

Professor Lesley Harbon
Head of School
FASS: School of International Studies and Education
15 Broadway, Ultimo NSW 2007

PO Box 123
Broadway
NSW 2007 Australia
WWW.UB.B.B.B.B.B.U
UTS CRICOS PROVIDER CODE 00099F

16.07.21

## UTS School of International Studies and Education Submission to the QITE Review Expert Panel

To whom it may concern,

## **Our organisation**

The School of International Studies and Education (referred to as the *School* in this submission) in the Faculty of Arts & Social Sciences at the University of Technology Sydney (UTS) has a long-held commitment to teacher education at both the undergraduate and postgraduate level. It is one of the oldest initial teacher education (ITE) providers in Australia, linking back to Balmain Teachers College. Now, located in Ultimo on the main UTS city campus, the *School* has approximately 30 full-time education academic staff that typically teach over 400 (EFTSL split over undergraduate and post-graduate) preservice teachers annually. Other teacher education course offerings in the *School* include HDR qualifications at PhD and Master of Education levels, as well as graduate certificates, bespoke professional learning programs, short courses and micro-credentials.

### This submission to the Expert Panel

The 11 person team in the *School* who contributed their expertise to this submission draw on more than 280+ combined years of experience in teacher education either as education researchers, coordinators of professional experience in schools, accreditation and subject specialists, former classroom teachers and school leaders with substantial in-service experience in K-12 contexts, language teachers at international sites, previous board roles with the NSW state regulator, positions as senior education officers and ministerial aides in state bureaucracies and current employment in a large NSW secondary school as a director of accreditation and professional practice <sup>1.</sup>

# Summary of main points in our submission that identify problems and offer recommendations

<sup>1</sup> Thank you to the expert team in the *School* at UTS who contributed their time with writing and ideas to this submission, they are: Associate Professor Jane Hunter, Dr Don Carter, Associate Professor Matthew Kearney (Leads), Professor Lesley Harbon, Dr Pauline Kohlhoff, Dr Annie Agnew, Dr Joanne Yoo, Professor Peter Aubusson (Adjunct), Dr Carmel Patterson (Industry Fellow), Dr Katherine Bates and Associate Professor Andrew Hurley (Contributors).

For decades reviews of initial teacher education (ITE) by various Australian governments have 'tinkered at the edges' and unless there is a radical rethink of ITE and the ongoing learning of the teaching profession more broadly, these latest terms of reference, will just result in more of the same. ITE and the teaching profession in schools are at a crossroads (Zhou, 4 July 2021).

Preparing teachers for the profession is a **process of education**, not training. Central to that understanding are 16 recommendations that require:

- 1. instituting different pathways for promotion to attract and retain professionals.
- 2. increasing teacher salaries to attract more school leavers and retain inservice teachers to reflect global alignment with education systems where initial recruitment and retention are less problematic.
- 3. re-casting ITE and lifelong professional learning and development as research-informed processes that are aimed at developing teachers who have the capacity to conduct research into their own practice, and to utilise education research to inform their practice (Mockler, 2014).
- 4. greater recognition that the production and consumption of research is central to the professional work of teachers and requires significantly more time and more generous resources allocated at the system level to such tasks (Lupton & Hayes, 2021).
- 5. greater attention to 'pull' factors to the profession like more flexible entry requirements and modifying the use of specialist teachers.
- 6. opening up and properly funding internships /residential professional experience placements in schools that remunerate and resource schools more generously.
- 7. better investment by school systems in school-university partnerships with schools being given annual funding and resources via easily accessible *departmental or institutional* grants.
- 8. accelerated integrated Bachelor/Masters programs like the UTS *vertical stack* (four years rather than five)
- 9. embedding second language learning in combined teacher education degrees, to promote diversity in the profession and intercultural competency
- 10. greater support for evidence-based teaching practice via the TPA.
- 11. linking more assessments tasks in ITE course work to field work in schools.
- 12. attending to the creation of dispositions and wellbeing subjects in ITE programs.
- 13. ensuring that quality experiences of primary school teaching in STEM subjects are continued into high school ITE programs that showcase contemporary pedagogies, interdisciplinary thinking, project-based and inquiry models.
- 14. stronger recognition of *informal teaching experiences* that can count towards final teaching proficiencies.
- 15. Immersion programs in local schools and Teacher in the Field programs with inservice teachers including virtual immersions and observations within all ITE coursework components; and
- 16. targeted and bespoke professional learning development for practising teachers in partner schools focused on mentoring and action learning; that is funded through accessible and less onerous annual government *mini-grant* processes.

