

Teacher Education Expert Panel

April 2023

Initial Teacher Education (ITE)

ENQUIRIES

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A. INTRODUCTION

La Trobe University welcomes the opportunity to respond to this Teacher Education Expert Panel Discussion Paper.

La Trobe has a long history of Initial Teacher Education (ITE) provision. Our ITE courses are offered across all La Trobe's campuses in Melbourne and regional Victoria. Hundreds of teachers have graduated from La Trobe over the years. In regional Victoria, the majority of our graduates are employed in regional Schools and have become a mainstay of the regional teaching workforce. For example, in Mildura, around 85% of our graduates are employed in the community.

La Trobe has undertaken a lot of internal work as an ITE provider to make innovative changes to its teacher education courses. For instance La Trobe has successfully piloted a 'Cohort Professional Experience Model', an evidence-informed approach to improving the quality of pre-service teachers' (PSTs) professional experience. We welcome the continuation of funding to our **Nexus** program (highlighted in the discussion paper), an alternate employment-based pathway program that seeks to build long-term relationships with hard-to-staff schools. Our Science of Language and Reading (**SOLAR**)Lab is preparing current students in evidence-informed approaches to the science of learning and reading and simultaneously helping to upskill existing teachers. We believe that high-performing models such as SOLAR have the potential to become National Centres of Excellence.

We are constantly monitoring developments in the research relating to optimal outcomes in ITE and look forward to working with the Panel and the rest of the sector towards an even more evidence-informed ITE curriculum. While teacher supply is an issue of immediate concern, we would caution against rushed, untested solutions and would rather recommend a focus on teacher education programs and pathways that are already proving their worth.

La Trobe supports the four broad areas of reform outlined in the Discussion Paper. In our response, we highlight the ways in which we are already addressing these reform priorities and ways in which La Trobe could play a leading role in driving excellence in ITE provision. This submission is structured as follows:

Section A: Introduction

Section B: Key Recommendations

Section C: La Trobe's response to the Discussion Paper's questions

B. SUMMARY OF KEY RECOMMENDATIONS

In its response to the Discussion Questions (Section C), La Trobe makes several proposals. In this section, we prioritise six recommendations as key to improving ITE programs in Australia:

- 1. Initial Teacher Education must be grounded in the Science of Learning (i.e., Cognitive Load Theory, the New Theory of Disuse, and other important cognitive principles):
- Beginning teachers must enter the classroom with foundational mental models that serve as a strong basis for future professional learning.
- Cognitive sciences should be a silver thread that run through ITE rather than isolated units within a course.
- Cognitive Load Theory has key implications for every aspect of ITE from instructional design to behavioural management, and inquiry learning. Therefore, pre-service teachers should be supported to learn and see these connections throughout the duration of their training.

2. Clarify and specify the knowledge that teachers must convey to students in the classroom

- In addition to Pedagogical Knowledge (PK), ITE must also include a focus on Content Knowledge (CK) and Pedagogical Content Knowledge (PCK) e.g. As part of their ITE course, future teachers should already be familiar with the actual resources (textbooks, slideshows, booklets) that they will use in their career.
- 3. In order to ensure that beginning teachers are classroom ready and to maximise their chances of success and encourage retention, focus on two key factors namely classroom management and curriculum resourcing:
 - 3.1 Increase the focus on and importance of class management throughout the ITE course

A beginning teacher needs to be able to manage a class and if the school in which a new teacher is taking up employment as a graduate does not prioritise a safe and orderly learning environment, then that beginning teacher will struggle under pressure and will not be able to attend to teaching.

- 3.1.1 Address the misperception that classroom management is something "that can be developed over time' and replace with a focus on classroom management as a fundamental set of skills that can be learnt but that requires time and practice to master
- 3.1.2 Include, as a recurring feature within ITE courses, material on specific tools and strategies on classroom management that materially support beginning teachers to be more successful in the classroom from the start

3.2. Prioritise curriculum resourcing and sharing of resources

If a beginning teacher is tasked with the challenge of creating every resource for themselves, then they will utilise valuable hours per week preparing lessons and produce sub-par learning resources that exacerbate any behavioural issues that may already exist within their classrooms.

- 4. On the basis of research that within performance-based professions such as teaching, rehearsal is a key path to success, increase the opportunities (and increase related funding) for 'teaching intensives' for both new and established teachers e.g. the annual Fogarty EdVance teaching intensive in Western Australia
- 5. Increase investment in alternative pathways to teaching to create a broader pipeline of high-quality teaching professionals, to further entice career changers to teach in high-need areas and to attract more diverse cohorts.
 - 5.1. With regard to La Trobe's Nexus program in particular:
 - consider the potential of the program to expand its reach through supporting a national rollout with a focus on regional, rural and remote schools
 - consider expanding the model to Bachelor degrees, in particular to attract Indigenous students to the teaching profession
- 6. Provide funding for high-performing ITE approaches to become 'National Centres of Excellence' e.g. La Trobe's Science of Language and Reading (SOLAR) lab could be funded to become a 'National Centre of Excellence' to lead a national approach to the science of reading and literacy.

