

# Faculty of Education

Te Kura Toi Tangata

# Waikato Journal of Education

Te Hautaka Mâtauranga o Waikato

Volume 18, Issue 1: 2013

Special Edition: Reclaiming and reframing teacher education in Aotearoa New Zealand

## WAIKATO JOURNAL OF EDUCATION TE HAUTAKA MĀTAURANGA O WAIKATO

Special Edition Editors:	Sally Hansen, John O'Neill, Peter Rawlins and Judith Donaldson
Current general editors:	Beverley Bell, Noeline Wright
Editorial board:	Bronwen Cowie, Deborah Fraser, Richard Hill, Clive Pope, Margie Hohepa, Sally Peters, Beverley Bell, Noeline Wright

The *Waikato Journal of Education* is a peer refereed journal, published twice a year. This journal takes an eclectic approach to the broad field of education. It embraces creative, qualitative and quantitative methods and topics. The editorial board is currently exploring options for online publication formats to further increase authorial options.

The Wilf Malcolm Institute of Educational Research (WMIER), which is part of the Faculty of Education, The University of Waikato, publishes the journal.

There are two major submission deadline dates: December 1 (for publication the following year in May); June 1 (for publication in the same year in November). Please submit your article or abstract to wmier@waikato.ac.nz.

Submissions for special sections of the journal are usually by invitation. Offers for topics for these special sections, along with offers to edit special sections are also welcome.

Correspondence, articles for review, subscriptions and payments should be addressed to the Administrator Wilf Malcolm Institute of Educational Research, Faculty of Education, The University of Waikato, Private Bag 3105, Hamilton, 3240, New Zealand. Email: wmier@waikato.ac.nz

Subscriptions:Within NZ \$50; Overseas NZ \$60Copyright:© Faculty of Education, The University of WaikatoPublisher:Faculty of Education, The University of WaikatoCover design:Donn RatanaPrinted by:Waikato Print

ISSN 1173-6135

## Waikato Journal Of Education

### Te Hautaka Mātauranga o Waikato

Volume 18, Issue 1, 2013

Editorial introduction: Reclaiming and reframing a national voice for teacher education John O'Neill, Sally Hansen, Peter Rawlins and Judith Donaldson	3
Policy driven reforms and the role of teacher educators in reframing teacher education in the 21st century <i>Diane Mayer</i>	7
Is initial teacher education a profession? John O'Neill	21
Rapporteurs' report: Is initial teacher education a profession? Beverley Norsworthy	33
Teacher education policy in New Zealand since 1970 Noeline Alcorn	37
Rapporteurs' report: Teacher education policy in New Zealand since 1970 Andy Begg and Barbara Allan	49
Towards equity through initial teacher education Dr Airini	53
Rapporteurs' report: Towards equity through initial teacher education <i>Chris Jenkin and John Clark</i>	67
From preparation to practice: Tensions and connections Mary Simpson and Lexie Grudnoff	71
Rapporteurs' report: From preparation to practice: Tensions and connections <i>Monica Cameron and Walt Rutgers</i>	83
What are the characteristics of exemplary initial teacher education programmes in countries similar to Aotearoa/New Zealand? <i>Peter Lind</i>	87
Rapporteurs' report: What are the characteristics of exemplary initial teacher education programmes in countries similar to Aotearoa/New Zealand? <i>Peter Lind, Barry Brooker and Beverley Cooper</i>	101
What should initial teacher education programmes for 2022 look like and why? <i>Jane Gilbert</i>	105
Rapporteurs' report: What should initial teacher education programmes for 2022 1 ook like and why?	
Letitia Fickel and Julie Mackey	117

What evidence-base do we need to build a stronger theory-practice nexus? <i>Lisa F. Smith</i>	121
Rapporteurs' report: What evidence-base do we need to build a stronger theory- practice nexus? Judith Donaldson and Kama Weir	131
Who should develop initial teacher education policy and why? <i>Judie Alison and Sandra Aikin</i>	135
Rapporteurs' report: Who should develop initial teacher education policy and why? Graham Jackson and Jenny Ritchie	147
Special Interest Group report: Tātaiako: Cultural competencies for teachers of Māori learners Jen McLeod and Pani Kenrick	151
Special Interest Group report: Early Childhood Education <i>Kerry Bethell</i>	155
Special Interest Group report: ICT/eLearning competencies in ITE <i>Mary Simpson</i>	159
Special Interest Group report: Learning languages in ITE <i>Adèle Scott</i>	163
Special Interest Group report: Literacy and numeracy competency of ITE students <i>Beverley Cooper and Bev Norsworthy</i>	165
Special Interest Group report: Inclusive education in ITE <i>Missy Morton</i>	171
Special Interest Group report: Sustainability in initial teacher education <i>Jenny Ritchie</i>	175

