Changes In Secondary School Preservice Teachers’ Concerns About Teaching
In New Zealand

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Abstract

This study followed a cohort of preservice teachers (n = 85) in a one-year secondary school programme in New Zealand, to examine their concerns about teaching in terms of what they are, how they are related to teaching efficacy, and how they are affected by practicum experiences. Before beginning the programme and after each of two practica, participants completed the Teachers’ Sense of Efficacy Scale (short form) (Tschannen-Moran & Woolfolk Hoy, 2001) and the Concerns About Teaching Scale (Smith, Mobley, & Klein, 2007; modified with permission). Focus groups (n = 8 each) were conducted after each survey administration. Results indicated that the participants’ concerns about teaching became differentiated over time and with classroom experience; their sense of efficacy increased. Results are discussed in terms of practical implications for teacher education taking into consideration the relationships among teaching concerns, practicum experiences, views of teaching, and policy changes in New Zealand.
Changes In Secondary School Preservice Teachers’ Concerns About Teaching In New Zealand

When the first author of this paper was about to enter a classroom for the first time, her concerns were, in order: What am I going to wear? Will the students like me? Do I really know enough to teach? Will I have any discipline problems? Worrying first about one’s first day of school outfit seems amusing now, but years later, we are hearing similar concerns from our preservice teachers, in roughly the same order (minus the wardrobe question).

It is not surprising that preservice teachers, especially those with little or no classroom experience, hold a naïve view of teaching and have concerns about how efficacious they will be in the classroom. So, how can we best work with our preservice teachers to help them progress from being students themselves to being professionals? This study explored how the initial concerns of preservice teachers changed over the course of a one-year secondary school teacher training programme in New Zealand, and examined those concerns as they related to teaching efficacy and experiences on practicum. It should be noted that the word “concerns” in this study refers to issues that lead to worry or anxiety.

Research on Preservice Teachers’ Concerns

Examining concerns about teaching is not a new idea. Fuller (1969) first proposed a model of teacher development that was based on discrete stages of concerns, beginning with personal adequacy, followed by teaching tasks, and finally individual students’ needs. Research on this model has yielded mixed results. Conway and Clark (2003) found support and Reeves and Kazelskis (1985) reported partial support. However, Pigge and Marso (1987) argued that concerns are not discrete, but overlap. Burn, Hagger, Mutton, and Everton (2003) and Haritos (2004) maintained that the model was too simplistic; similarly, Poulou (2007) questioned whether concerns follow a linear development. The order of the concerns in the model has also been disputed. Using non-traditional data collection methods including
drawing and card sorts, Swennen, Jörg, and Korthagen (2004) found that concerns about pupils ranked highest among a sample of Dutch preservice teachers’ concerns. Boz (2008) reported that task-related concerns were most prevalent for a sample of Turkish preservice teachers, along with concerns related to meeting students’ needs.

Brookhart and Freeman (1992) conducted a comprehensive review of 44 studies and established four major categories to describe teacher candidates in their first teaching preparation course: the demographics of the samples, motivations for becoming teachers, perceptions of the roles and responsibilities of teachers, and teacher candidates’ concerns about teaching. In terms of concerns, Brookhart and Freeman reported that although new teacher candidates had high levels of self-confidence, more so for males than females, their optimism about their teaching skills was often idealised. Simultaneously, they were concerned about how they would perform once they were in front of students in the classroom. This led Brookhart and Freeman to conclude that the teacher candidates were confident but anxious. Whether beliefs changed over the course of teacher training was inconclusive from the review.

Research on preservice teachers’ concerns in individual subject areas has included music (Campbell & Thompson, 2007), physical education (Capel, 1997; Meek & Behets, 1999; Wendt & Bain, 1989), science and/or mathematics (Dawson, 2007; McDonnough & Matkins, 2010; Nilsson, 2009; Zielinski & Preston, 1992), preparation for teaching in inclusive classrooms (Hamre & Oyler, 2004), and teaching students with disabilities (Everhart, 2009; Pugach, 2005). Comparisons of alternate teacher certification programmes with traditional teacher certification programmes have also received some attention (Zientek, 2006, 2007). The concerns described in these studies largely mirror those of studies with broader cohorts.

In terms of wider concerns, Boyer (2004) noted that societal demands have led to
increased anxiety for those entering the profession than previously. Baum and McMurray-
Schwarz (2004) found that preservice teachers expressed concerns about whether their
training was adequate for building quality relationships with their students’ families. They
recommended the inclusion of family involvement as part of teacher training programmes.