C. LA TROBE RESPONSE TO DISCUSSION QUESTIONS

Reform Area 1: Strengthen ITE programs to deliver effective, classroom ready graduates

General comments on Reform Area 1

Section 1.2: The Brain and Learning¹: La Trobe strongly recommends the inclusion of 'The brain and learning' as an area of core content to support ITE students' progress towards classroom readiness. Knowledge about the development and functioning of the human brain helps teachers to understand how and why evidence-informed pedagogical practices are effective and informs teachers' moment-to-moment professional decision-making and reasoning. We affirm the proposed learning outcomes in this area and are finding that our students (Education students in La Trobe's School of Education) appreciate the value of this learning in our renewed Bachelor of Education and Master of Teaching. We would also recommend the inclusion of 'The Science of Learning' and 'Learning Sciences' and note the role of the brain and learning as core to the learning sciences.

- Evidence-based teaching practices: Are there other evidence-based practices which should be prioritised in ITE programs?
- As a general comment, La Trobe notes that 'evidence-informed' rather than 'evidence-based' practices is a better way of describing the use of evidence to support effective learning.
- As outlined in Recommendations 1-4 in Section B, to develop more classroom ready teachers there needs to be a focus on practical experiences informed by evidence:
 - o Ground teacher education in the Science of Learning
 - Increase specificity around the curriculum resources to be used, and work with systems to make these resources available to PSTs before they enter the classroom, and opportunities to test them during placement.
 - Explicit instruction in classroom management building opportunities to 'practise' approaches through peer workshops and lab sites.
 - Incorporate rehearsal as a core active ingredient into teacher education.
- Researchers and lecturers from La Trobe's School of Education have also collated a list of additional evidence-informed practices² which should be considered in ITE programs. These include:
 - Affects and emotions in teaching: A growing body of research has shown how
 effective teaching practices address the affective terrain of the learning experience.
 Attention to the affective and emotional dimensions of learning helps broaden the
 affordances of the 'input-output' information processing models that prioritise the
 cognitive aspects of learning.
 - Learning and teaching as an equity-promoting pedagogical partnership that amplifies participation and voice ('students as partners'): A growing body of qualitative research (principally in Australia, the UK and US) associates pedagogical partnerships with improvements in belonging, engagement and agency in higher education, particularly for equity-seeking students (Mercer-Mapstone & Bovill, 2019). Examples include consultancies where students provide advice to faculty, based on their learning experiences, and co-design of curriculum and assessment.

¹ Please refer to Annex 1 for further discussion and recommendations on the core area 'The Brain and Learning'.

² Please refer to Annex 2 for further detail on these models and the way they relate to the APSTs.

- Universal Design for Learning: Universal Design for Learning (UDL): Originating in the US, UDL is an evidence-informed, flexible and responsive framework for designing inclusive curriculum and pedagogy. Influenced by Universal Design in architecture, where facilities must be designed for diverse needs, UDL proposes that designing curriculum to meet diverse needs benefits all learners (Cumming & Rose, 2021). A recent Australian study affirmed the efficacy of UDL as a framework for inclusively designing university curriculum and pedagogy, particularly from the student perspective (Cumming & Rose, 2022).
- A Broader Range of Classroom Competencies: While it is important for pre-service teachers to identify and apply evidence-based pedagogical practice, it is not enough to simply expose PSTs to these approaches as they will need to learn how to anticipate, diagnose and address their ever-changing classroom environments. They must be able to discern what practice(s) to employ, how and for how long and for what purpose which requires developed competencies, such as problem-solving, creative and critical thinking, communication, etc.
- Culturally-responsive Teaching (CRT): CRT is an approach that acknowledges and incorporates the cultural backgrounds, values, and experiences of students into the teaching and learning process (Gay, 2018). It is important in ITE because it promotes equity and inclusion in education and can help to close the achievement gap for students from culturally and linguistically diverse backgrounds. Incorporating CRT in ITE can help to prepare teachers to effectively meet the needs of diverse learners and promote social justice and equity in education.
- Amending Accreditation Standards and Procedures: How should the Accreditation Standards and Procedures best be amended to ensure all ITE students learn and can confidently use these practices? Should the Accreditation Standards and Procedures be amended to require Teaching Performance Assessments (TPAs) to assess these practices?