Waikato Journal of Education Te Hautaka Mātauranga o Waikato



Volume 18, Issue 1: 2013

# What are the characteristics of exemplary initial teacher education programmes in countries similar to Aotearoa/New Zealand?

#### Peter Lind

New Zealand Teachers Council

#### Abstract

Recent political and educational debate in New Zealand has closely linked the quality of teaching with the educational achievement of learners. This has been supported by evidence from both national and international research. It is no surprise; therefore, that attention has been focused on how we prepare teachers for the profession in Aotearoa New Zealand.

The Education Workforce Advisory Group recommended in its Final Report to the Minister of Education (2010) that moving initial teacher education (ITE) to a postgraduate qualification would improve the provision of ITE by reducing the variability in quality of ITE programmes and helping to raise the status of the teaching profession. There is very little evidence provided in this report to support this claim. Therefore, one of the intentions of this paper is to examine how this vision aligns to the characteristics of exemplary ITE programmes offered internationally.

To achieve this we will ask the following questions:

- What are the characteristics of exemplary ITE programmes?
- How effectively do these programmes prepare teachers to improve the educational outcomes for all learners?
- What are the implications for New Zealand ITE programmes?

#### Introduction

There is overwhelming international evidence of the critical role teachers play in educating children and young people (Hattie, 2009; OECD, 2005). For many governments, this has led to close scrutiny of the work of teachers and questions about the best way to prepare teachers for a twenty-first century education system. There continue to be many radical proposals for change and much heated debate on this issue (Hagger & McIntyre, 2006).



The purpose of this paper, therefore, is threefold. Firstly, it is to identify the characteristics of exemplary initial teacher education (ITE) programmes from the international academic literature, secondly, to outline how these programmes prepare teachers to improve the educational outcomes for all learners and, thirdly, to examine the implications for New Zealand ITE programmes.

Teacher education has not had a high profile in international educational research (Goodlad, 2002). In their comprehensive analysis of the empirical evidence about teacher preparation in the United States, Cochran-Smith and Zeichner (2005) found that the research base was limited by small samples, qualitative methodologies, and utilising descriptive rather than analytical approaches. Longitudinal studies or those based on national databases are largely absent. They note that this is because the field is still, to some extent, in its infancy:

Our analyses also suggest that some of what are considered serious failings in the research on teacher education are more rightly understood as reflections of the field's relative youth and of its history in terms of research priorities and resource allocation. (Cochran-Smith & Zeichner, 2005, p. 4)

Cameron and Baker (2004) have provided a comprehensive overview of ITE research literature for the period 1994 to 2004 in New Zealand and expressed similar concerns about the robustness of the research conducted on ITE, commenting that many studies were one-off with a narrow focus, limiting the possibility of generalisability.

Since 2005, there have been a number of key international studies that have sought to identify the characteristics of exemplary ITE programmes (Barber & Mourshed, 2007; Darling-Hammond, 2006, 2010; Jensen, Sandoval-Hernández, Knoll, & Gonzalez, 2012; Levine, 2006). Two of these studies are situated in the United States, where there are a plethora of ITE pathways.

#### **Characteristics of exemplary ITE programmes**

#### The United States of America

The United States has over 1200 faculties or schools of education awarding more diplomas or degrees than in any other vocational field (Levine, 2006). This range of ITE provision offers a rich database for critical analysis. After conducting a four-year study of ITE programmes in the United States, Levine and his research team concluded that the best ITE programmes are

committed to prepare excellent teachers and have clearly defined what an excellent teacher needs to know and be able to do. The field component of the curriculum is sustained, begins early, and provides immediate application of theory to real classroom situations. There is a close connection between the teacher education program and the schools in which students teach, including ongoing collaboration between academic and clinical faculties. All have high graduation standards. (Levine, 2006, p. 81)

One of the key recommendations of this study was the need to "transform education schools from ivory towers into professional schools focused on classroom practice" (Levine, 2006, p. 114). This means that "education schools need to follow the example of other professional schools in making the basic practitioner their primary activity" (p. 114).