**Concerns and Classroom Experience**

Over two decades ago, Evans and Tribble (1986) described significant differences
between concerns of preservice teachers and beginning teachers, and speculated that the lack
of classroom experience and insecurity about the role of a teacher were the underlying issues
for the preservice teachers’ concerns. Preservice teachers in that study ranked knowledge of
subject matter as one of their primary concerns, as compared to the beginning teachers, who
were more focused on classroom discipline, assessment, and relationships with parents.
However, both preservice teachers and beginning teachers reported concerns about
motivating students, accommodating to individual differences, and organising class work.
Since that time, classroom experience during preservice training has emerged as an important
factor both for building teaching efficacy and identifying preservice teacher concerns (Lin,
Gorrell, & Taylor, 2002; Ng, Nicholas, & Williams, 2010; Smith, Klein, & Mobley, 2007;
Watkins, 1999; Zientek, 2007). Mau (1997) and Murray-Harvey et al. (2000) found that
concerns shifted or decreased with classroom experience. Murray-Harvey et al. reported no
gender or age differences, and highlighted the importance of the relationship between the
supervising teacher and the preservice teacher in ameliorating concerns. However, Moore
(2003) reported that preservice teachers in practicum had difficulty getting beyond their
concerns regarding time management, teaching content, and classroom management.

More recent research has shown that preservice teachers’ concerns change toward a
more realistic view of teaching, over the course of their training and with classroom
experience (Lamote & Engels, 2010). Smith, Klein, and Mobley (2007) found that not only
do concerns become more realistic; they become more differentiated. In a factor analytic study, preservice students’ concerns prior to practicum experience were unidimensional. After practicum experience, factor analysis showed a three-factor solution, with concerns separated among personal issues, university/associate (cooperating) teacher support, and balancing life’s demands/stress.

Reporting a disconnect among preservice teachers’ beliefs, the training they received in their programmes, and what they observed in the classroom, Stoughton (2006) called for support by teacher trainers in helping preservice teachers develop their identities and practices. Çakmak (2008) found that classroom management was of major concern to a sample of preservice teachers in Turkey, and noted that training and classroom experience may alter apprehensions of preservice teachers. Liaw (2009) reported similar results in Taiwan, pointing to the importance of discussions in building efficacy and easing concerns about classroom management and other issues.

**Efficacy**

The construct of teaching efficacy has its origins in Bandura’s (1977, 1986, 1997) social cognitive theory. Extant literature has indicated that although teaching efficacy is a concept that is not easy to pinpoint (Tschannen-Moran & Woolfolk Hoy, 2001), those who train teachers have long recognised its importance in becoming an effective educator (Guskey, 1987, 1994; Henson, 2001; Parker, Guarino, & Smith, 2002; Tschannen-Moran & Woolfolk Hoy, 2002; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Woolfolk Hoy & Spero, 2005). Recent studies have examined efficacy in terms of preservice practicum experiences. Haverback (2009) reported an inflated sense of efficacy in a sample of preservice reading teachers prior to any classroom experience. Gurvitch and Metzler (2009) conducted a quasi-experimental study with physical education preservice teachers and concluded that high-level, authentic experiences are critical to developing teacher efficacy. In
the United States, using both the short and long forms of The Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), Fives and Buehl (2010) reported a single efficacy factor for a sample of preservice teachers, as compared to a three-factor structure for a sample of practicing teachers. They concluded that preservice teachers’ understanding of the nature of teaching is naïve and global, and suggested that teacher educators recognise this lack of sophistication when building preservice teachers’ belief structures.

Only one study was found that empirically examined the relationship between preservice teacher efficacy and concerns about teaching. Boz and Boz (2010) reported a negative relationship between concerns and efficacy beliefs for a sample of secondary science and maths education students in Turkey. The fifth year students in that study had significantly fewer concerns than those students in the second and third years of study.

No studies were found that followed a cohort of preservice teachers to examine how their teaching efficacy beliefs and concerns about teaching developed over time and with exposure to classroom experience. Therefore, the primary objective for this research was to follow a cohort of preservice teachers through the course of their secondary school programme to determine how their teaching concerns changed over time, and the effect of their practicum experiences on those changes. A secondary objective was to explore changes in how their concerns about teaching were related to their sense of teaching efficacy. Of particular interest was whether the development of a differentiated set of concerns, as found in the Smith, Klein, and Mobley (2007) study in the United States would be observed in a one-year secondary school programme in New Zealand.