#### Introduction

This submission addresses all ten questions in the terms of reference in Parts A and B in the QITE Discussion Paper; our concerns are set out in the paragraphs below and briefly identify problems, offer examples and suggest recommendations to address the situation.

#### Part 1

Attracting and selecting high-quality candidates into the teaching profession

Question 1: How can we further encourage high performing and highly motivated school leavers to enter ITE and choose teaching as a career?

Historically teaching as a post school career choice has attracted young people from largely female cohorts. Primary teacher education is still dominated by female students, feminisation of the profession changes at the secondary school level where there tends to be more male teachers (Theobald & Prentice, 1991). Table 1 shows recent UTS enrolment figures. However, it is important to state that across Australian ITE providers there are decreasing numbers of school leavers who see teaching as a career of first choice.

EFTSL (End of May 2021)	
C10349 Bachelor of Education (Primary) Bachelor of Arts in	22.625
International Studies	
C10350 Bachelor of Arts Bachelor of Education	229.62
	5
C10209 Bachelor of Arts in Educational Studies	3
C10392 Bachelor of Arts in Educational Studies Bachelor of Arts in International	0.375
Studies	
C10404 Bachelor of Science Master of Teaching in Secondary Education	1.125
C10405 Bachelor of Communication (Creative Writing) Master of Teaching	6.292
in Sec Ed	
C10406 Bachelor of Engineering Studies Master of Teaching in	0.25
Secondary Education	
C10444 Bachelor of Education Bachelor of Languages and Cultures	0.167
C04255 Master of Teaching in Secondary Education	100.87
	5
Total	364.3
	3 4

## Table 1

In the following section, we specify two recommendations to address the first question:

 School leavers experience of the teaching profession is usually related to family or close family friends. They recognise the hard yards on initial entry to most professions but can see better pathways for promotion or specialty in other **professions but not in teaching**. To address this teaching pay scales and associated work needs re-structuring to offer more versatility in promotion or specialties - not just curriculum but also pedagogical expertise, well-being proficiency and extra-curricular talents and experience.

2. Career pathways in teaching must include more generous pay scales and the structure of the work done that is conducted against the scale. If comparisons of pay scales of a schoolteacher and an academic in teacher education are set side-by-side there are large differences in progression levels and promotional levels. This includes differences in face-to-face teaching time, and there is no time allocated for administrative duties nor for research-praxis nexus (Patterson, 2021).

Question 2: What changes to admissions and degree requirements, including recognition of prior experience, would better attract and support suitable mid- and late-career professionals from other fields transition into the profession and become quality teachers?

The Expert Panel must query the assumption that mid- and late-career professionals are changing careers for the right reasons even though high-level expertise on an applicant's papers is apparent. In the following section, we specify two recommendations:

- 1. Recognition of prior learning should focus on the **pedagogical aspects of practice** as detailed in the descriptors for <u>Standards 1, 3, 4, and 5</u>
- Need to determine more consistently who are suitable candidates. Teaching
  requires more than subject matter expertise selection must honour the high
  degree of interpersonal and intrapersonal skills required to work with young people,
  and career-change teachers at the very least must demonstrate the seven General
  Capabilities from the Australian Curriculum in their practice, collaboration and
  communication skills.

Solutions to address transitions into the profession offered in our *School* are ITE programs that offer highly flexible arrangements. Courses are designed to cater for a wide range of students applying for an ITE qualification. Our graduate-entry Master of Teaching (Secondary) degree caters for graduates who meet discipline knowledge prerequisites set by NSW Education Standards Authority (NESA), this includes career-change applicants.