This echoes the findings of Darling-Hammond's (2006) review of exemplary United States ITE programmes. She identified seven common features:

- A common, clear vision of good teaching that permeates all coursework and clinical experiences, creating a coherent set of learning experiences.
- Well-defined standards of professional practice and performance that are used to guide and evaluate coursework and clinical work.
- A strong core curriculum taught in the context of practice and grounded in knowledge of child and adolescent development and learning, an understanding of social and cultural contexts, curriculum, assessment, and subject matter pedagogy.
- Extended clinical experiences—at least 30 weeks of supervised practicum and student teaching opportunities in each program that are carefully chosen to support the ideas presented in simultaneous, closely interwoven coursework.
- Extensive use of case methods, teacher research, performance assessment, and portfolio evaluation that apply learning to real problems of practice.
- Explicit strategies to help students to confront their own deep-seated beliefs and assumptions about learning and students and to learn about the experiences of people different from themselves.
- Strong relationships, common knowledge, and shared beliefs among school and university-based faculty jointly engaged in transforming teaching, schooling, and teacher education. (p. 306)

Both of these reviews highlight the critical importance of the time required by student teachers to develop and apply their professional practice before final graduation. As Darling-Hammond (2010) argues:

the most powerful programs require students to spend extensive time in the field throughout the entire program, examining and applying the concepts and strategies they are simultaneously learning about in their coursework. (p. 40)

#### Finland and Singapore

Although initial teacher education (ITE) cannot be expected to provide student teachers with all of the knowledge and skills that they could ever need, a number of researchers link the educational successes of some countries with the high-quality ITE programmes by which their graduates have been prepared to teach (Darling-Hammond, 2010; Jensen et al., 2012; Sahlberg, 2011).

The McKinsey Report on *How the World's Best-Performing Systems Come out on Top* observed that

in the world's top-performing school systems, high standards are set for entry into teacher education, the number of places in teacher education programs is limited to the number of graduates required, students

compete for entry, and the status of teaching is high. In contrast, lowperforming systems often set low standards for entry and train more teachers than they require, resulting in limited competition and low status. (Barber & Mourshed, 2007)

In his report to the International Summit on the Teaching Profession, Schleicher (2012) highlights the teacher education systems of two countries, Finland and Singapore, considered high performing by the OECD. In both countries, selection into an ITE programme is highly competitive.

In Singapore, prospective teachers are selected from the top one-third of each cohort by panels that include current principals. Strong academic ability and non-academic qualities are essential considerations during the recruitment process, such that only candidates who possess the character, aptitude and abilities to teach and develop students are recruited as teachers (National Institute of Education, 2009).

Similarly, in Finland less than 10 per cent of applicants are accepted into primary school teacher education. Sahlberg (2011) observes that "Finland is perhaps the only nation that is able to select its primary school teacher-students from the top quintile of all high school graduates year after year" (p. 76).

Besides attracting high-quality applicants, there are four key components of Finnish teacher preparation (Schleicher, 2012). Firstly, student teachers are expected to complete a master's degree that includes a research-based dissertation on an aspect of their teacher preparation and classroom work. This builds an expectation for disciplined inquiry in their professional practice. Secondly, there is a strong emphasis on subject-specific pedagogy, which is a shared responsibility between teacher education faculty and academic subject faculty. Thirdly, Finnish teachers are thoroughly prepared in diagnosing learning difficulties and adapting their teaching approaches and strategies to the needs of their learners. Finally, there is a very strong clinical component in Finnish teacher preparation. This includes at least a full year of teaching practice in a school associated with the university.

In Singapore, all teachers are trained at the National Institute of Education, part of Singapore's Nanyang Technological University. It has developed a model of teacher education, labelled 'TE21' (National Institute of Education, 2009), which places the learner at the heart of teachers' work, emphasises the importance of ongoing professional learning in the face of a rapidly changing education milieu, and a clear commitment by teachers to collaborate with their profession and their community in their professional endeavours (Schleicher, 2012).