This study used both quantitative and qualitative methodologies to examine the following research questions:

1. How do initial concerns about teaching change over the course of a one-year secondary school teacher training programme in New Zealand?
2. What is the relationship between concerns about teaching and teaching efficacy for students in a one-year secondary school teacher training programme in New Zealand?

Method

Participants

The participants were $n = 85$ students in a Graduate Diploma of Teaching in Secondary Education Programme in New Zealand. The original sample was $n = 89$; however, protocols from four participants were eliminated from the data set, as each one was missing responses to one full survey. Participants ranged in age from 21 to 53, with a median age of 24. There were $n = 56$ females and $n = 29$ males, with 78% ($n = 66$) reporting their ethnicity as European/Caucasian, 3.5% Asian/Pacific Islander ($n = 3$), 6% ($n = 5$) Māori, and 13% ($n = 11$) Other (typically mixed ethnicity). Participants listed a total of 34 intended subject areas for their teaching.

After each administration of the survey instruments, $n = 8$ volunteers from the participants took part in a 90-minute focus group. The first and second focus groups each comprised $n = 5$ females and $n = 3$ males; the third focus group comprised $n = 4$ females and $n = 4$ males. The participants for each focus group were unique, to ensure wide representation and to prevent reactivity to previous groups.

Materials

The materials used in this study were:

1. A brief demographic questionnaire;
2. The Teachers’ Sense of Efficacy Scale (short form) (TES); Tschannen-Moran & Woolfolk Hoy, 2001);
3. The Concerns About Teaching Scale (CAT; Smith, Mobley, & Klein, 2007), modified with the authors’ permission for the purposes of this research; and,
4. Focus Group Protocols.

The TES has consistently yielded three subscales: engagement (alpha = .81), instruction (alpha = .86), and management (alpha = .86), which are moderately correlated (Tschannen-Moran & Woolfolk Hoy, 2001). In terms of reliability, the short form of the TES has been shown to be appropriate for determining efficacy beliefs of preservice teachers (Fives & Buehl, 2010).

The CAT (Smith, Mobley, & Klein, 2007) previously yielded a one-factor solution (alpha = .94) for preservice teachers prior to classroom experience. After extended practicum experience, the CAT yielded a three-factor solution, with subscales corresponding to personal issues (alpha = .83), university/associate teacher support (alpha = .76), and balancing life’s demands/stress (alpha = .72).

The focus group protocols are described in the Procedure.

Procedure

Prior to the beginning of the study, the researchers adapted the CAT (Smith, Mobley, & Klein, 2007) with permission. Five items were added to the CAT based on the literature, the authors’ combined experiences training teachers over two decades, and reflecting concerns that had been expressed by previous cohorts of students in the programme in which this study was being conducted. The language of the CAT was modified slightly, to take into account differences between American and UK English. This made a total of 17 items on the CAT, which is shown in Figure 1. The additional items are noted with asterisks.

Figure 1 about here

University ethics approval and Māori Consultation were obtained for the study. During an orientation session for the programme in January, all participants completed consent
documents, the TES, and the CAT. The TES and CAT were also completed in March following their first 6 weeks of practicum, and in May following their second practicum of 7 weeks.

The focus groups followed each data collection. To prevent reactivity to the researchers, who were known to the students, and to encourage open discussion, a graduate research assistant facilitated the focus groups. The participants responded to a set of semi-structured items based on responses to the surveys and were given the opportunity to add their reflections by way of providing depth to the survey data. Figure 2 shows the focus group protocols. The focus group participants were given lunch; no other compensation was made. All focus group sessions were taped using digital recorders and transcribed by a transcription service.

Data Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 16 and NVivo Version 7 computer software. Statistical techniques included descriptive statistics, factor analyses and reliabilities for the scales for the TES and the CAT, reliabilities for resulting subscales, repeated measures analyses of variance for comparisons among the groups across time, correlation, and trend analyses for the qualitative data. Following the analytical approach of Smith, Klein, and Mobley (2007), we wanted to determine if the factor structure of the CAT became more differentiated (i.e., had more factors) following practicum experience. Thus, we conducted an exploratory factor analysis on the CAT at three points in time. We did the same with the TES to confirm that its factor structure remained stable over time.
For the focus groups, transcriptions were coded independently by one of the researchers and the graduate research assistant, by hand and using NVivo software. Interrater reliability for the coding by hand was .92. The primary goal was to generate an underlying set of themes that represented preservice teachers’ concerns about teaching. Therefore, a constant comparison approach taken from grounded theory (Straus & Corbin, 1990) was used. Each rater created a grid for each focus group session, with the questions and the issues brought up written across the top of a sheet of A3 paper; each response was listed under its corresponding question/issue. Each response was then examined and identified according to what the rater felt was the underlying meaning or thesis of the response. The raters compared their analyses and collated the final set of themes. This reciprocal and iterative approach to the data analysis served to bootstrap the results. The themes that emerged from the focus group data were then examined to determine if they were consistent with the findings from the survey data analyses and to establish anecdotal evidence to augment the quantitative data.