Moreover, there are mid-year entry options; where there is sufficient scale preservice teachers might complete our Master of Teaching in accelerated mode over 18 months, and there are also mid-year entry options; applicants can choose from a variety of teaching areas (including combinations of two areas) as described by the NSW curriculum and consistent with NESA Subject Content Knowledge Requirements.

Question 3: How can we increase ITE completion rates so that quality ITE students graduate and pursue careers as quality teachers?

In line with earlier comments about increases in salary and better promotion pathways the Expert Panel must focus their attention on 'pull' factors to make teaching a more attractive profession, for example, if the profession is to compete with alternative career paths that offer higher salaries, such as those in the STEM professions. In the following section, we specify two recommendations:

- 1. Accrediting bodies such as state regulators like NESA must be more flexible with their entry requirements. In particular we argue for prospective teachers who would like to 'major' in Mathematics teaching, two units of undergraduate Mathematics study should be acceptable for entry into ITE courses. This small change should increase the numbers of teachers qualifying in this critical area of state-wide shortage. The shortfall in mathematics content knowledge can then be accommodated within the ITE degree. Furthermore, potential teachers who would like to enhance their employability by qualifying to teach mathematics as a 'minor' at the Years 7-10 levels could be expanded by including the number of subjects that contribute towards meeting content knowledge requirements. Subjects that have a substantive Mathematics component, such as Actuarial Studies, some Accounting subjects and Statistics, for example, should be considered for their mathematical content. Noting that, likely teachers who are mid-career changers could have their workplace experience and/or prior studies recognised, particularly those applicants with experience in STEM areas, Accounting, or Actuarial work.
- Greater attention to disposition and wellbeing subjects in ITE programs will impact teaching quality when there is a more explicit and purposeful focus on the development of preservice professional identities, social and emotional intelligences that can then be reinforced with experience in the field in significant internship/residency programs (Altan &Lane, 2018; Ashbrook & Lowry, 2019).

Question 4: What more can be done to address issues with workforce supply in some subject areas (particularly Mathematics) and schools?

School systems and schools need to prioritise and invest in school-university partnerships to enable more productive, sustained relationships between schools and universities in order to increase workforce supply. These partnerships allow preservice teachers to participate in more meaningful and better supported professional experiences and this in turn will increase completion rates and improve the capability of graduates (Darling-Hammond,1994).

Professional experience in partnership schools is integral to the work of the teaching profession. An **internship model of professional experience** supports preservice teachers to build familiar relationships with schools, to develop confidence and pedagogical repertoires, practice classroom management techniques and really understand what it means to work in a community of practitioners. Fear of poor classroom behaviour and losing control of their class is a prime concern of most new graduates. In the following section, we specify four recommendations to address ongoing workforce supply and preparation/retention in teaching:

1. 1-2 day per week immersion/residency in partnership schools for 12 months would be an ideal alternative to the conventional 4–5-week block structure. This arrangement to start from the first weeks of course enrolment will result in preservice teachers placed in schools as being viewed as key members of school staff and allow them to make a significant, long term contribution to the school's program of learning and teaching. Under this internship / residential model, the role of preservice teachers to be re-conceptualised as teaching assistants (as members of staff) who can value-add to partner schools. Intense programs require schools to assign a mentor who would negotiate ways in which the preservice teacher can contribute to the school - they are effectively *defacto* members of the school's staff; and the extent of this contribution would be built into their course and university assessment requirements.

Programs like this were resourced by government in the 1980s in ITE at the University of Canberra for example – where within one year all graduating, teachers were teaching at local secondary schools. Graduates of this highly successful *inschools program* remained in the profession for more than three decades. Such models require serious government funding where preservice teachers are also paid in their final semester. In addition, international students who are not familiar with Australian schools, can spend more time observing classes or co-teaching to build their classroom confidence.