There are very similar components in the teacher preparation of Singaporean graduates as of Finnish graduates. Firstly there is an expectation that student teachers will be active researchers in their own professional practice, largely through action research. Secondly there is a strong emphasis on achieving balance between theoretical knowledge and practice-based learning. This is strengthened through partnerships with schools. It is achieved by school-based inquiry projects, utilising pedagogical tools that replicate classroom experiences within the university context, and experiential learning such as practicum and field trips. Of particular importance is the training of school-based mentors and seconding practitioners from schools to the National Institute of Education on short-term contracts.

#### Effective collaborative ITE partnerships

#### The Netherlands

The need to ensure that the theory of teaching and learning is not taught in isolation from practice permeates much of the literature (Cameron & Baker, 2004; Darling-Hammond, 2006). A growing number of researchers, particularly from The Netherlands, have sought to identify the practical knowledge of teachers (Hiebert, Gallimore, & Stigler, 2002; Meijer, 1999; Verloop, Van Driel, & Meijer, 2001). Teachers often express and exchange their knowledge in the narrative mode of anecdotes and stories (Munby, Russell, & Martin, 2001). Encouraging teachers to articulate their classroom experiences and the processes by which they make decisions enables their practical knowledge to be examined and shared publicly. This can help to shape approaches in teacher education. In translating this to pre-service teacher education, Korthagen (2001) argues that learning needs to be constructed from practicum experiences faced by student teachers that can be later reconstructed through discussion amongst peers. In association with colleagues from the University of Utrecht, Korthagen developed an approach to ITE called the 'realistic teacher education' model (2001). This emphasis on the importance of field-based experience has led to ongoing debate between tertiary institutions and the teaching workplace as to the locus of control in preparing teachers.

#### England

Nowhere has the 'locus of control' been more hotly debated than in England. In the past 30 years, ITE has increasingly moved from being within higher education institutes (HEI) to being focused within the workplace, a schools-based approach (Hagger & McIntyre, 2006).

How successful has this been in preparing teachers for the workforce? Hagger and McIntyre (2006) argue that earlier schools-based approaches in England have been largely 'craft models', where imitation of current teaching practice has been emphasised. Drawing on the work of the 'Modes of Teacher Education' study, Hagger and McIntyre conclude that the schools-based approach had:

Qualified strengths in that

- the expertise of the experienced teachers is (within quite severe limits) recognized and relied upon,
- beginning teachers generally acquire basic practical competence,

but limitations in that

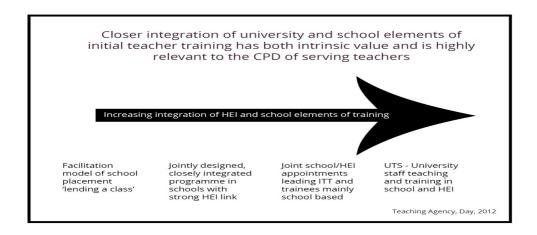
- beginning teachers frequently do not learn how to critically evaluate and improve their own practice,
- official concerns are focussed more on a pervasive regime of quality control than on the development of learning opportunities within the system. (p. 16)

According to Hagger and McIntyre (2006, p. 64), "the effectiveness of schooluniversity partnerships for ITE depends on a carefully considered, realistic, shared

understanding about how the contributions of the two partners can best complement each other".

Partnerships between tertiary providers and schools are not new. They could be viewed on a continuum (see Figure 1). Day (cited in Rossner & Commins, 2012, p. 2) describes four key junctures in such a continuum. At one end of the continuum, it can simply involve 'lending a class', through to the other end of the continuum, which requires a full partnership with collegial learning and fully aligned processes between the provider and the workplace.

