

Learning about and through teaching: Course work and practicum during initial teacher education

Lexie Grudnoff^a, Lorrae Ward^b, Jenny Ritchie^c Barry Brooker^d, Mary Simpson^e,

a = University of Auckland; b = Cyperus Limited; c = Unitec; d = University of Canterbury;
e = University of Otago.

Abstract

This paper reports on findings from the final pilot of a survey (N=811) to be used by multiple New Zealand initial teacher education providers to measure graduating teacher perceptions of how well their programmes prepared them to start teaching. The survey, commissioned by the Teacher Education Forum of Aotearoa New Zealand (TEFANZ), is their proactive response to the political accountability demands that are a feature of teacher education internationally, and to the need for higher education to take a lead in the accountability 'narrative' (Shulman, 2007).

This paper focuses on the perceptions of graduating student teachers regarding the learning opportunities provided to them during their ITE programmes. It compares opportunities during course work and practicum and suggests that more attention should be given to both components to ensure that student teacher learning is maximised in teacher preparation programmes.

Introduction

Internationally, initial teacher education (ITE) is criticised for not preparing teachers to work effectively with increasingly diverse student populations. Such criticism, which is particularly directed at university based teacher education (Finn, 2003), has resulted in debates about how, when and where teachers should be prepared (Cochran-Smith et al., 2009) and in calls for the review and reform of ITE (Townsend, 2011). Underpinning such debates is the increasing evidence base regarding the influence of quality teaching on student outcomes coupled with concerns around teacher supply and retention (Darling-Hammond, 2000; Santiago, 2002).

Teacher learning has been described as including knowledge for practice, knowledge in practice and knowledge of practice (Cochrane-Smith & Lytle, 1999). ITE is the first of three phases (or the 'three I's) of teacher education, the other two being induction and in-service learning (Coolahan, 2002). As discussed elsewhere (Ward, Grudnoff, Brooker & Simpson, 2013), these three phases can be aligned to the three concepts related to teacher learning as knowledge for, in and of practice. Further, there is a need for a 'coherent and powerful curriculum' (Feiman-Nemser, 2001) across these three phases of professional learning if teachers are to become self-reliant, lifelong learners, with the capacity to cope with the challenges ahead of them. We suggest the same is needed across the course work and practicum components of an ITE curriculum.

In this paper we focus on the extent to which the ITE experiences of 811 graduating early childhood, primary and secondary student teachers from eight different New Zealand teacher education providers can be viewed as a coherent curriculum designed to prepare them to begin teaching. We focus on their perceptions of their preparedness and the opportunities they were provided with during both course work and practicum.

Method

The data reported here were collected as part of a multiple institute research project. Building on the international knowledge gained through other quantitative research projects (e.g., Ludlow et al., 2010), the Teacher Education Forum of Aotearoa New Zealand (TEFANZ) commissioned the

development of a longitudinal survey tool to measure graduating student teacher preparedness to teach across programmes and institutions within New Zealand. The survey is a proactive response to political accountability demands that are a feature of teacher education internationally, and to the need for higher education to take a lead in the accountability 'narrative' (Shulman, 2007). It also provides individual institutions with a comprehensive tool for reflecting on and enhancing their own programmes. Thus it is a potentially valuable tool for developing new understandings about effective teacher education.

The survey

The survey comprises 22 questions grouped into eight sections: initial teacher education experiences, knowledge of the New Zealand curriculum and policy context, pedagogical knowledge and skills, pedagogical content knowledge, teacher self-efficacy, feelings about teaching, programme details and personal demographics. Respondent's self-reported levels of confidence are used to measure preparedness while their perceptions of their programme provide evidence regarding the opportunities they have had to develop knowledge and expertise in key areas. The iterative design and testing process implemented is described elsewhere (Ward, Grudnoff, Meissel, Brooker & Simpson, 2012).