- 2. Schools and school systems must modify how they use specialist teachers with more teachers qualified to teach Years 7-10, it should be possible to relieve specialist Year 11-12 Physics and Maths teachers of some teaching duties for students in earlier years, and thus utilise their expertise across more than one school online access could effectively facilitate this possibility in more locations. State regulators, schools and school systems should re-consider the nature of required mathematical learning in the 7-10 curriculum (e.g. see Hernandez-Martinez & Vos, 2018). Mathematics is a good example of a subject that serves different purposes, and it makes sense to maintain a requirement for students to achieve functional adult numeracy, problem solving, and reasoning. This recommendation would reduce the requirement for students to engage with more abstract mathematical thinking and could ease the demand for specialist mathematics teachers, and afford much needed curriculum time to other disciplines, such as history, the creative arts, and languages.
- 3. School systems and schools need to prioritise and fund collaborative research with universities to develop more evidence-based approaches for contemporary learning in schools. Research activities and ongoing inservice development of teachers informs the enhancement of current professional practice in schools. Renewed focus on education research agendas over time will reduce the likelihood of preservice teachers being placed in 'yesterday's schools'- and very sadly this happens all too often.

In <u>one recent publication</u> the suggestion was made that part of the annual workload allocation for teacher education academics must be for regular **refresher placements in schools** to strengthen classroom currency and build partnerships (like those in vocational education where TAFE teachers annually commit and spend time in the field in which they teach).

4. Workforce supply for future Mathematics and Science teachers starts in primary school and that unfortunately extends through secondary subject choices and into career aspirations in tertiary education. Conversations are heard in classrooms when very young students compare pay scales for different professions and when the option of teaching is raised ... 'you've lost them'. In one recent Year 7 extension class for Science, it was noted, that whenever students complete and discuss their Know and Wonder on the Learning Intention or the Assessment Task there is a wide variety of experiences in both the curriculum covered and the skills developed. Even at this early-stage Mathematics and Science experiences students have had in primary school vary widely therefore unless engaging pedagogy and skill development in these subjects are prioritised it remains a difficult 'perceived value to turn around' (Hunter, 2021).

Question 5: How can we attract a more diverse cohort into ITE so that teachers better mirror the diversity in school students and society?

Increasingly universities are attracting more diverse cohorts although this has been slower to occur in ITE (Southgate, et al, 2014). A significant move to address the lack of diversity has come from community engaged partnership research in teacher education conducted by Lampert (2021). Citing that the challenge of ITE is: "more about preparing preservice teachers to engage more deeply with students in high-poverty communities, some of whom they will ultimately teach. It requires an institutionally embedded strategy to involve Indigenous, refugee, poor, and other historically vulnerable communities in central, rather than tokenistic, ways" (p. 449). At UTS the *Centre for Social Justice and Inclusion* leads many programs targeting alternate pathways into university. In the following section, we specify two recommendations for ITE:

- 1. The new (2021) vertical stack combined Master of Teaching degree options at UTS cater for school leavers who wish to pursue a career in teaching or have multiple career aspirations; designed to attract prospective young people from broader societal groups to complete an undergraduate degree in a non-ITE field combined with a Master of Teaching graduates will hold a double-degree completed in an accelerated timeframe of four years (e.g. Undergraduate degrees include Science, Business, Engineering and Communications (Creative Writing).
- 2. Embedding the learning of a second language in combined teacher education degrees (eg. the Bachelor of Education/Bachelor of Arts in International Studies at UTS) or in shorter out of session language and culture immersion experiences these could be added to an ITE degree. Such programs attract heritage speakers, who use them to brush up and deepen their language knowledge and expertise and add to their teaching areas, as well as reinforce resilience for the challenges of the teaching profession.

Since 1987 the multilingual, multicultural nature of our Australian society has been acknowledged with the 2016 Australian Census identifying more than 300 different

languages as spoken in Australian homes. Research indicates that ITE programs which recruit pre-service teachers with competence in another language besides English and who can teach into heritage language programs or offer literacy programs which value first language literacy alongside English literacy, are more likely to develop intercultural competencies among the student cohort (Seals & Kreeft Peyton, 2016).