#### Figure 1. Continuum of school and initial teacher training (ITT) integration



Hierarchical relationships that are characterised by irregular contact with the school or early childhood service simply to satisfy the practicum requirements of the provider stretch the goodwill of the teaching profession. A 'full partnership' is characterised by developing locally relevant, collegial learning relationships and maintaining these 'learning communities' over a sustained period of time (Le Cornu & Ewing, 2008). To achieve this, there needs to be an awareness of the values and practices of the local communities in which the learning institutions are based. Cochran-Smith (2003) has proposed such 'shared communities of learners' in ITE that allowed for

prospective teachers, experienced teachers and teacher educators alike to work together in communities of learners—to explore and re-consider their own assumptions, understand the values and practices of families and cultures that are different from their own and construct pedagogy that takes these into account in locally and culturally sensitive ways. (p. 24)

Based on the premise that locating ITE in the workplace ensured that student teachers could directly access expert practitioner knowledge and experience, Hagger and McIntyre (2006) conducted a comprehensive three-year study to identify the characteristics of effective integration of school-based and university-based ITE. Their research identified the unique perspectives brought to the ITE experience from each of the parties. As Furlong, Barton, Miles, Whiting and Whitty (2000) described:

Because of the nature of their work and the institutional context in which they are based, professional teacher educators ... are able to support [professional] learning in ways that is impossible for teachers ... few teachers have access to the range of other forms of knowledge that good (HEI-based) teacher educators can bring to bear. (pp. 14–15)

This study replaced the traditional practicum model of the Postgraduate Certificate in Education (PGCE) with a comprehensive school-based ITE curriculum. This programme evolved into the Oxford Internship Scheme.

#### Victoria, Australia

With a similar rationale as the Oxford Internship Scheme, the University of Melbourne introduced its Masters of Teaching (MTeach). It capitalised on the introduction of the 'Melbourne Model' in 2007, which shifted all vocational degrees at the University of Melbourne to postgraduate courses, and created generalist undergraduate degrees in areas including arts, biomedicine, science and environments. Teacher education sought to break away from its traditional undergraduate pathway for preparing primary and early childhood teachers, and one-year graduate diploma for preparing secondary teachers, to a two-year postgraduate qualification for all pre-service teachers.

To break the cycle of teachers teaching as they were taught and new teachers being drawn into this prevailing culture, the MTeach emphasises the importance of alignment, understanding and collaboration between the university and schools/early childhood settings. This is achieved by student teachers spending two days per week in a school or early childhood centre from early in their studies, as well as blocks of sustained teaching practice in carefully chosen schools and centres, where staff have a sound understanding of the programme. The university also employs staff from each of the base schools/centres—called a Teaching Fellow—who are released from 50 per cent of their duties to work across the partnership group/network with student teachers and the university staff mentor. This builds a community of learning that helps student teachers make sense of their course work within a professional practice environment and make purposeful links between theory and practice (Dinham, 2012).

#### Scotland

In contrast, Scotland has strongly resisted moves to field-based ITE approaches. Initial teacher education in Scotland centres in large measure on the four-year undergraduate and the one-year Post Graduate Diploma in Education (PGDE) routes. The unique feature of the Scottish system is the provision of a paid year-long placement in a mainstream school for all graduate teachers qualifying from Scottish universities to support them to achieve fully registered teacher status after one year of successful employment. The Teacher Induction Scheme was introduced in 2002 and is managed and administered by the General Teaching Council of Scotland. It provides professional induction and mentoring for newly qualified teachers, who are required to maintain a teaching workload of 0.7 over this period of employment. This allows the balance of time to be devoted to the intensive induction and mentoring of the new graduate. Prior to the introduction of the scheme, newly qualified teachers were 'provisionally registered' for the equivalent of two years full time.

Levels of support for newly qualified teachers varied hugely under the previous system, and some teachers completed their probation through short-term appointments in a range of different schools. Short-term supply contracts often lasted for just one or two days, with no support or preparation time. Apart from those who gained permanent or long-term temporary work, probationers were often being exposed to a disparate range of experiences in different schools and different local authorities. The 2000 McCrone Report witheringly described this way of gaining full registration as 'little short of scandalous'. (Donaldson, 2011, p. 36)

This highlights the critical need for robust supply-demand models for the teaching workforce. The renewal of the profession must ensure that newly qualified teachers are effectively inducted into the workplace and supported professionally to help assist the newly qualified teacher to become as effective as possible in the shortest time reasonable. It also must protect the newest members of the profession from being exposed to poor employment practice and little if any induction. Moreover, the Scottish experience illustrates the benefit of such a scheme for the profession at large.