Currently, there are significant inconsistencies across jurisdictions regarding TPA and accreditation processes, which are core to ensuring consistency and quality across ITE programs. For instance with regard to accreditation processes, there are inconsistencies linked to entry requirements, 'Recognition of Prior Learning' and 'Permission to Teach' (PTT) requirements. La Trobe recommends a consolidation of accreditation standards and a move towards a national approach so that those undertaking a teaching degree are able to be accredited as a 'national' teacher. This would help mitigate against future workforce shortages through greater mobility of the workforce across Australia.

Curriculum specific content: What steps should be taken to ensure curriculum-specific ITE content embeds the evidence-based practices?

La Trobe recommends more clarity on the knowledge that teachers are required to convey to students in the classroom. In the 80s, American educational psychologist Lee Shulman highlighted the importance of Pedagogical Knowledge (PK) in tandem with both Content Knowledge (CK) and Pedagogical Content Knowledge (PCK). If there is no specification on the content that teachers are required to teach, then ITE will be largely restricted to just PK. Research shows that when teachers are more familiar with the curriculum-specific content that they will actually teach, they will increase their CK and therefore their PCK, which will make them better teachers.

Increased specificity around curriculum-specific content could be achieved through steps similar to those taken in German teacher training, and in Finnish teacher training throughout the 90s. In these modes, preservice teachers understand the value of existing resources to support curriculum development and existing curriculum to support learning design. Textbooks, slideshows, booklets and

other resources are core to PSTs knowing the field of possible resources so they can focus on designing learning around core resource offerings.

Ensuring consistent, robust delivery of evidence-based teaching practices: What changes to the authorising environment are required to ensure consistent application of the Accreditation Standards and Procedures and implementation of core content in ITE programs?

There needs to be targeted funding to ITE providers such as La Trobe (see Text Box 1) which have transformed their programs to be more evidence-informed to track the impact of the new programs on PSTs.

Such initiatives are very resource-intensive and require support. However, they have the potential of providing important evidence-informed approaches in ITE.

Text Box 1 - How La Trobe is addressing Reform Area 1: Strengthen ITE programs to deliver effective, classroom ready graduates

Core Content Area 1: The Brain and Learning

✓ La Trobe has in place Learning Science subjects that address (and extend upon) Core Content Area 1. This includes six core subjects with a focus on 'The Brain and Learning'/'Learning Sciences' in the Bachelor Degree. In addition, La Trobe is undertaking research under the working title 'Evidence-informed approaches in Initial Teacher Education' which aims to measure the impact of course content on the development of knowledge and skills as students transition into the profession.

Core Content Area 2: Effective Pedagogical Services

✓ La Trobe's Classroom Readiness project has developed a competency-based approach to track and scaffold preservice teacher development in this area. La Trobe is currently working with an industry partner to develop a platform from which PSTs, University Mentors and School mentors are able to track classroom readiness of ITE students.

Core Content Area 3: Classroom Management

✓ La Trobe is developing classroom simulation labs that will allow our preservice teachers to practice skills associated with core content areas, particularly classroom management.

Core Content Area 4: Enabling factors for Learning

✓ La Trobe's alternative pathways programs namely Nexus, Access Quality Teaching Initiative, and Greater-Shepparton Teaching Academy of Professional Practice all take a rigorous approach to strengthen preservice teacher knowledge and skills in this core content area.

Reform Area 2: Strengthen the link between performance and funding of ITE

• ITE performance measures: Are there additional indicators that should be considered? To what extent should the performance measures form the core part of the evidence requirements in provider's Plans For Demonstrating Impact required in the Accreditation Standards and Procedures?

Preparing more diverse cohorts of pre-service teachers: In terms of additional indicators, La Trobe recommends that ITE performance measures should consider the proportion of diverse cohorts of pre-service teachers. Linked to this, is the need to recognise the additional resources required to develop diverse populations in the teaching profession. Owing to La Trobe's location and multicampus footprint, a significant proportion of students enrolled in our ITE programs are from culturally and linguistically diverse background or are 'first-in-family' to attend university. We believe that this will position this cohort of pre-service teachers to contribute significantly to the culture of the schools where they will be employed and the learning opportunities for their future students with whom they would share similar ethnic, cultural, linguistic and socio-economic backgrounds and experiences.

However, it should also be noted that preparing a diverse cohort of pre-service teachers will require additional resources to avoid 'watering down' the ITE courses and to prepare a capable teaching workforce familiar with the needs of the least advantaged students. Schools of education need to invest additionally in response to the more complex needs of this cohort of pre-service teachers who may often require special adjustments to their study plans, professional placements, one-on-one mentoring. This additional cost is reflected in estimates that indicate that educating students from underprivileged and marginalised Australian communities is six times as resource intensive, on average, as their more privileged counterparts³.

