerging consequences of such benchmarking would be critical to be acceptable to all institutions. In addition, the current course accreditation process arrangements by Teacher Regulatory Authorities (TRAs) as well as support for TPAs for ITE providers is intractable and transactional, making implementation of systems challenging.

Recommendation 10: The MGSE recommends that comparable Teaching Performance Assessment (TPA) measures be embedded into ITE programs, and appropriate systems of cross-institutional moderation be adopted to ensure sustainability and consistency of TPAs nationally. Further, consistent positioning of TPAs in regulatory systems, including national benchmarking, will ensure fidelity, consistency of implementation, and ultimately, impact.

- Standardisation of the authorising environment relevant to TPAs would assist their implementation.
 This includes consistent messaging about expectations of TPAs, their use, and consequences for non-compliance.
- TPAs should be embedded into programs, if they are to lead to program improvements (the initial aim for developing TPAs).
- All TPAs must demonstrate the reliability and validity of the measures used.
- o All TPAs must ensure institutional cross-moderation, with the results nationally comparable.
- TPAs must add value to ITE programs through demonstrating impact and complying with quality assurance requirements.
- The cost and sustainability of TPAs must be reviewed on a regular basis.
- Ongoing monitoring of programs through data linking could ensure continuous quality assurance processes are in place.

5. The Education community's role in supporting the next generation of teachers

Focussed questions addressed:

- How can ITE providers best support teachers in their ongoing professional learning?
- Do the current HALT arrangements support the education ecosystem, particularly in relation to ensuring quality mentoring and supervision of ITE students?
- How could HALT support the development of ITE students and newly graduated teachers? What would this look like? What changes to current arrangements would be required to give effect to this?
- Should ITE providers continue to support the development of newly graduated teachers? What would this look like?
- How could teacher and school leader workloads be made more manageable to allow them to provide more support to pre-service and newly graduated teachers?

We must ensure that teachers receive high-quality training and professional development at every stage of their career, and fundamental to this is initial teacher education. We must ensure that all teacher professional development, from initial education through to advanced leadership, continuously, systematically and consistently be informed by knowledge relating to up-to-date and high-quality research in teaching and learning reflective of the changing role of teachers and leaders in diverse educational settings.

ITE is the first point of call for teachers in understanding the profession, their role and responsibility in their ongoing professional learning. MGSE make these links through specialisation in discipline areas, which is then consolidated in the Capstone, and through links to their role as teacher leaders. We believe that professional learning for mentor teachers is essential and will result in positive gains for schools and ITE providers alike. Changing the mindset of mentor teachers in schools such that being a mentor teacher is a desired and celebrated activity with the achievement of graduate teachers that meet the standards attributed to mentor

teachers, and hence measure their impact. There is such variation of the placement experience within schools, that a common understanding of the provision and responsibilities of school leadership and teachers in nurturing developing and supporting PSTs would be valuable and could be added to schools' performance measures.

In some sense, schools and teachers could move to a system where they are licenced as a PST training school, with mentors who have engaged in professional learning committed to teacher education through their work with PSTs. This licencing would need to be reviewed regularly as is required of other professions.

In theory attaining Highly Accomplished and Lead Teacher (HALT) certification requires sustained commitment to mentoring PSTs. While it must be noted that not all states and territories support the HALTs scheme, however, all have recognition in some form of leading teacher, e.g., Lead Teachers and Learning Specialist in Victoria. Responsibilities of HALT or leading teachers could also include supporting mentor teachers within schools who mentor PSTs and developing induction processes for graduates as they transition into the profession.

ITE providers are best placed to work with schools to provide ongoing professional development for new graduates. This should include post-professional education experiences to build engagement and a mindset for continuous improvement. Resourcing of ITE providers to deliver support to graduates in the first calendar year after graduation will also contribute to successful transitions particularly in hard to staff schools. This support should be in the form of voluntary online video meetings where graduates are offered an opportunity to receive support as they transition into the profession. The existing relationships between the graduates and the ITE provider are essential in mentoring and create a 'safe space' for graduates to check understandings, debrief and refine practices.

Recommendation 11: The MGSE recommends that ITE providers deliver ongoing support for ITE graduates in the form of professional learning during induction, and simultaneously provide mentor teachers with professional learning in relation to the mentoring and assessment of pre-service teachers.