## PART B - Preparing ITE students to be effective teachers

Question 6: What more can we do to ensure that the ITE curriculum is evidence-based, and all future teachers are equipped to implement evidence-based teaching practices?

Teaching is a complex and multifaceted profession. To be an effective teacher means more than competence in the classroom. Teaching requires highly developed interpersonal skills in dealing with colleagues, parents and the wider school community. The highly functioning teacher displays "strength and resourcefulness, creativity and energy" in all contexts (Smith & Ulvi, 2017, p. 942).

To be an effective teacher means that the individual not only possesses strong curriculum content knowledge and the necessary range of assessment tools and strategies to gauge student performance; it also means that teachers have a strong grasp of curriculum and assessment 'history'. That is, a sense of 'where we've come from' in order to make sense of why current approaches have currency.

This issue is not new, with the observation that "(o)urs is a forgetful era, often oblivious to ways in which past cultural practices have shaped the foundations of much that we think and do" are still pertinent (Reid, 2004, p. ix). As such, every teacher must know **the historical antecedents and theoretical** backgrounds of their classroom approaches in order to implement their approaches effectively and when necessary, be able to justify their approaches to colleagues or parents.

We support the notion that an ITE curriculum must be evidence-based and that graduates must be equipped to implement evidence-based practices. In the following section, we specify two recommendations:

1. Preservice teachers are equipped to implement evidence-based teaching practice via the teacher performance assessment (TPA). For example, in Element 1 the focus is on their capacity to understand the context of their placement and their planning for student learning in relation to the specific goal/s of the sequence of lessons, and the ways in which they will judge their impact on student learning. In Element 2, preservice teachers explore the impact of their teaching on student learning; here, they gather data and analyse their teaching, to demonstrate how they considered the complexity and interrelation of learning and teaching, reflected on their learning goals, and the role of professional judgements that have been made in their teaching. In Element 3 the focus is on delivering a summative assessment task as part of the cyclic process of collecting and analysing evidence of what students

know, understand and can do. The TPA is the right place to assess whether their students have been able to achieve the overarching learning goals for the sequence of lessons.

2. One of our team, the Industry Fellow, drew on her current experience in coordinating professional experience placements from various universities at her secondary school. Many preservice teachers do not have any assessment tasks linked to their in the field work. This seems to be a missed opportunity and university rules need to change around this (Gore, et al, 2017). Some preservice teachers are only required to complete a logbook of hours and observations notes and there is little or no requirement for writing to engage in critical thinking or pedagogical research around their in-school experience. Total requirements are based on the number of lessons taught and/or observed - which again reinforces the structure of the inadequate teaching pay scale where there is no time built into the professional day for mentoring and supervising preservice teachers to grow, reflect and change their practice.

Question 7: What more can ITE providers and employers do to ensure ITE students are getting the practical experience they need before they start their teaching careers?

In addition to the recommendations made at question 4 we contend that an in-school experience earlier in ITE programs from the second week of enrolment is a worthy goal. In the UTS Master of Teaching (Secondary) program, current planning for professional experience means it will be included over four semesters – well beyond the current **two placements**. For example: in Year 1 – Semester 1: Core subjects: 10 days, and Semester 2: Professional Experience 1: 20 days, and in Year 2 -Semester 1: Teaching Methods subjects: 10 days and Semester 2 Professional Experience 1: 20 days. In the following section, we specify a further two recommendations to increase practical experience prior to career commencement:

- A stronger emphasis on practical experiences that are informal but count towards total professional experience. Important supplementary informal activities could include volunteering at school events, coaching for HSC success or school sporting team competitions.
- 2. If connections to schools were opened up sooner in the ITE program physical/virtual observations of classrooms/lessons in real-time across diverse curriculum areas (beyond secondary teachers' specialist areas) could count. Harnessing lessons from the Covid-19 pivot in schools the power and connectivity of video-conferencing technologies requires more investigation about its possibilities and thus greater formal recognition of its value by state regulators (O'Gradaigh et al, 2021).