Tracking graduates' transition to teaching: La Trobe supports an approach whereby measuring the performance of ITE programs would involve tracking how effectively graduates transition to teaching and where they end up after a period of time such as for instance two years. This would then provide useful data for refinement of ITE programs. However, in order to succeed, this would need a supportive financial model to enable ITE providers and schools to work together to build future workforces.

Public reporting: Should the Australian Teacher Workforce Data collection be the basis for reporting and publicising the performance measures? Are there other approaches for reporting the performance measures?

Public reporting should also include reporting on 'diversity and equity', which is an area of national priority and a key target for the ongoing 'Australian Universities Accord' process.

Public transparency: If made publicly available, are these performance measures sufficient to drive quality improvement in ITE?

Transparency is important but there needs to be a significant focus on data hygiene when reporting on graduate outcomes. The first years following the conclusion of a teaching degree is also determined by the quality mentoring offered by systems and employers. There needs to be clarity on who 'owns' the reporting measures and how various factors contribute to quality, retention and impact.

Transition funding to support performance improvement: How could transition funding be used to set higher education providers on a path to improving the quality of their programs?

³ References: Marcia Devlin, Liang-Cheng Zhang, Daniel Edwards, Glenn Withers, Julie McMillan, Lynette Vernon & Sue Trinidad (2023) The costs of and economies of scale in supporting students from low socioeconomic status backgrounds in Australian higher education, Higher Education Research & Development, 42:2, 290-305]

Transition funding is important to meet the significant changes being proposed. However, there needs to be caution on supporting low performers while high performers are already meeting significant benchmarks in quality ITE. Perhaps there needs to be funding options for high performers through 'Centre of Excellence' funding.

 Excellence pool for higher quality programs: How could a system of reward funding be best designed to support high performing ITE programs and encourage them to increase their enrolments? Are there any risks to such an approach? How should they be addressed?

There could be some strategic benefits for high performers to play a 'mentoring' role through system funding to support a range of ITE providers. Another issue that needs to be addressed is whether 47 ITE providers are needed across the country and/or whether it would make more sense to have a smaller number of providers focusing on ITE while other providers specialise in other areas. This is an issue which La Trobe explores further in its submission to the Australian Universities Accord where La Trobe argues that there is currently a lack of diversity in Australia's university system and that funding incentives should be transformed to encourage more specialisation (and less duplication) across the tertiary education sector.

As outlined in Recommendation 6, La Trobe's <u>Science of Language and Reading (SOLAR) lab</u>, which is successfully collaborating with researchers, teachers, school leaders and allied health professionals to integrate evidence-based approaches into classroom practice to promote success in reading, writing, and spelling, could be funded to become a 'National Centre of Excellence' to lead a national approach to the science of reading and literacy.

Text Box 2 – How La Trobe is addressing Reform Area 2: Strengthen the link between performance and funding of initial teacher education

Performance measure 1: Selection

- ✓ La Trobe has strong participation across its courses, and particularly in Nexus, of preservice teachers from rural, low SES, and diverse backgrounds. (The retention rate of 72% is very high when compared to other ITE programs.
- ✓ Nexus and the Access Quality Teaching Initiative recruits high achieving students.
- ✓ Nexus actively seeks to recruit First Nations Students and STEM students.

Performance measure 3: Classroom readiness

- ✓ La Trobe's Alternative pathways programs (Nexus and Greater-Shepparton Teaching Academy of Professional Practice) prepare PSTs to be community-ready to work in RRR areas.
- ✓ La Trobe's 'Cohort Professional Experience model' (Text Box 3) supports a collective approach to mentoring, developing the skills of participating mentor teachers and ensuring a higher quality mentoring experience for PSTs compared to the traditional master-apprentice model.
- ✓ La Trobe's 'Innovative Reflective Circle Education Model (RCEM)' is a model being piloted to provide foundational support for the personal and professional supervision of educators in early childhood, primary and secondary school settings. Based on a three year pilot study in socially disadvantaged regional Victorian primary schools supporting educators (teachers, support staff and principals) the project is now being expanded across three educational sectors to include early learning, primary and secondary schools in regional, then rural and metropolitan areas.
- ✓ Nexus-in-residence pilot provides a strong model of an embedded approach to mentoring preservice teachers.

Reform Area 3: Improving the quality of practical experience in teaching

System level agreements: Would establishing more comprehensive system level agreements between school sectors/systems and higher education providers address challenges in the school matching process and deliver more effective placements? How could these agreements complement current localised arrangements?

There is an opportunity to see how the NSW School Hub model and the VIC partnership agreement model could be merged to develop a strong national approach to also meet local needs.

Centres of excellence: Would encouraging centres of excellence, such as hub schools, support high-quality practical experience? What are the impediments?

Funding is a constraint but the opportunity to position centres of excellence to drive quality would benefit providers who are in the early stages to build quality programs. (See Recommendation 6)

 National frameworks: Would higher education providers, schools and teachers benefit from more specific guidance in delivering practical experience? What guidance would be beneficial to address key barriers to high-quality practical experience?