The guaranteed induction year is one of the strengths of the current system in Scotland. Teachers on the induction year have a chance to put into practice what they have learned and to build on their existing skills. There is time built in to allow them to reflect on their experiences. Having students and probationers in schools forces those schools to consider their practices. (Donaldson, 2011, p. 38)

In summary, these international examples reinforce the critical role of effective, collaborative professional exchanges between tertiary providers of ITE programmes and expert practitioners in grounding the theoretical knowledge and skills developed by student teachers in the workplace. Furthermore, close attention needs to be paid to the seamless progression from pre-service to the first few years of in-service, as is the case in Scotland.

#### **Implications for New Zealand ITE programmes**

In New Zealand, registered teachers are required to satisfactorily complete an approved ITE programme. Traditionally primary and early childhood teachers graduate with a three-year undergraduate qualification and secondary teachers complete a one-year graduate diploma in teacher education. However, a growing number of primary and early childhood teachers are following a similar pathway to secondary teachers and complete a graduate diploma, albeit in early childhood or primary teacher education. The approval of ITE programmes is the responsibility of the New Zealand Teachers Council in conjunction with other quality assurance agencies. In the case of university providers, it is in conjunction with Universities New Zealand and, in the case of non-university providers, with the New Zealand Qualifications Authority.

Two recent New Zealand case studies illustrate how ITE can benefit from findings from the international research, in particular building ITE programmes strengthened by strong collaboration with expert practitioners. They also illustrate how the revised New Zealand Teachers Council requirements align to international findings and can be applied to innovative models of ITE. These two examples provide evidence of how such programmes have been approved by the New Zealand Teachers Council, in conjunction with Universities New Zealand.

#### Te Aho Tātairangi: Bachelor of Teaching Māori Medium/Diploma Māori Education

As has been identified in international research, ITE needs to develop purposeful and meaningful relationships between tertiary providers, the workplaces in which they will be employed and the communities that they will serve (Zeichner, 1996). This New Zealand example attempts to meet the challenge issued by Māori leadership and communities at the first Hui Taumata Mātauranga in February 2001, where a framework for considering Māori aspirations for education was developed. There was wide agreement about three goals for Māori education

- to live as Māori,
- to actively participate as citizens of the world,
- to enjoy good health and a high standard of living. (Durie, 2004, p. 2)

Firstly, this programme is focused specifically on preparing graduates to teach effectively in kura kaupapa Māori that teach through the philosophy of Te Aho Matua. Therefore it is deeply embedded in a strong cultural philosophy. Secondly, the programme represents a significant relationship between a teacher education provider, Massey University Institute of Education, and Te Rūnanga Nui o ngā Kura Kaupapa Māori ('Te Rūnanga Nui'). This follows a hui of acknowledgement held in 2010, in which Māori who are employed across 'the wider Massey University' (beyond the Institute and the School of Maori Studies) in academic and general staff roles turned out en masse at Te Kupenga o Te Matauranga marae to evidence their support for this initiative. Major components of the programme content, skills, knowledge and assessment will be delivered by tūmuaki (principals) who are members of Te Rūnanga Nui and who are external to the university. Through the contribution of Te Rūnanga Nui, the programme will benefit from access to expertise in Te Aho Matua philosophy and practice, sector expertise and a lived knowledge and experience of kura infrastructures and management relationships. As individuals, the tūmuaki from Te Rūnanga Nui involved in this programme are fully committed to its success. Finally, each student teacher will be linked to a local kura for the length of their four years of undergraduate study.

#### Postgraduate Diploma in Teaching (Secondary) Field-based

This programme is field-based with the graduates teaching in secondary schools while completing their ITE programme. This is a model used commonly in New Zealand in the early childhood ITE sector, where a major component of the programme is practice-based but has not been readily adopted in the schooling sector. Like Te Aho Tātairangi, it requires building a close working relationship between the provider, the University of Auckland, and the secondary schools that will partner the university in the programme and provide the 'home school' where the student teacher will spend the bulk of their field-based education. This postgraduate ITE programme is two years and two months in length. The university has drawn on models of selection and delivery in the Teach First programme in England and Teach for Australia programme and has designed a programme to best suit the New Zealand context.