- One set of standards and indicators of quality mentorship of ITE students within the practicum experience would benefit schools and ITE providers.
- A licensing system for schools with standards that are continuously updated would add to quality outcomes.
- Support from school systems for extra load is essential so that schools, leadership teams and teachers can handle the additional workload required to appropriately mentor and coach preservice teachers.
- Schools and ITE providers must work together to build partnerships that enhance induction processes for graduate teachers.
- o Induction needs to be considered part of the continuous learning that characterises a teacher's career (such that reaccreditation of school's leaders and teachers becomes part of the norm).
- ITE providers could offer support to graduates in their first calendar year after graduation if supported by state/territory Departments of Education.

Part C. Cross cutting recommendations

MGSE posits that a number of cross-cutting areas impact on the supply and demand of quality teachers and the role of ITE providers in their preparation.

1. Inclusion of Early Childhood Education

Australia is investing heavily in early childhood education yet minimal attention is turning to the role of teachers in providing high-quality early education (Iorio & Yelland, 2021). The reforms of the 2014 Teacher Education Ministerial Advisory Group (Action Now: Classroom Ready Teachers [TEMAG] 2014) omitted recommendations specific to early childhood (pre-schooling). Nuttall (2018) cites 'The positioning of early childhood education outside the compulsory education sector is the most obvious explanation for why early childhood teacher education has been largely ignored by policy-makers'.

A growing body of evidence demonstrates the quality of children's environment and interactions is critically important for learning and developing outcomes. The relationship between teaching practices and the effectiveness of Australian early childhood programs was tracked by the E4Kids study (Tayler et al. 2016). Researchers concluded that 'the findings confirm that certain teaching and learning dimensions within a program make a significant difference to children's achievement outcomes, having controlled for other influences such as home learning environment...' (p. 6).

Currently MGSE houses the Research in Effective Education in Early Childhood (REEaCh) Hub established in 2019 to continue the work of Professor Collette Tayler in developing a strong evidence base and is supported with philanthropic funds. Its purpose is to make a sustained impact upon the lives of young Australians through advancing the quality of early learning experiences for all children. The REEaCh Hub works to translate research findings into real-life solutions so that all young children can realise their potential.

Recognising the differences between schools and early childhood services and the regulatory environments in which they operate and given the emergence of dual Early Childhood and Primary programs, the preparation of early childhood educators is worthy of attention to guide government investment.

Recommendation 12: The MGSE recommends that the Review reflects on the preparation of Early Childhood Educators as a specialised sector and take note of varying regulatory requirements, standards for teaching, pedagogical preferences, and working conditions in this context.

• the development of a national evidence base that will focus on understanding the implementation and impact of a set of standards to ensure best practice in ITE programs.

2. Simplifying and Aligning the Authorising Environment

The authorising environment in which ITE providers operate confound processes of entry and transition into and across the teaching profession. The disparity of practices across institution and various jurisdictions in areas such as selecting candidates, assessment of English language proficiency, and teaching performance assessment conflict with the intent of a nationally consistent approach to accreditation of initial teacher education. Furthermore, processes that aim to support transition into the profession such as alternative authorisation to teach, registration and mutual recognition of registration are cumbersome and restrict the ease at which access to teaching pathways and workforce mobility can be achieved. As suggested Permission to Teach is also a complex process – the conditions in the authorising environment have a domino effect. We argue that a range of work categories to enable 'permission to teach' e.g., 'teaching pathways' would be beneficial.

The Australian Institute for Teaching and School Leadership (AITSL)'s national education oversight for the states' and territories' implementation of the Teacher Standards and Program Standards provide a framework that edges the nation closer to the notion of conceptualising teacher development as a system. However, the variability of approaches to implementation of these Standards, and lack of common measures

and indicators of quality present difficulties in evaluating and interpreting effectiveness. The current course accreditation arrangements for ITE providers by TRAs does not support evidence-based high-impact teaching strategies. The current system is intractable and transactional.

Recommendation 13: The MGSE recommends that the authorising environments at national, state and territory levels be reviewed, and mechanisms put in place to support consistent and less bureaucratic approaches to ITE provider reaccreditation.

- Time and investment are required to change policy, create incentives, build suitable flexibility into the authorising environment, and develop a dynamic evidence base to inform policy alignment.
- o Increasing mobility of the teaching workforce, nationally and internationally, will ensure more accessibility and response to demand.
- The recommendation of the 2018 Teacher Education Review to improve mutual recognition processes when teachers move between jurisdictions should be operationalised.
- A national mechanism that allows easy access to registration across States and Territories would be valuable and attractive to potential teachers.