See Text Box 3 on La Trobe's 'Cohort Professional Experience Model', successfully piloted in Northern Metropolitan Melbourne, and which is now being rolled out as La Trobe's preferred approach to university placements.

Text Box 3 – How La Trobe is addressing Reform Area 3: Improving the quality of practical experience in teaching

The **Cohort Professional Experience Model** is La Trobe University's evidence-informed approach to improving the quality of PSTs' professional experience. This model acknowledges that the traditional 1:1 "master-apprentice" model of teacher placement is not fit-for-purpose and results in highly variable experiences for both preservice teachers and mentor teachers alike. The Model involves placing six or more preservice teachers at the one site and allocating a University Practice Advisor to support the professional experience. The group of preservice teachers form a cohort of practice – supporting each other to work through the professional challenges of their placement. This model also creates a cohort of mentors who can share expertise and knowledge across the group, improving the quality of mentoring for all. In parallel, the visiting Practice Advisor helps strengthen the connection between theory and practice, as well as providing support and coaching to both preservice teachers and mentor teachers.

Feedback from PSTs has highlighted the value of peer support, both in supporting professional development and in managing the emotional work of placements. Mentor teachers have reported improved PST performance and have appreciated sharing the mentoring load amongst the group. Finally, placement assessment data shows that PSTs on placements structured this way as more successful than those on traditional 1:1 placements.

This model reflects several of the characteristics of high-quality practical experience including:

- ✓ Integrated peer support.
- ✓ Capacity sharing amongst the cohort of mentors provides PSTs with a capable mentor team.
- ✓ Scaffolding to structure the integration of course content and practical experiences.
- ✓ Regular Practice Advisor contact to support connection between theory and practice.
- ✓ Hosted by schools with which La Trobe has/is developing high-quality, collaborative relationships.

Reform Area 4: Improve postgraduate ITE for mid-career entrants

Better pathways for mid-career entrants: How can Masters degrees be structured so that mid-career entrants can assume roles in the classroom within 12-18 months instead of two years? What changes to regulatory arrangements are needed to enable this?

La Trobe recommends alternate and diverse entry options to ensure there is greater diversity in the cohorts entering the teaching profession. La Trobe's Nexus program is again a very good example of attracting regional, rural and remote and 'first in family' to the teaching profession and has significant potential to be extended.

La Trobe also recommends that employment-based models (such as Nexus) could be extended to Bachelor programs in particular to provide a pathway for Indigenous teachers to enter the profession. (see Recommendation 5)

Text Box 4 – How La Trobe is addressing Reform Area 4: Improving post-graduate ITE for mid-career entrants

La Trobe's Master of Teaching includes an accelerated program. All preservice teachers in La Trobe's Nexus employment-based program enrol in this mode.

✓ The discussion paper suggests that mid-career programs are "in their infancy" and that evidence is needed. Nexus has an opportunity to provide this evidence and develop a strong model.

Annex 1: The Brain and Learning

La Trobe strongly welcomes the inclusion of 'The brain and learning' as an area of core content to support ITE students' progress towards classroom readiness. Knowledge about the development and functioning of the human brain helps teachers to understand how and why evidence-based pedagogical practices are effective and informs teachers' moment-to-moment professional decision-making and reasoning. We affirm the proposed learning outcomes in this area and are finding that our students (Education students in La Trobe's School of Education) appreciate the value of this learning in our renewed Bachelor of Education and Master of Teaching.

However, we believe the parameters in the proposed core curriculum in this area are currently too narrow; equally crucial knowledge and understanding is missing that could support the curriculum proposed in '1.2.2 Effective pedagogical practices', '1.2.3 Classroom Management', and '1.2.4 Enabling factors for learning – 4. Response to Intervention. On the matter of diverse learning needs, we feel that the needs of learners with cognitive and social-emotional disabilities (the most prevalent disabilities in schools; School students with disability, ACARA, 2022) warrant more attention in the proposed curriculum.

The QITE Review (Recommendation 7) recommended that teachers receive better preparation to support diverse learners. In addition to learning how to implement a multi-tiered framework (MTSS with emphasis on the importance of evidence-based Tier 1 pedagogies), we believe that all teachers should be equipped with specific developmental psychology knowledge that will support them to work supportively and resiliently with diverse learners (as they implement effective pedagogical practices and between-times). Currently some ITE providers teach developmental psychology (or child and adolescent development) in ways that are only tenuously connected to teaching in general or to supporting diverse learners, sometimes with an unwarranted focus on Piaget's largely discredited theories. In addition, we believe that preservice teachers should be equipped with sound knowledge about oral language growth across the school years along with linguistics knowledge necessary for teaching all aspects of reading, spelling, and writing.