Survey respondents

The data reported here were gathered from 811 respondents. These include graduating teachers from early childhood (n=119, 15%), primary (n=366, 45%) and secondary (n=326, 40%) programmes. The respondents were predominately female (n=559, 79%) and of New Zealand European ethnicity (n=508, 72%). The most dominant age group was between 21 and 25 (n=326, 46%).

The majority studied full-time (n=668, 94%) and in courses that were mainly taught face-to-face (n=609, 85%). Respondents were most likely to be graduating with a one-year Graduate Diploma (n=284, 40%) or an undergraduate teacher education degree (n=329, 46%).

Results

We have previously reported the extent to which the opportunities provided during course work and practicum correlate with the confidence reported by the respondents (Ward et al., 2012). We found statistically significant levels of correlation for three key areas of relevance to the New Zealand policy context - meeting the needs of children with special education needs, the use of eLearning in the classroom and using assessment practices to inform teaching.

The reported levels of both opportunity and confidence were lower for meeting the needs of children with special education needs than for the other two areas. We hypothesised that this could be due to the greater level of specific teacher knowledge and expertise that is required for meeting the needs of children with special education needs. In comparison, using assessment practices and eLearning in the classroom are both more generic skills that can be learnt and are used across a range of contexts.

In this paper we look in more depth at the opportunities that the respondent graduating teachers report they were provided with to better understand what their ITE programme is preparing them to do. We are particularly interested in the extent to which practicum and course work provides different opportunities, broadening the learning experiences of student teachers. We want to understand whether the course work and practicum components are being used to their full potential in terms of providing a comprehensive teacher education curriculum.

Beginning teachers' perceptions of the relative importance of practicum and course work

In the survey, respondents were asked to report the overall level (as a percentage) of positive influence on their reported levels of confidence which they would attribute to four different factors. They could also indicate 'other.' When analysing the data there were two categories of response that dominated. These were *personal qualities/attributes* and *relationships and support networks*.

The highest mean level of influence across all respondents was attributed to practicum alone (43%). This was true for both the primary (44%) and secondary (44%) respondents. While 607 (75%) respondents indicated that course based learning alone was a positive influence, the extent of that influence was slightly lower than for practicum. Practicum alone was mentioned by more respondents (626, 77%), further emphasising the perceived importance of practicum in ITE programmes.

The early childhood respondents appeared to have different perceptions of the relative influence of the factors than their primary and secondary counterparts. On average, they reported that it was the combination of course work and practicum that was the most influential (46%).

The links between course work and practicum

Respondents were asked a number of questions about their perceptions of their overall programme, including the links between the two components.

- Overall the mean level of agreement that their *programme had successfully prepared them for teaching* was 4.73 (strongly agree on a six-point scale).
- They also strongly agreed ($\bar{x} = 4.93$) that *their practicum experiences enabled them to try out strategies and techniques they were learning during course work*.
- They moderately agreed ($\bar{x} = 4.17$) that *what they had learned in course work was reflected in the practices they observed during practicum*.

As with other questions in the survey the early childhood respondents reported higher means on each of these items than those from primary and secondary programmes. These findings do suggest that there are obvious connections between course work and practicum.

What opportunities to learn are student teachers getting?

In an earlier article (Ward et al., 2013), we suggested that during ITE student teachers develop knowledge for practice and begin to develop knowledge in practice (Cochran-Smith & Lytle, 1999). The former is knowledge that has been produced by others, which they are able to use – the latter is knowledge that they develop as they gain experience through practicum which situates their learning in authentic, practical contexts. It has been shown that where initial teacher education provides student teachers with a solid foundation in pedagogy and subject matter they become more effective teachers (Rice, 2003). We were interested in exploring the extent to which this foundation has been developed through a comparison of practicum with course work opportunities.

In the survey respondents were asked to separately indicate the extent to which they had a number of opportunities to learn during course work and practicum. The scale used for these questions was 1=none/negligible, 2=limited, 3=some, 4=quite a lot, 5=a lot and 6=extensive.