Question 8: How can Teaching Performance Assessment (TPA) arrangements be strengthened to ensure graduate teachers are well-prepared for the classroom?

The TPA is an important component of ITE for preservice teachers. As such, we recommend the following to maximise its role:

- 1. ITE providers need to integrate aspects of the TPA in the early stages and throughout relevant teacher education degrees to ensure preservice teachers' familiarity with TPA requirements by the time they commence their final year of study. For example: teaching and learning skills addressed in the TPA need to be backward mapped throughout the degree and be aligned to the development of skills addressed in the teaching methods subjects.
- 2. The embedding and use of 'reflection' in ITE programs are an important component of the TPA where the preservice teacher reflects on their classroom experiences. The capacity for effective reflection improves the opportunity for deep learning (Dummer et al., 2008; Moon, 1999); developing critical thinking skills (Moon, 2006; Schön, 1987) and encouraging metacognition (Moon, 2006). The ability for preservice teachers to reflect meaningfully on their practicum experiences and relevant aspects of coursework is dependent on their ability to sift through these experiences and express them orally or in writing both cogently and articulately. To do so requires an understanding of the higher-order processes such as the ability to analyse, evaluate, and create. As such, ITE programs need to strengthen their approaches to embedding these skills and understanding of what constitutes 'teacher reflection'.
- 3. The use of video in the TPA an effective strategy to assist the preservice teachers in reflecting and reviewing their classroom experiences is the use of video recording. While not all ITE providers require this in their TPA program, preservice teachers stand to benefit from re/viewing their classroom performance and undertaking meaningful conversations with the supervising teacher (here we are reminded of the highly effective micros skills recording and skill development in local schools at the University of Sydney in the 1990s.)
- 4. funding support for Tertiary Supervisor (TS) in the final practicum experience upon which the TPA is based. ITE providers must ensure that a much stronger tertiary supervisory presence is evident to ensure the provision of quality advice and guidance. The TS must have robust and current knowledge of curriculum requirements, pedagogical approaches and assessment strategies.

The following was noted by the Industry Fellow on our team who is the director of accreditation and professional practice in a NSW secondary school; these are not necessarily the experience of all ITE academics at UTS (NSW Teachers Federation, 2021):

"Placements are predominantly handled by professional staff in the university, which is usually an onerous exercise in filling in placements in a spreadsheet. Most tertiary advisors are casuals who were once in the profession (sometimes quite a few years ago) have limited knowledge of the updates to the current school curriculum and may not have experience of the university subjects linked to the professional experience placements. The TPA should include an early initial placement within the first year of

the degree so that the preservice teacher and their assigned academic can determine if they're suitable for the profession and the development that will be required over their university degree and into their early career years as they work towards their accreditation at Proficient Teacher level".

Question 9: How can leading teachers, principals and schools play a greater role in supporting the development of ITE students?

There are opportunities for ITE programs to harness the expertise of schools, as well as opportunities for schools to utilise university-based expertise. School-based personnel including highly successful teachers, members of school executives and principals are well-positioned to play a greater role by collaborating with ITE providers in innovative initiatives to ensure preservice teachers are receiving the practical experience they need before they start their careers. In the following section, we specify three recommendations to support their development:

- 1. One recent example is the collaboration between *The School* and Killara High School. Titled *School Immersion* this kind of experience will give preservice teachers opportunities to experience the complexities of school life and to cover topics that may be difficult to address in university-based coursework. Topics like current technology policy, playground duty, student wellbeing, learning support structures, Indigenous communities and engagement with student learning data. Such experiences would allow targeted conversations with experienced and early career teachers, interactions with casual teachers on site, how to work effectively with parents parent teacher interviews, excursion management and risk assessments.
- 2. ITE programs also stand to benefit through the integration of inservice teachers at strategic points in subjects/courses. This already happens with the *Teacher in the Field* co-teaching in English Teaching Methods (ETM) subjects in *The School* each week of semester with the tutor who is a Master of Teaching academic. Conducted via Zoom this session connects the inservice teacher to the ETM class on campus or at home it is the connection to 'a real teacher' with the latest syllabus knowledge critical for the senior years, effective assessments and marking activities using real student work samples that is invaluable. This practice provides opportunities for preservice to rehearse online pedagogies and management of the contemporary delivery of curated subject matter.
- 3. Creating more opportunities through funding of activities where schools utilise the expertise of universities. For example, all schools are required to provide an Annual Report to their respective education sector. Each report identifies specific aims, goals and targets and as such, provides an indication of the areas in which universities are able to potentially work alongside and assist schools in achieving their targets. The School has conducted this kind of valuable work with NSW schools mainly invitational over many years in areas like STEM, technology-enhanced learning, literacy and numeracy development, special education and leadership.

Question 10: Can ITE providers play a stronger role in ongoing professional development and support of teachers?

If governments and school systems in Australia can invest in stronger school-university partnerships (see Questions 4 and 7 above), there is the potential for more targeted professional development for practising teachers in partner schools (Young, 2020). Mentor teachers in schools need ongoing support in effective mentoring and coaching practices whilst preservice teachers are on professional experience. Targeted topics could include providing quality feedback to preservice teachers, managing challenging conversations, and the procedures that are unique to their institution, such as the basic requirements for preservice and mentor teachers. In the following section, we specify two recommendations to support this development:

- 1. Academic staff in ITE partner institutions can facilitate teachers' professional learning in partner schools in a range of other areas, including the use of action learning procedures (Aubusson et al., 2009; Hunter, 2021). In the School an action learning short course was recently piloted with two hub schools and 40+ teachers. Teachers were able to investigate problems/issues arising from their practice, such as formative assessment, differentiating instruction, enhancing student well-being, managing challenging behaviour, and developing effective pedagogical approaches in teaching mathematical reasoning and reading.
- 2. ITE institutions must be incentivised to tailor professional development and support to teachers through active considerations of a partner school's specific context e.g. rural, metropolitan or remote, low socio-economic, selective and/or comprehensive schools, primary and secondary schools. Personalized approaches are more responsive and will address other chronic problems in school education, eg. the retention of early career teachers.

#### References

- Altan, S., & Lane, J. (2018). Teachers' narratives: A source for exploring the influences of teachers' significant life experiences on their dispositions and teaching practices. *Teaching and Teacher Education (74)*, 238-248.
- Ashbrook, P. & Lowry, A. (2019). Engineering Habits of Mind: The Early Years.
- Aubusson, P., Schuck, S. & Burden, K. (2009) Mobile learning for teacher professional learning: benefits, obstacles and issues, ALT-J, 17(3), 233-247.
- Australian Bureau of Statistics. (2016). Main language spoken at home. <u>The Census of Population and Housing[https://www.abs.gov.au/statistics/standards/language-standards/latest-release#main-language-spoken-at-home]</u>, accessed 2 July 2021.
- Carter, D. (2019). Restoring purpose: applying Biesta's three functions to the Melbourne Declaration. *Curriculum Perspectives*, 39, 125–134.
- Darling-Hammond, L. (1994). *Professional Development Schools: Schools for Developing a Profession.* New York: Teachers College Press.
- Dummer, T., Cook, I., Parker, S., Barrett, G., & Hull, A. (2008). Promoting and assessing 'Deep learning' in geography fieldwork: An evaluation of reflective field diaries. *Journal of Geography in Higher Education*, 32(3), 459–479.