**Context of the Practicum Experiences**

The majority of the participants completed their practicum experiences throughout the South Island of New Zealand; a small number chose to complete their extended final practicum on the North Island, to be closer to family and thus save on living expenses. In New Zealand, all schools are independent entities governed by individual elected boards of trustees. Each school is given a decile rating from 1 (low) to 10 (high); these are surrogates for the socio-economic status of the families of the children enrolled in that school. The participants in this study completed their practica in schools across all decile levels; each preservice teacher is assigned to different schools representing different deciles for their practica. This is done intentionally to expose the preservice teachers to different settings and situations, and is considered a strength of this programme.
Results

The primary objective for this research was to explore the concerns about teaching for a cohort of preservice teachers in a one-year secondary school programme in New Zealand, including an examination of the effect of their practicum experiences on those changes. This section begins with the results from factor analyses for each of the three administrations of the TES and the CAT. It will be shown that the dimensionality of the preservice teachers’ concerns changed over time, even though the factor structure of the TES remained consistent. Next, their concerns are examined over time through a series of repeated measures analyses of variance, and correlated with TES scores. Finally, results are presented from the focus groups.

Change Over Time - Factor Analyses of the TES and the CAT

The factor structure for the TES for the three administrations were comparable to those reported by Tschannen-Moran and Woolfolk Hoy (2001), with reliabilities ranging from .78 to .82 for the Efficacy In Student Engagement subscale, .80 to .86 for the Efficacy in Instructional Strategies subscale, and .84 to .87 for the Efficacy in the Classroom Management subscale.

The factor structure for the CAT, however, showed a different picture. Employing an eigenvalue greater than one criterion for extracting factors, and a varimax rotation, the factor analysis of the CAT yielded a different solution for each of the three administrations across the year. In the first administration, prior to the beginning of the programme, there was a one-factor solution that explained 75% of the variance. Using Cronbach’s alpha, the reliability coefficient for the 17 items was .97. Thus, it can be seen that before the programme began, students had an undifferentiated view of the issues related to teaching: they were either confident or not that it was going to go well.
The second administration of the CAT occurred after the preservice teachers had completed a 6-week practicum. These results differ dramatically from the first administration. This analysis yielded a four-factor solution that explained 64% of the variance. Table 1 shows the complete factor structure. There was a relatively strong first factor, with an eigenvalue of 6.06 that explained 35.62% of the variance. Seven items loaded on this factor, which as a group pertained mainly to success in the classroom:

- I will be effective at classroom management.
- The students in the classroom will readily accept me as their classroom teacher.
- The transition from the associate teachers’ authority in the classroom to my authority in the classroom will go smoothly.
- I am emotionally prepared to be a teacher.
- I will be able to balance my personal and professional demands.
- My teaching experiences will be free of stress.
- I will have effective time management and organisational skills to get everything done.

Table 1 about here

The second factor had an eigenvalue of 2.31 that explained 13.59% of the variance. Five items that loaded on this factor, which pertained to being supported and accepted as a professional:

- I will fit in with the other teachers in the staff room environment.
- My values will match those held by state schools.
- I will receive support from my associate teachers while I’m on practicum.
• My College of Education lecturers will be supportive.
• I will be accepted as one of the teachers rather than as one of the students in the school.

The third factor had an eigenvalue of 1.33 that explained 7.83% of the variance. Three items loaded on this factor, two of which pertained to receiving external support. The third item related to concerns about academic preparation and loaded on both this and the fourth factor:

• My family will be supportive of my becoming a teacher.
• My friends will be supportive of my becoming a teacher.
• I am academically prepared to teach my subject areas.

The fourth factor had an eigenvalue of 1.19 that explained 7.01% of the variance. Two items in addition to “I am academically prepared to teach my subject areas” loaded on this factor and pertained to personal preparation for becoming a teacher:

• I will be a reliable, punctual, and dependable colleague.
• I am confident that my literacy skills are sufficient for planning lessons and preparing teaching materials.