The programme also meets the international recommendation of being highly selective. The aim is to recruit high-achieving graduates in specialist shortage subjects into teaching in low decile schools in the Auckland and Northland regions. The programme will especially target the recruitment of Māori, Pasifika and male graduates to meet these areas of shortage in low decile schools. There are philanthropic support provisions secured by the Teach First Trust. The involvement of a private trust in financially supporting the recruitment and selection of high-calibre graduates into this New Zealand programme is unique.

As a partnership with secondary schools, the programme will draw on the expertise of both teacher educators and school-based mentors. It will model itself on international best practice and will be measured by the collaboration and constructive engagement, shared goals, interdependence and exchanges that foster individual and collective understandings, mutual respect and responsiveness. This requires provision for appropriate professional training and engagement for the university and school mentoring staff employed in the programme.

#### Resourcing

As exemplified by these two ITE programmes, developing meaningful professional partnerships between the workplace and the tertiary provider demands significant resourcing. At present, the Tertiary Education Commission (TEC) funds ITE programmes as an applied professional qualification. However, in comparison to other professional qualifications with clinical practice requirements, ITE is less well resourced (see Table 1).

Teaching	\$8,569	
Nursing	\$10,338	
Speech Language Therapy	\$11,060	
Dental Therapy	\$13,166	

 Table 1.
 Current EFT values at Level 7 of National Qualifications Framework

If New Zealand tertiary providers are to be able to continue to build high-quality ITE programmes that capitalise on the evidence from international best practice, current funding levels need to be urgently reviewed. As it is unlikely that TEC will increase the overall budget for ITE, there needs to be careful supply-demand modelling of the New Zealand teaching workforce to ensure adequate renewal of the profession. Currently, there is debate as to whether there is an over-supply of primary teacher graduates and secondary teacher graduates in some of the curriculum specialisations. By careful analysis and accurate forecasting, it would be possible to reduce the number of graduates trained, yet maintain the current overall budget for ITE provision. In other words, increase the EFT funding for ITE by carefully targeting the number and types of ITE graduates required.

#### Summary

In summary, there are a number of overarching characteristics that can be drawn from the international academic literature on the effectiveness of ITE programmes in preparing student teachers for the teaching profession.

- 1. Entry into high-performing programmes is highly selective (Barber & Mourshed, 2007; Jensen et al., 2012).
- 2. High-performing programmes are strongly grounded in practice and "require students to spend extensive time in the field throughout the entire program, examining and applying the concepts and strategies they are simultaneously learning about in their coursework" (Darling-Hammond, 2010, p. 40).
- 3. High-performing programmes build strong connections through partnerships between the workplace and the tertiary provider where "prospective teachers, experienced teachers and teacher educators alike work together in communities of learners—to explore and re-consider their own assumptions, understand the values and practices of families and cultures that are different from their own and construct pedagogy that takes these into account in locally and culturally sensitive ways" (Cochran-Smith, 2003, p. 24).
- 4. High-performing programmes ensure graduates have a sound understanding of the link between 'learning and teaching' by ensuring graduates have the ability to assess learners' progress and the capability to implement a range of teaching approaches to meet those learners' needs (Sahlberg, 2011).
- 5. Special attention is paid to the employment practice of ITE graduates to allow them the opportunity to receive a high-quality induction programme in the first years of teaching, as is the case in Scotland.

These characteristics should provide a template against which current ITE programmes are compared. It should also be emphasised that, in order to build strong partnerships between tertiary providers of ITE and expert practitioners in the workplace, resourcing needs to reflect the costs of such collaboration. This may require a trade-off. If the New Zealand Tertiary Education Commission does not increase the overall ITE budget, tertiary providers will not be able to educate as many student teachers as is currently done. Future resourcing will require careful supply-demand modelling to ensure that the number of places in ITE programmes meets the need for graduates with the variety of specialisations and expected teaching expertise.

#### References

- Barber, M., & Mourshed, M. (2007). The McKinsey report: How the world's best performing school systems come out on top. London, England: McKinsey & Company.
- Cameron, M., & Baker, R. (2004). Research on initial teacher education in New Zealand: 1993–2004. Literature review and annotated bibliography. Wellington, New Zealand: Ministry of Education.
- Cochran-Smith, M. (2003). Learning and unlearning: The education of teacher educators. *Teaching and Teacher Education*, 19, 5–28.