- Gore, J., Holmes, K., Smith, M., Fray, L. McElduff, P., Weaver, N. & Wallington, C. (2017). Unpacking the career aspirations of Australian school students: towards an evidence base for university equity initiatives in schools, *Higher Education Research & Development*, 36(7), 1383-1400.
- Hunter, J. (2021). *High Possibility STEM Classrooms: Integrated STEM in Research and Practice*. New York: Routledge.
- Lo Bianco, J. (1987). National policy on languages. Canberra: AGPS.
- Lampert, J. (2020). A community-engaged framework for the preparation of teachers for high-poverty communities. *Australian Education Researcher*, (48), 449–466, Lambert, P. (2017). *Education: Future frontiers hard focus on soft skills*. New South Wales Department of Education.
- Lockhart, P. (2002). A mathematician's lament, 2002. Retrieved 28<sup>th</sup> June 2021 from https://www.maa.org/external\_archive/devlin/LockhartsLament.pdf
- Lippman, L., Ryberg, R., Carney, R. & Moore, K. (2015). Workforce connections: Key "soft skills" that foster youth workforce success. *Child Trends*. Viewed at: <a href="https://www.childtrends.org/wp-content/">https://www.childtrends.org/wp-content/</a> uploads/2015/06/2015-24WFCSoftSkills1.pdf
- Lupton, R. & Hayes, D. (2021). *Great Mistakes in Education Policy*. Bristol: Bristol University Press.
- Mockler, N. (2014). Simple solutions to complex problems; moral panic and the fluid shift from 'equity' to quality' in education, *Review of Education*, 2(2), 115-43.
- Moon, J. A. (1999). *Reflection in Learning & Professional Development*. Routledge Falmer. Moon, J. A. (2006). *Learning Journals, a handbook for reflective practice and professional development*. Routledge. <a href="https://doi.org/10.4324/9780203969212">https://doi.org/10.4324/9780203969212</a>
- NSW Teachers Federation (2021) (also known as the Gallop Inquiry). *Valuing the profession*Retrieved here
  <a href="https://static1.squarespace.com/static/5e3758f6cdad377a5754259c/t/60597e729a6b026b0016beef/1616477832453/qallop\_inquiry\_report\_2021.pdf">https://static1.squarespace.com/static/5e3758f6cdad377a5754259c/t/60597e729a6b026b0016beef/1616477832453/qallop\_inquiry\_report\_2021.pdf</a>
- O'Gradaigh, S., Connolly, C., MacMahon, B., Agnew, A. & Poole, W. (2021). An investigation of emergency virtual observation in initial teacher education in Australia and Ireland during the COVID-19 pandemic. *Irish Education Studies*.
- Organisation for Economic Co-operation and Development (2019). OECD Future of education and skills: Learning compass 2030 framework. OECD.
- Patterson, C. (2021). The evidence says teachers need more time and more money. Why is the government ignoring it? Retrieved on 12 July from <a href="https://www.aare.edu.au/blog/?p=8560">https://www.aare.edu.au/blog/?p=8560</a>
- Prentice, A. & Theobald, M. (Eds). (1991). Women Who Taught: Perspectives on the history of women and teaching. Canada.
- Reid, I. (2004). Wordsworth and the Formation of English Studies. Ashgate.
- Seals, C.A., & Kreeft Peyton, J. (2016). Heritage language education: valuing the languages, literacies and cultural competencies of immigrant youth. <u>Current Issues in Language Planning</u>, DOI: <a href="https://doi.org/10.1080/14664208.2016.1168690">https://doi.org/10.1080/14664208.2016.1168690</a>.
- Smith, K. & Ulvik, M. (2017). Leaving teaching: lack of resilience or sign of agency?, Teachers and Teaching, 23(8), 928-945.
- Southgate, E., Douglas, H., Scevaka, J., Macqueen, S., Rubinc, M., & Lindella, C. (2014). The academic outcomes of first-in-family in an Australian university: An exploratory study. International Studies in Widening Participation, 1(2), 31-45.

Young, K. (2020). Innovation in initial teacher education through a school university partnership. *Journal of Curriculum and Teaching*, 9(1), 15-29.

Zhou, N. The Guardian, 4 July 2021 accessed here

https://www.theguardian.com/australia-news/2021/jul/04/everyones-bailing-australian-teachers-speak-on-stress-and-uncertainty-of-increasing-casual-contracts

Yours Sincerely,

Professor Lesley Harbon

Levely Haven

Head of School

School of International Studies and Education