The third administration of the CAT occurred after preservice teachers had completed their second, 7-week practicum. This analysis yielded a three-factor solution that explained 58% of the variance. Table 2 shows the complete factor structure. The first factor had an eigenvalue of 4.12 that explained 24.26% of the variance. Eight items loaded on this factor, which pertained to being supported and accepted:

• My family will be supportive of my becoming a teacher.
• My friends will be supportive of my becoming a teacher.
• My College of Education lecturers will be supportive.
• I will be a reliable, punctual, and dependable colleague.
• I am confident that my literacy skills are sufficient for planning lessons and preparing teaching materials.
• I will be accepted as one of the teachers rather than as one of the students in the school.
• I will fit in with the other teachers in the staff room environment.
• I will receive support from my associate teachers while I’m on practicum.

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Table 2 about here
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The second factor had an eigenvalue of 3.80 that explained 22.33% of the variance. Six items that loaded on this factor, which concerned efficacy issues:

• I will be effective at classroom management.
• I am emotionally prepared to be a teacher.
• I will be able to balance my personal and professional demands.
• The transition from the associate teachers’ authority in the classroom to my authority in the classroom will go smoothly.
• I am academically prepared to teach my subject areas.
• I will have effective time management and organisational skills to get everything done.

The third factor had an eigenvalue of 1.99 that explained 11.72% of the variance. Three items loaded on this factor, which largely related to confidence:

• My values will match those held by state schools.
• My teaching experiences will be free of stress.
• The students in the classroom will readily accept me as their classroom teacher.
Group Comparisons of the Factor Structures Obtained for the CAT

Because the factor structures of the CAT changed over the course of the programme, an analysis was conducted to determine whether the mean values of the scales derived from the final factor analysis (the third administration) changed over time. Subscales for the first and second administrations of the CAT were computed based on the final subscales obtained. This was done to permit a direct comparison of the preservice teachers’ concerns as they developed across time and to examine whether group differences were present. A repeated measures analysis of variance was used with time of administration of the CAT as the within factor and gender, age, and ethnicity as the between factors. For the first factor, Support/Acceptance, there was a significant main effect for time of administration, $F(2, 63) = 181.90, p < .001$, partial eta squared = .85. There were no significant effects for age, gender or ethnicity, nor were there any interaction effects. Table 3 shows the descriptive statistics for the Support/Acceptance factor by time of administration of the CAT. It can be seen from Table 3 that concerns about Support/Acceptance decreased significantly from the second administration of the CAT to the time of the third administration of the CAT.

Table 3 about here

For the Efficacy factor, there was a significant main effect for time of administration, $F(2, 63) = 149.30, p < .001$, partial eta squared = .83. There were no significant effects for age, gender or ethnicity, nor were there any interaction effects. Table 3 shows the descriptive statistics for the Efficacy factor. It can be seen that concerns about Efficacy issues decreased significantly from the second administration of the CAT to the time of the third administration of the CAT.
For the Confidence factor, there was a significant main effect for time of administration, $F(2, 63) = 68.04, p < .001$, partial eta squared = .68. There were no significant effects for age, gender or ethnicity, nor were there any interaction effects. Table 3 shows the descriptive statistics for the Confidence factor. It can be seen that Confidence increased significantly from the second administration of the CAT to the time of the third administration of the CAT.

Figure 3 shows the mean responses for each CAT factor over time. This figure indicates that for each factor, concerns about teaching did not significantly change until after the second practicum.

Concerns and Teaching Efficacy

To examine how concerns about teaching related to teaching efficacy, scores on the three subscales from the final administration of the TES were correlated with the scores on the Efficacy subscale from the final administration of the CAT (see Table 4). The correlations were significant, but not so high as to suggest that the concerns expressed on the CAT were surrogates for the three subscales of the TES.

Change Over Time – Focus Group Analyses

The focus groups were often rather lively. The participants in the second and third groups were eager to reflect on their classroom experiences, which provided needed depth to augment the survey data. Overall, although the concerns expressed by the preservice teachers
did not disappear, as time progressed they were more able to articulate their concerns and even offer suggestions for addressing them within their training in the programme.

Seven themes emerged from the focus group data:

1. Underestimating the Role of the Teacher,
2. Teaching to all Levels/Abilities,
3. Classroom Management,
4. Being a Professional,
5. Acceptance as a Teacher/Building Rapport with Students,
6. Work/Life Balance and Time Management, and
7. Assessment (This theme emerged during the final focus group, when the students were asked if there was anything they’d like to add or that should be brought back to the programme directors.)