- Cochran-Smith, M., & Zeichner, K. M. (2005). Executive summary. In M. Cochran-Smith & K. M. Zeichner (Eds.), Studying teacher education: The report of the AERA panel on research and teacher education (pp. 1–36). Washington, DC: AERA/Lawrence Erlbaum.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary* programs. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1–2), 35–47.
- Dinham, S. (2012). *Walking the walk: The need for school leaders to embrace teaching as a clinical practice*. Retrieved 27 September 2012, from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1137&context=research\_ conference.pdf
- Donaldson, G. (2011). *Teaching Scotland's future: Report of a review of teacher education in Scotland*. Edinburgh, Scotland: Scottish Government.
- Durie, M. (2004). *Māori achievement: Anticipating the learning environment*. Retrieved 17 March 2012, from

http://www404.massey.ac.nz/massey/fms/Te%20Mata%200%20Te%20Tau/Publications%20-

%20Mason/Maori%20Achievement%20Anticipating%20the%20learnong%20en vironment.pdf

- Education Workforce Advisory Group. (2010). A vision for the teaching profession: Report to the Minister of Education. Available from http://www.minedu.govt.nz/theMinistry/Consultation/WorkforceAdvisoryGroup. aspx
- Furlong, J., Barton, L., Miles, S., Whiting, C., & Whitty, G. (2000). Teacher education in transition. Buckingham, England: Open University Press.
- Goodlad, J. I. (2002). Teacher education research: The outside and the inside. *Journal* of *Teacher Education*, 53(3), 216–221.
- Hagger, H., & McIntyre, D. (2006). *Learning teaching from teachers: Realizing the potential of school-based teacher education*. Maidenhead, England: Open University Press.
- Hattie, J. (2009). Visible learning. A synthesis of over 800 meta-analyses relating to achievement. London, England: Routledge.
- Hiebert, J., Gallimore, J., & Stigler, J. W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher*, 31(5), 3–15.
- Jensen, B., Sandoval-Hernández, A., Knoll, S., & Gonzalez, E. J. (2012). *The experience of new teachers: Results from TALIS 2008.* Paris, France: OECD Publishing.
- Korthagen, F. A. J. (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Mahwah, NJ: Lawrence Erlbaum.
- Le Cornu, R., & Ewing, R. (2008). Reconceptualising professional experiences in preservice teacher education: Reconstructing the past to embrace the future. *Teaching and Teacher Education, 24,* 1799–1812.
- Levine, A. (2006). *Educating school teachers: Report of the education schools project.* Retrieved 18 September 2012, from www.edschools.org/teacher\_report.htm

- Meijer, P. (1999). *Teachers' practical knowledge: Teaching reading comprehension in secondary education* (Unpublished doctoral thesis). Leiden University, The Netherlands.
- Munby, H., Russell, T., & Martin, A. (2001). Teachers' knowledge and how it develops. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 877–904). Washington, DC: American Educational Research Association.
- National Institute of Education. (2009). *TE21: A teacher education model for the 21st century*. Singapore: National Institute of Education. Retrieved 21 September, 2012, from

http://www.nie.edu.sg/files/about-nie/TE21%20online%20version.pdf

- OECD. (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris, France: OECD Publishing.
- Rossner, P., & Commins, D. (2012). Defining 'enduring partnerships': Can a wellworn path be an effective, sustainable and mutually beneficial relationship? Brisbane, QLD, Australia: Queensland College of Teachers.
- Sahlberg, P. (2011). Finnish lessons: What can the world learn from educational change in Finland? New York, NY: Teachers College Press.
- Schleicher, A. (Ed.). (2012). Preparing teachers and developing school leaders for the 21st century: Lessons from around the world. Paris, France: OECD Publishing.
- Verloop, N., Van Driel, J., & Meijer, P. (2001). Teacher knowledge and the knowledge base of teaching. *International Journal of Educational Research*, 35(5), 441– 461.
- Zeichner, K. (1996). Teachers as reflective practitioners and the democratization of school reform. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds.), *Current reform in preservice teacher education* (pp. 199–214). New York, NY: Teachers College Press.