We believe the following learning outcomes should be part of any core ITE curriculum in the area of 'The brain and learning'. If the panel seeks illustrations of how this content can be integrated into an ITE course, we can provide examples from La Trobe University's renewed ITE degrees.

- Knowledge of brain development from early childhood to late adolescence, including the neuronal basis of learning and age trends in cognitive functioning, and related implications for teaching practice.
- Knowledge of the most efficient and effective processes of knowledge acquisition at all ages, including the information processing model of memory, the nature of schemas and how schemas are constructed, and the concept of cognitive overload. This also includes a deep understanding of how to implement spaced, massed and interleaved practice to enhance students' learning.
- Applying both formative and summative assessments and having a clear rationale for the purposes of both forms of assessment.
- Knowledge of what it means to be a 'novice' versus 'expert' learner and the implications of the expertise reversal effect for teaching practice.
- Knowledge of common forms of neurodisability and neurodivergence (including SLDs, ASD, and ADHD) and their implications for inclusive practice.
- Knowledge of the potential impacts of trauma on a developing brain and the implications for inclusive practice.
- Knowledge of common "neuromyths" in education and how to respond to these from an informed and respectful position in school settings.

 Knowledge of Response to Intervention (embedded within Multi-Tiered Systems of Support) as a conceptual framework for designing and delivering high-quality instruction and support and monitoring progress using robust classroom assessment tools.

Specifically in relation to literacy:

- An understanding and application of the fact that oral language skills are biologically primary and reading, writing, and spelling skills are biologically secondary.
- Knowledge about the linguistic structure (phonology, morphology, syntax, semantics, and pragmatic) of English language, both spoken and written
- Knowledge about how the English writing system works and the historical basis of patterns in its spelling and representations of meaning.
- An understanding and application of tiers of vocabulary and the application of this knowledge to reading comprehension, writing, and speaking, across text and discourse genres.
- An understanding and application of the weight of evidence favouring explicit and systematic literacy teaching over embedded, incidental teaching about how the writing system works.
- An understanding and application of knowledge concerning the writing process, including the need to start with sentence-level mastery and work up to genre-writing.

Annex 2: Other Evidence-Informed Teaching Practices

Other evidence-informed teaching practices	Relevant APSTs	References
Affects and emotions in teaching Affects and emotions are an integral part of any teaching/learning experience. A growing body of research has shown how effective teaching practices address the affective terrain of the learning experience (Bozalek & Zembylas, 2017; Cahill & Dadvand, 2022; Trofanenko, 2014; Zembylas, 2014; Zembylas & Papamichael, 2017). Attention to the affective and emotional dimensions of learning helps broaden the affordances of the 'input-output' information processing models that prioritise the cognitive aspects of learning. Effective teacher practices are, thus, 'affective' in that they consider how acquiring new knowledge is tightly entwined with our emotional state, experiences, cultures, and personal histories. Affects and emotions are important in fostering strong and positive student-teacher relationships, especially in contexts of trauma and in working with socially marginalised students (Legette et al., 2022; Marraccini et al., 2021). Affective teacher practices also contribute significantly to creating safe learning environments in which students develop a sense of belonging (Sheppard & Levy, 2019).	1.1 Physical, social and intellectual development and characteristics of students 1.2 Understand how students learn 1.3 Students with diverse linguistic, cultural, religious and socioeconomic backgrounds 1.4 Strategies for teaching Aboriginal and Torres Strait Islander students 1.5 Differentiate teaching to meet the specific learning needs of students across the full range of abilities 2.4 Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non-Indigenous Australians 3.5 Use effective classroom communication 4.1 Support student participation 4.4 Maintain student safety 7.3 Engage with the parents/carers	 Bozalek, V., & Zembylas, M. (2017). Towards a response-able pedagogy across higher education institutions in postapartheid South Africa: An ethico-political analysis. <i>Education as Change</i>, <i>21</i>(2), 62-85. Cahill, H., & Dadvand, B. (2022). Transformative methods in teacher education about gender-based violence. <i>Pedagogy, Culture & Society</i>, <i>30</i>(3), 311-327. Legette, K. B., Rogers, L. O., & Warren, C. A. (2022). Humanizing student-teacher relationships for black children: Implications for teachers' social-emotional training. <i>Urban Education</i>, <i>57</i>(2), 278-288. Marraccini, M. E., Lindsay, C. A., Griffin, D., Greene, M. J., Simmons, K. T., & Ingram, K. M. (2021). A Trauma-and Justice, Equity, Diversity, and Inclusion (JEDI)-Informed Approach to Suicide Prevention in School: Black Boys' Lives Matter. <i>School Psychology Review</i>, 1-24. Sheppard, M., & Levy, S. A. (2019). Emotions and teacher decision-making: An analysis of social studies teachers' perspectives. <i>Teaching and Teacher Education</i>, <i>77</i>(1), 193-203. Trofanenko, B. (2014). Affective emotions: The pedagogical challenges of knowing war. <i>Review of Education</i>, <i>Pedagogy, and Cultural Studies</i>, <i>36</i>(1), 22-39. Zembylas, M. (2014). The place of emotion in teacher reflection: Elias, Foucault and 'critical emotional reflexivity'. <i>Power and Education</i>, <i>6</i>(2), 210-222. Zembylas, M., & Papamichael, E. (2017). Pedagogies of discomfort and empathy in multicultural teacher education. <i>Intercultural Education</i>, <i>28</i>(1), 1-19.
Learning and teaching as an equity- promoting pedagogical partnership that	1.1 Physical, social and intellectual development and characteristics of students	Cook-Sather, A. (2014). Multiplying perspectives and improving practice: What can happen when undergraduate students
amplifies participation and voice ('students as partners').	1.3 Students with diverse linguistic, cultural, religious and socioeconomic backgrounds	collaborate with college faculty to explore teaching and learning. Instructional Science, 42, 31-46. doi: 0.1007/s11251-013-9292-31