What follows is an explanation of each theme with a set of quotations for that theme. These quotations were selected as representative of the responses and as illustrative of the development of the participants’ responses over time. After each quotation is a parenthetical notation to indicate whether the quotation was from the first, second, or third focus group, and the gender of the respondent. For example, (F1, F) indicates the first focus group, female respondent.

**Underestimating the role of the teacher.** The preservice teachers, as a group, reported that they did not anticipate just how much would be involved with creating and delivering engaging lessons. Their concern about getting it all done and done well did not dissipate over time.

“It’s a lot more than I thought. It will be interesting to go on practicum and see if it’s actually not that bad.” (F1, F)
“I think I under-estimated it…there’s quite a lot to it.” (F2, M)

“I knew there’d be a lot of work, but then I went, “Oh my word, what a lot of work!” (F3, F)

“I think what I wasn’t prepared for was the staying up until at least midnight working, and then having to work the next day.” (F3, M)

Teaching to all levels/abilities. The focus group participants were concerned with how to create lessons taking into account the individual students in their classes. Although this concern did not diminish, by the end of their training the participants seemed to develop insight about working with individual students. By the third focus group their reflections had shifted from focusing on their worries or potential inadequacies to observations about the importance of identifying needs and celebrating successes.

“Like, I worry about catering to each individual student and abilities and all that sort of stuff.” (F1, M)

“Behind the scenes you think, “…how’s student X going to cope with this unless I know what he is like?” So I think I’m quite amazed at the amount of focus that you need for individual students.” (F2, F)

“Sometimes on practicum when I knew I’d done something in class and someone hadn’t got it I’d go home and I’d feel quite bad about it because it’s my job for them to get it…” (F2, F)

“There’s different levels of achievement and…one of my students, oh it was awesome just to get him to complete something, so that was an achievement
rather than the actual achievement itself.” (F3, M)

**Classroom management.** Classroom management was a popular topic for each focus group. In the first group, there was an anxiety over the anticipation of classroom management issues. The attitudes were rather negative and centred on classroom management taking priority over teaching. Over time, this attitude changed to one that recognised that classroom management is important, but so is respect for the students.

“I think it is going to be just so much work trying to get the class…focused, it’s way more dominant than actually teaching.” (F1, M)

“If you’ve got a year 9 class of 30 kids…you are going to have to be a bit of a dragon you know.” (F1, F)

“If you haven’t got classroom management you can’t teach.” (F2, M)

“I think you should set the tone and act toward the students as they should act toward each other.” (F3, M)

“It is important that your students feel respected and safe in your class because otherwise they’re not going to learn.” (F3, F)

**Being a professional.** The theme of professionalism seemed to evolve over time. Prior to any training or practicum experience, the preservice teachers talked about being a teacher as analogous to playing a role, and requiring distance from the students. After the first practicum, there was awareness on the part of many of the preservice teachers that they were not much older than the students in their classes. They began to realise that they needed to move from being students themselves to being professionals. By the third focus group, there
was a shift toward being more comfortable with the students and being able to articulate qualities of a professional.

“It’s important to keep in mind that you are professional people you know and that you are the teacher and you have got that role.” (F1, M)

“They can’t just be your friend or whatever, but I’m not sure how much I can do without seeming like a friend instead of their teacher.” (F1, F)

“It's important for them to see you as a teacher…OK they've gotta see you as a person, but kind of see you as a teacher. You know, you've gotta keep that professional distance from the students. Yeah.” (F2, M)

“You can choose what you want in your personal life to tell…like if something happens to you in the morning that is really funny then you can let your class know about it.” (F3, M)

“Professional colleague…hmmm…that’s being punctual, reliable, efficient, polite, cheerful, keen, motivated, enthusiastic and very willing to listen to constructive advice. And a strong work ethic” (F3, F)

**Acceptance as a teacher/building rapport with students.** Prior to any training or practicum experience, the preservice teachers were apprehensive about whether they would be accepted as a teacher and whether the presence of the associate teacher in the classroom would affect their acceptance by the students. Reflections moved from talking about the students “smelling fear” to talking about how enthusiasm is contagious.