For both practicum and course work opportunities there were high standard deviations suggesting wider variation in the reported opportunities. The extent to which this variation can be attributed to different institutions, programmes or personal demographics will be considered in future work.

Opportunities during course work.

The range of mean levels of opportunity across all 21 items is from 3.11 (*some*) to 4.90 (*a lot*). This suggests that student teachers are experiencing a wide range of opportunities, although none are to any great depth.

Areas with the highest mean levels overall were:

The relevant Curriculum document and the implications for teaching and learning within it (\bar{x} = 4.90).

Strategies for reflecting on your teaching to improve learner outcomes (\bar{x} =4.85)

Creating a positive learning culture in the classroom/centre (\bar{x} =4.78)

Areas with the lowest mean levels overall were all related to specific groups of learners:

Strategies for teaching learners who are gifted and talented (\bar{x} =3.11)

Strategies for teaching English language learners (second language) (\bar{x} =3.16)

Strategies for teaching learners with special education needs (\bar{x} =3.35)

Strategies for teaching Pasifika learners in culturally responsive ways (\bar{x} =3.39)

Mean levels of opportunity, as reported by early childhood respondents, tended to be higher than for their counterparts from the primary and secondary sectors. There were three items where the reported mean for early childhood respondents was greater than 5.00. No single item had a mean of 5.00 across any other respondent group.

- *The relevant Curriculum Document and the implications for teaching and learning within it* (\bar{x} =5.33).
- *Strategies for reflecting on your teaching to improve learner outcomes* (\bar{x} =5.18)
- *Planning authentic learning experiences based on learners' interests and abilities* (\bar{x} =5.01)

Of particular interest in the New Zealand policy context are:

- The difference in means across the three sectors for the *integration of digital technologies into teaching and learning* – secondary \bar{x} =4.40, primary \bar{x} =3.44, early childhood \bar{x} =3.81. The overall mean was 3.88.
- The comparatively high mean for strategies for *teaching Māori learners in culturally responsive ways* when compared with other groups of learners identified as vulnerable - secondary \bar{x} =4.18, primary \bar{x} =4.07, early childhood \bar{x} =4.46.
- The comparatively higher mean for early childhood respondents (\bar{x} =4.71) for *developing assessments for monitoring learning outcomes* –secondary \bar{x} =4.21 and primary \bar{x} =4.18.
- The comparatively high mean also for early childhood respondents (\bar{x} =4.32) for the *home/social communities of the learners you are likely to teach in the near future*–secondary \bar{x} =3.51 and primary \bar{x} =3.50.

Opportunities during practicum.

Across the 25 items in this question the mean levels of reported opportunity in practicum ranged from 2.92 (*some*) to 5.01 (*a lot*). This is the same range as for course work, again suggesting breadth rather than depth of opportunity.

The areas with the highest overall reported means were:

- *Reflecting on your practice with your associate teachers in ways that supported your professional learning* (\bar{x} =5.01)
- *Taking responsibility for the design and implementation of a range of teaching and learning activities for the whole class/centre* (\bar{x} =4.88)
- *Reflecting on your practice with your visiting lecturers/tutors in ways that supported your professional learning* (\bar{x} =4.86).

The areas with the lowest overall reported means were:

- *Teaching learners who are identified as gifted and talented* (\bar{x} =2.92)
- *Teaching Pasifika learners in culturally responsive ways* (\bar{x} =2.98)
- *Communicating with parents and whānau of the learners you were teaching to support their learning* (\bar{x} =3.02)
- *Talking to external professionals that support schools and early childhood centres (e.g., special education support, RTLBs, truancy officers)* (\bar{x} =3.04).

As with the course work opportunities, the early childhood respondents tended to report higher mean levels of opportunity than their primary or secondary counterparts. One area, where there was a marked difference between sectors was in *communicating with parents and whānau* – early childhood \bar{x} =4.59, primary \bar{x} =3.33, secondary \bar{x} =2.08.