3. Indigenous contexts and ITE

Education systems worldwide face challenges in addressing the needs and rights of their Indigenous communities (Villegas & Lucas, 2002a). Harrison (2010) argued that teachers have a role to play in shaping relationships between Indigenous and non-Indigenous people. He suggests 'how this future develops is dependent on a range of factors, one of which is the willingness of teachers to reassess their own place in history' (p. 99). It is argued that teachers also need to understand the impact of colonialism and appreciate that the experiences of Aboriginal and Torres Strait Islander people differ from place to place and over time (Manning, 2008).

Ell (2011) argues that teacher education is a potential lever that can foster cultural competency. As such, MGSE's ITE programs have a strong focus on Indigenous Education, while also paying attention to the challenges accompanying other diverse and multicultural contexts. The 2022 Master of Teaching programs will have an integrated thread of Aboriginal and Torres Strait Islander teaching and learning and a standalone subject devoted to this content.

While such program design features are essential, there is also a need for consistency across the standards and indicators related to successful approaches to teaching and learning in Indigenous communities. Further resources describing and exemplifying Indigenous knowledge and pedagogies would support both schools and teacher educators to bring these practices to their classrooms. Access to professional learning experiences and cultural responsiveness training is also essential.

Given the significance of this cross-cutting perspective, it is appropriate to reiterate our key recommendations related to this focus.

Recommendation 14: MGSE recommends the development of focussed standards and indicators that will guide ITE providers to embed and implement Aboriginal and Torres strait Islander knowledge and pedagogies into their existing courses.

- Develop a national approach to embedding knowledge and pedagogies related to teaching and learning in an Indigenous context into ITE programs and support this initiative through the creation and sharing of appropriate resources.
- Articulate standards that will ensure cultural responsiveness practices are enacted by PSTs during placement.
- Support and invest in marketing strategies and alternative programs that will attract secondary school, undergraduate, and post graduate Aboriginal and Torres Strait Islander students into a teaching career.

4. Research and evaluation into teacher education effectiveness

Education is one of the key mechanisms for individual and community empowerment. Research tells us that teaching is by far the most crucial adjustable driver of student outcomes (Hattie, 2012). As a consequence of research into the importance of teacher quality, considerable attention, both within Australia and internationally (Donaldson, 2010; Carter, 2015), has been given to initial teacher education (ITE). Despite this significant attention, teacher education today is still considered by many as "the Dodge City of the education world" (Levine, 2006). Concerns have been raised relating to policy and research around selection into teacher education programs, the effectiveness of programs, PST's classroom readiness and impact, and the "wash out" effect of enduring school cultures on new pedagogies and approaches.

Understanding the nature and challenges of initial teacher education is the complex venture, hence measuring the effectiveness and ensuing impacts is multifaceted and intricate. While research in relation to effective teaching and effective teachers is equivocal, there are a number of elements that educators and researchers can agree on. Teaching requires the capacity and skill to teach but also the disposition to engage in teaching and learning. This spotlight on ITE is important challenge and requires investment in a national program of research and evaluation to understand the links and impact of our complex sector. Collaboration to link data bases, understand relationship and impact across our diverse back drop is a whole of sector responsibility

In a response to this call to action the MGSE has established the Teacher and Teaching Effectiveness Research Hub. The aim of the Research Hub is to understand effectiveness of Teacher Education through whole of career including ITE programs, and ultimately the impact on the lives of students. The Hub not only implements and houses the TCAT, the AfGT and the Visible Classroom data but also conducts evaluative research into the merit and worth of teacher and teaching initiatives and reviews of evidence. Translation of research outcomes into practice is major goal. As a consequence of this work we are able to demonstrate the relationship between selection, measures for ITE, LANTITE, Clinical Praxis Examination TPAs and PSTs outcomes.

Recommendation 15: The MGSE recommends a consistent evidence-based approach to the capacity building of Teacher Educators be supported by the development of a repository of research into ITE. Aligned to this, it is suggested that data-linking across national and local datasets will support the ongoing monitoring and evaluation of teacher education programs and the development of professional learning for teachers.

- Development of a repository of research into ITE inputs, processes and outputs would allow for a consistent evidence-based approach to ITE. It would also support the ongoing engagement and capacity building of Teacher Educators.
- ITE providers should ensure Teacher Educators are supported by professional learning and through access to, and engagement with, contemporary research activities, including the scholarship of Initial Teacher Education.
- Data linking across national and local datasets would support monitoring and evaluation of teacher education programs and the development of teacher professional learning.
- A national evaluation framework for ITE providers will support ongoing quality assurance as well as measures of the impact that ITE programs have on the profession, schools, communities, and

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