“It’s going to be hard to go into the classroom, they already have a teacher…and then you are coming in…and I think there is going to be that time period where they are,
like, are you really our teacher. And they will keep looking back to their old teacher for answers… it is going to be quite hard.” (F1, F)

“I’d say that being accepted by the students crucial. If you’re not accepted then every time before that class you’re going to be so apprehensive as to what is going to happen.” (F2, F)

“You can’t show fear…they can smell it. You’ve got to put up that bravado that you’re confident…otherwise, they know” (F2, M)

“Any negativity at all coming from you as a teacher, it’s going to be picked up on by the students.” (F3, M)

“It is really important to be positive and energetic…being energetic and enthusiastic about everything you’re doing so then it will be caught up on by the students and they’ll participate to their fullest as well. Even it you had a really bad lesson with them the time before, just forget about it.” (F3, F)

**Work/life balance and time management.** The theme of balancing work with life and time management was an important one for the preservice teachers. The first focus group was concerned in an egotistical way, wondering how they would have time for their social lives and families. After the first practicum, there was a realisation that time had to be used efficiently. After the final practicum, the importance of time management was evident, but with a realistic perspective.

“I’m concerned about how I can learn how to be a teacher but at the same time to have a social life and learn how to structure work around that.” (F1, F)
“My biggest concern is how much time [teaching] is going to impact on my family.”
(F1, F)

“There’s a lot of usable hours in the day and you just have to make sure that you’re using those.” (F2, F)

“There’s not enough hours in the day to be a perfectionist teacher and that’s something I’ve had to learn this year.” (F2, M)

“It’s on prac you realise that they can learn just by you doing something simple, it doesn’t have to take hours of your time for them to enjoy it.” (F3, M)

“Time management and organisation, honestly, I don’t know if you can survive without them both.” (F3, F)

Assessment. In the third focus group, when the participants were asked if there was anything they’d like to add to the discussion or that should be brought back to the programme directors, they talked at length about assessment. Concerns were expressed not having had enough training in creating reliable assessments, marking assessments fairly, and communicating assessment results. Their suggestion for the programme directors was to improve their training in assessment for learning and assessment of learning. All quotations shown are from the third focus group.

“It’s all very well when they say, you’re going to be making summative assessments, but there’s no class on what makes a good summative assessment.” (F)
“I didn’t find the problem of actually assessing, I found the problem with having it at the right level…” (M)

“I really struggled, even now though I’m improving as I go along but I still find myself struggling with formative assessment. And…feedback, I still really struggle with that. I just don’t know enough strategies to use… that worries me.” (M)

“I find with formative assessment it can be hard to um, individually assess where each student is at.” (F)

“It’s all very well to give them a quiz or give them a test that’s nice and easy…I struggle thinking of an activity which I can tell them, that when you’re doing this activity your weak point was there.” (M)

“I felt my personal efficacy increased with assessment, when on practicum I was able to sit along side my associates and mark the exam. If you’re left on your own it’s a bit daunting.” (F)

Discussion and Conclusion

This section will first review the research questions that motivated this study and the findings associated with those questions. Next, a general set of conclusions about the research is drawn and related to the research literature. We then move to a discussion of the practical implications of the research and conclude by looking at limitations and future directions.

The first research question was: How do initial concerns about teaching change over the course of a one-year secondary school teacher training programme in New Zealand? There are two primary findings in response to this question. First, the factor analyses of the
CAT showed that concerns about teaching evolved over the year of training from a somewhat simplistic “concerned/not concerned” structure to a three-factor differentiation. Second, concerns about teaching decreased over time, in particular following the second practicum. The focus group data supported the survey findings and provided anecdotal evidence that illustrated how the participants’ concerns moved toward realistic views of teaching and what it means to be a teacher. It is important to note that preservice teachers in the final focus group still had concerns; however, they had an understanding of what they did not know and where the gaps had been in their training. They acknowledged that they would need assistance from more practised professionals as they started teaching. Timperley’s (2001) call for more mentoring conversations would certainly assist with this. In general, these results lend support to previous findings (Lamote & Engels, 2010; Liaw, 2009; Pigge & Marso, 1997; Smith, Klein, & Mobley, 2007) that preservice teachers’ concerns change over the course of training and with classroom experience. They also are consonant with Watkins’ (1999) finding that lack of experience is related to having higher levels of concerns.

The second research question was: What is the relationship between concerns about teaching and teaching efficacy for students in a one-year secondary school teacher training programme in New Zealand? The subscales of the TES and the Efficacy subscale on the CAT were related; however, the correlations were not so high as to suggest that the concerns expressed about efficacy on the CAT were simply surrogates for the TES. The results for this sample extend findings reported by Gurvitch and Metzler (2009), Fives and Buehl (2010), and Boz and Boz (2010) with regard to perceived preservice teacher efficacy and concerns about teaching.