The reported mean level of opportunity for *integrating eLearning practices* was highest for the secondary respondents (\bar{x} =4.21) compared with 3.30 for early childhood and 3.77 for primary. This finding is interesting as reports on technology use in classrooms suggest that use is higher in primary schools than secondary.

Discussion

The findings above suggest that the course work and practicum components of the respondents' teacher education programmes provided somewhat similar opportunities for learning. Both components appeared to focus more on generic practices such as teaching whole classes and reflecting on their own teaching rather than on specific activities or on the specific needs of priority groups of learners. That respondents perceived that they had fewer opportunities to gain the skills and knowledge to work with Maori, Pasifika children and learners with special needs confronts teacher education providers with questions regarding where, and to what extent, student teachers are being prepared to work effectively in increasingly diverse and challenging educational settings.

Despite the respondents' very positive views of the practicum component of their ITE programmes, it appears that the student teachers did not get many opportunities during practicum to work with specific, and potentially challenging, groups of students. The respondents also did not appear to have had much opportunity to discuss achievement data with students or to work with the external professionals that support schools. These are opportunities for professional learning that the course work components of ITE programme cannot provide.

Given the link between teacher preparation and the development of quality teachers we suggest that teacher educators need to carefully consider the learning opportunities provided during course work and in practicum. The correlation between opportunities and confidence places a professional challenge on ITE providers to ensure students are being provided with the 'right' opportunities, in the 'right' contexts. The value in having both course work and practicum essentially focus on the same area of knowledge and expertise needs to be questioned.

One implication is that more consideration needs to be given to ensuring practicum provides opportunities to develop beginning teachers' knowledge and expertise in areas that can only be developed as knowledge 'in practice.' Donaldson (2011) highlights concerns over the role and training of mentors and duplication with pre-service courses in Scotland. We would also suggest that there could be concerns with duplication between practicum and course work.

It may be that the respondents in this survey saw more value in their practicum than in their course work because practicum covers the same material but in an applied setting. If the course work and practicum components were to provide more divergent opportunities, which better reflect the very different learning contexts and expertise requirements, then maybe more value would be seen in the combination of the two. We are not suggesting that course work and practicum should not reinforce key concepts and skills, nor that student teachers should not see the connections between the two sets of opportunities. Rather, we are suggesting that there may be a need for less duplication and more breadth of opportunity in the teacher education curriculum.

In reflecting on these data it is worth noting that these respondents, on average, reported being highly confident about beginning to teach in their own classroom or centre (\bar{x} =4.05 on a six-point scale). The early childhood respondents (\bar{x} =4.58) were more confident overall than their primary (\bar{x} =3.83) or secondary (\bar{x} =4.11) counterparts.

That the respondents identified more opportunities in most areas reinforces the correlation between opportunities and confidence. This would seem to be a strong driver for ITE providers to work closely with their partnership schools to ensure more opportunities are provided during practicum in areas that cannot be readily addressed in course work. The finding regarding respondents' perceptions that they had fewer opportunities to gain the skills and knowledge to work with Maori, Pasifika, and children with special needs challenges teacher education providers to examine their programmes regarding where, and to what extent, student teachers are being prepared to work effectively in increasingly diverse and challenging educational settings.

While it could be argued that induction will provide the necessary specific opportunities, there is evidence to suggest that the efficacy of induction is varied at best and largely dependent on the culture of the school in which a beginning teacher is working (Anthony & Kane, 2008; Ewing & Smith 2003; Grudnoff, 2012).

Where to next

This paper, along with other work undertaken on the data gathered through the different iterations of the survey to date, has highlighted the potential of the tool to inform ongoing research and to provide new understandings to enhance the effectiveness of teacher education at multiple levels and in multiple contexts. The data from this survey has given members of TEFANZ an opportunity to reflect on the nature and content of their teacher education programmes and the extent to which they are meeting the learning needs of their student teachers, particularly in terms of policy priorities around addressing inequality.