A growing body of qualitative research (principally in Australia, the UK and US) associates pedagogical partnerships with improvements in belonging, engagement and agency in higher education, particularly for equity-seeking students (Mercer-Mapstone & Bovill, 2019). Examples include consultancies where students provide advice to faculty, based on their learning experiences, and co-design of curriculum and assessment.

Research evidence about the benefits of pedagogical partnerships for HE learners includes:

- increased reflective capacity and empowerment through participation in dialogue about difference (Cook-Sather, 2014; 2015)
- greater agency, including recognition that learning challenges can reflect system limitations rather than individual deficits and that student voice can inform changes to education system to better cater for student diversity (Cook-Sather, 2018)
- improvement in assessment literacy, i.e. understanding of performance and how to do better (Deeley & Bovill, 2017)
- development of learning communities associated with student success and retention (Healey, Flint, & Harrington, 2014).

- 1.4 Strategies for teaching Aboriginal and Torres Strait Islander students
- 1.5 Differentiate teaching to meet the specific learning needs of students across the full range of abilities
- 2.4 Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non-Indigenous Australians
- 3.5 Use effective communication
- 4.1 Support student participation
- 4.4 Maintain student safety
- 7.1 Meet professional ethics and responsibilities

- Cook-Sather, A. (2015). Dialogue across differences of position, perspective, and identity: Reflective practice in/on a student-faculty pedagogical partnership program. Teachers College Record, 117(2), 1-42.
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- Deeley, S. J., & Bovill, C. (2017). Staff student partnership in assessment: enhancing assessment literacy through democratic practices. Assessment & Evaluation in Higher Education, 42(3), 463-477. doi: 10.1080/02602938.2015.1126551
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Universal Design for Learning

Originating in the US, Universal Design for Learning (UDL) is an evidence-informed, flexible and responsive framework for designing inclusive curriculum and

- 1.1 Physical, social and intellectual development and characteristics of students
- 1.2 Understand how students learn
- 1.3 Students with diverse linguistic, cultural, religious and socioeconomic backgrounds
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pedagogy. UDL offers guidelines and checkpoints for providing multiple ways of engaging learners, representing content, and offering learners multiple ways to express their knowledge (CAST, 2018). Influenced by Universal Design in architecture, where facilities must be designed for diverse needs, UDL proposes that designing curriculum to meet diverse needs benefits all learners (Cumming & Rose, 2021).

Most research about UDL comes from the US. A recent meta-analysis from the US affirmed UDL as a research-based practice, finding that UDL has modest efficacy on academic achievement for learners from pre-kindergarten, through primary and secondary school to university (King-Sears et al., 2023). Stronger effects were noted for learners in smaller groups (King-Sears et al., 2023). An earlier Australian meta-analysis (Capp, 2017) affirmed that implementation of UDL enhanced the process of learning for all students from kindergarten through to university but did not establish efficacy for improving academic achievement.

Recently published qualitative research from the US found that UDL helped prepare PSTs in secondary and special education settings to plan for inclusive practice, foster inclusive learning environments and collaboration in general classrooms. (Mackey, Drew, Nicoll-Senft, & Jacobson, 2023). A recent Australian study affirmed the efficacy of UDL as a framework for inclusively designing university curriculum and pedagogy,

- 1.4 Strategies for teaching Aboriginal and Torres Strait Islander students
- 1.5 Differentiate teaching to meet the specific learning needs of students across the full range of abilities
- 1.6 Strategies to support full

participation of students with disability 2.2 Content selection and

Organisation

programs

- 2.3 Curriculum, assessment and reporting
- 2.6 Information and communication technology
- 3.1 Establish challenging learning goals
- 3.2 Plan, structure and sequence learning
- 3.3 Use teaching strategies
- 3.4 Select and use resources
- 3.5 Use effective classroom communication
- 3.6 Evaluate and improve teaching programs
- 4.1 Support student participation
- 4.5 Use ICT safely, responsibly and ethically
- 7.1 Meet professional ethics and responsibilities

Inclusive Education, 21:8, 791-807, DOI: 10.1080/13603116.2017.1325074

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King-Sears, M., Stefanidis, A., Evmenova, A., Rao, K., Mergen, R.L., Sanborn Owen, L., & Strimel, M.M. (2023). Achievement of learners receiving UDL instruction: A meta-analysis. Teaching and Teacher Education, 122.

Mackey, M., Drew, S.V., Nicoll-Senft, J., & Jacobson, L. (2023).

Advancing a theory of change in a collaborative teacher education program innovation through universal design for learning. Social Sciences & Humanities Open, 7.

particularly from the student perspective (Cumming & Rose, 2022).		
(Cumming & Rose, 2022). A Broader Range of Classroom Competencies While it is important for pre-service teachers to identify and apply evidence-based pedagogical practice, it is not enough to simply expose PSTs to these approaches as they will need to learn how to anticipate, diagnose and address their ever-changing classroom environments. They must be able to discern what practice(s) to employ, how and for how long and for what purpose which requires developed competencies, such as problem-solving, creative and critical thinking, communication, etc.	3.1 Establish challenging learning goals 3.5 Use effective classroom communication 3.6 Evaluate and improve teaching programs	Barnes, M., Lafferty, K. & Li, B. (2022) Assessing twenty-first century competencies: can students lead and facilitate the co-construction process?, <i>Educational Review</i> , DOI: 10.1080/00131911.2022.2142524 Foundation for Young Australians (2016). The New Basics: Big Data Reveals the Skills Young People Need for the New Work Order. Foundations for Young Australians Report. Zlatkin-Troitschanskaia, O., Pant, H. A., Toepper, M., Lautenbach, C., & Molerov, D. (2017). Valid Competency Assessment in Higher Education: Framework, Results, and Further
While there has been increasing focus on developing and assessing work ready competencies among school children (Barnes et al., 2022; Foundation for Young Australians, 2016) and higher education contexts (Zlatkin-Troitschanskaia et al., 2017), there has been limited discussion on identifying (and interrogating) what might constitute classroom-ready competencies for PSTs and how to embed them into ITE programs.		Perspectives of the German Research Program KoKoHs. AERA Open, 3(1). https://doi.org/10.1177/2332858416686739
Culturally Responsive Teaching Culturally responsive teaching (CRT) is an approach that acknowledges and incorporates the cultural backgrounds, values, and experiences of students into the teaching and learning process (Gay, 2018). It	Students with diverse linguistic, cultural, religious and socioeconomic backgrounds	Gay, G. (2018). Culturally responsive teaching: Theory, research, and practice. teachers college press.

is important in Initial Teacher Education (ITE) because it promotes equity and inclusion in education and can help to close the achievement gap for students from culturally and linguistically diverse backgrounds. CRT can also help to foster positive relationships between teachers and students and create a more welcoming and inclusive classroom environment (Villegas & Lucas, 2002). Research has shown that CRT can improve academic achievement, motivation, and engagement among students from diverse backgrounds (Gay, 2018). By acknowledging and valuing the cultural identities of students, teachers can create a more meaningful and relevant learning experience that is responsive to their needs and interests (McAllister & Irvine, 2002; Shay & Oliver, 2021). Additionally, CRT can help to challenge and dismantle the biases and stereotypes that can contribute to educational inequities and discrimination (Gay, 2018). Therefore, incorporating CRT in ITE can help to prepare teachers to effectively meet the needs of diverse learners, and promote social justice and equity in education.

- 1.4 Strategies for teaching Aboriginal and Torres Strait Islander students
- 3.7 Engage parents/ carers in the educative process
- 7 .3 Engage with the parents/carers

Lee, J. S., & Luykx, A. (2006). Teachers' beliefs and practices regarding culturally responsive pedagogy in high-poverty urban schools. Journal of Teacher Education, 57(3), 286-300

McAllister, G., & Irvine, J. J. (2002). The role of empathy in teaching culturally diverse students: A qualitative study of teachers' beliefs. Journal of teacher education, 53(5), 433-443

Shay, M., & Oliver, R. (Eds.). (2021). Indigenous education in Australia: Learning and teaching for deadly futures. Routledge.

Villegas, A. M., & Lucas, T. (2002). Preparing culturally responsive teachers: Rethinking the curriculum. Journal of teacher education, 53(1), 20-32.