The survey provides a rich quantitative data set for analysis on its own, using a range of sophisticated statistical analyses. It also provides a rich foundation on which to build more in-depth mixed methods research. While the survey data provide answers to some questions, they also raise questions for further analysis and data collection. For example, in most cases the early childhood respondents reported higher levels of opportunity than their primary and secondary peers. There are also differences in key areas such as integrating eLearning and communicating with parents and whānau (extended families) of the learners they are teaching. Understanding the reasons for these

differences, and their implications, would provide an opportunity to consider how different ITE providers could learn from each other to enhance their programmes.

As noted above, this paper reports on findings from the final pilot of a survey to be used by multiple New Zealand teacher education providers to measure graduating teacher perceptions of how well they felt their programme prepared them to start teaching. In 2013 TEFANZ has implemented pre- and post- surveys enabling data collection on entry to ITE and again when student teachers complete their programmes. These data should enable greater consideration of changes over time and the influence of ITE programmes on graduating teacher levels of confidence. We have also added questions related to the prior experiences of student teacher and the values and attitudes they bring to ITE. We believe that the data from these entry and exit surveys may enable us to gain a better understanding of the influence of teacher preparation on graduating teachers' key attitudes and values as well as capture their perceptions of their preparedness to teach at the end of their ITE programme.

Bibliography

- Anthony, G., & Kane, R. (2008). *Making a difference: The role of initial teacher education and induction in the preparation of secondary teachers*. Wellington: Crown.
- Cochran-Smith, M., & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Educational Research in Education*, 24, 249-305.
- Cochran-Smith, M., & The Boston College Evidence Team. (2009). Reculturing teacher education: Inquiry, evidence and action. *Journal of Teacher Education*, 60(5), 458-468.
- Coolahan, J. (2002). *Teacher education and the teaching career in an era of lifelong learning*. France: OECD.
- Darling-Hammond, L. (2000). *Solving the dilemmas of teacher supply, demand and standards: How we can ensure a competent, caring and qualified teacher for every child*. New York: National Commission on Teaching and America's Future.
- Donaldson, G. (2011). *Teaching Scotland's future: Report of a review of teacher education in Scotland*. Edinburgh: The Scottish Government.
- Ewing, R., & Smith, D. (2003). Retaining quality beginning teachers in the profession. *English Teaching: Practice and Critique*, 2, 15-32.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.
- Finn, C. (2003). *High hurdles*. Retrieved July 2011, from Education Next: <http://educationnext.org/highhurdles/>
- Grudnoff, L. (2012). All's well? New Zealand beginning teachers' experience of induction provision in their first six months in school. *Professional Development in Education*, 38(3), 471-485.
- Ludlow, L., Mitescu, E., Pedulla, J., Cochran-Smith, M., Cannady, M., Enterline, S., & Chappe, S. (2010). An accountability model for initial teacher education. *Journal of Education for Teaching: International Research and Pedagogy*, 36(4), 353-368.

- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington D.C: Economic Policy Institute.
- Santiago, P. (2002). *Teacher demand and supply: Improving teaching quality and addressing teacher shortages*. OECD Education Working Papers, No. 1: OECD Publishing.
- Shulman, L. (2007). Counting and recounting: Assessment and the quest for accountability. *Change: The Magazine for Higher Learning*, 39(1), 20-25.
- Townsend, A. (2011). Thinking and acting both locally and globally: New issues for teacher education. *Journal of Education for Teaching: International Research and Pedagogy*, 37(2), 121-137.
- Ward, L., Grudnoff, L., Meissel, K., Brooker, B., & Simpson, M. (2012). *Responding proactively to accountability: Collaborative evidence gathering*. Paper presented at the annual meeting of the American Education Research Association, Vancouver: April 2012.
- Ward, L., Grudnoff, L., Brooker, B., & Simpson, M. (2013). Teacher preparation to proficiency and beyond: Exploring the landscape. *Asia Pacific Journal of Education*, 33(1), 68-80.