The fundamental findings from this sample of New Zealand preservice teachers are clear, and consistent with research elsewhere in the world on the topic: Students develop a more differentiated set of concerns about teaching as they gain classroom experience, and
their concerns become more realistic with that experience. Although their concerns were not eliminated, after each practicum experience these preservice teachers’ reflections demonstrated that they were developing an appreciation of how much is involved in being an outstanding professional, and they had begun to understand the subtleties of life in a school and the importance of both internal and external support. The results also indicated that teaching efficacy and teaching concerns are not identical or interchangeable but instead have a reciprocal relationship. As teaching efficacy increased, concerns about teaching decreased.

The way in which the preservice teachers’ concerns changed over time point to a developmental model and argue for increased positive experiences in the classroom to build confidence and efficacy, and reduce concerns. This is supported by the strong effect sizes for time and the lack of interaction effects or main effects for gender, age, or ethnicity on the CAT.

The discussions in the focus groups interrogated the survey data and provided insight regarding how to help preservice teachers shift from their initial naïve beliefs about teaching toward becoming professionals in the classroom. Based on the focus group discussions, it was evident that the participants’ concerns became more manageable over time. This shift can be assisted by teacher educators promoting self-awareness and cultivating positive teacher dispositions (see Darling-Hammond, 2000; Schussler, Stooksberry, & Bercaw, 2010).

In terms of practical implications, the findings suggest that those who train teachers can work toward mediating some of the concerns associated with first teaching experiences by providing experiences in classrooms early in their programmes and continuing at regular intervals, in different types of classrooms. Maintaining open dialogues with students over the course of their training is also critical for success. And, teacher trainers and associate teachers need to provide opportunities to create, give, and mark assessments both for and of learning.
Of course, discussions of practical implications need to take into consideration the context in which the teacher training takes place. With regard to the current study, in New Zealand many teacher educators see a disconnect between best practice in preparing teacher education students and recent changes in government policy concerning a variety of issues impinging on initial teacher preparation (Cowie & Hill, 2011). Given the responses of the preservice teachers in this study, it seems timely to bring together our teacher educators, principals, and associate teachers for professional development sessions to first discuss these challenges, then identify ways in which the entire community of practice can work with the policy changes while delivering quality teacher education training. In addition, policy changes in NZ point to increasing pressure in terms of accountability. An examination of teacher education models around the world may help teacher educators in NZ and in other countries to avoid potential pitfalls and adapt those effective practices.

There are, of course, limitations to this study. The findings may not generalise to preservice teachers in primary or early childhood programmes, or even outside of the programme in New Zealand in which the data were collected. It would also be helpful to examine associate teachers’ and university supervisors’ reports in conjunction with the preservice teachers’ survey and focus group data.

In conclusion, this study extends the literature on preservice teachers’ concerns about teaching to the NZ context, in a secondary education graduate diploma programme. The use of focus groups also extends previous findings that for the most part relied on inventory and observational data. In particular, the focus groups provided understanding of how the differentiation of concerns as shown by Smith et al. (2007) might evolve. That a similar differentiation of concerns on the CAT as reported by Smith et al. was obtained in New Zealand suggests that there is a degree of generalizability in the understanding of teaching as a profession. The study also provides direction for teacher educators in terms of
working with the community of practice to strengthen teacher education programmes. A number of the participants from this study are currently taking part in a follow-up to this research, to examine whether their concerns and efficacy change over their first two years of teaching.

**Acknowledgement**

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References


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Secondary Preservice Teachers’ Concerns


Table 1

*Factorial Structure Of The Four-Factor Solution Of The Concerns About Teaching Scale*  
*(Smith, Mobley, & Klein, 2007; Modified With Permission)* After First Teaching Practicum (*n* = 85)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Communality (h²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academically prepared</td>
<td>.29</td>
<td>-.12</td>
<td>.48</td>
<td>.38</td>
<td>.47</td>
</tr>
<tr>
<td>Emotionally prepared</td>
<td>.73</td>
<td>.01</td>
<td>.25</td>
<td>.27</td>
<td>.68</td>
</tr>
<tr>
<td>Literacy skills are sufficient</td>
<td>.11</td>
<td>.16</td>
<td>.39</td>
<td>.49</td>
<td>.42</td>
</tr>
<tr>
<td>Support from associate teachers</td>
<td>.32</td>
<td>.64</td>
<td>.15</td>
<td>.23</td>
<td>.59</td>
</tr>
<tr>
<td>Support from lecturers</td>
<td>.15</td>
<td>.61</td>
<td>.50</td>
<td>.14</td>
<td>.67</td>
</tr>
<tr>
<td>Support from family</td>
<td>.03</td>
<td>.22</td>
<td>.83</td>
<td>.01</td>
<td>.77</td>
</tr>
<tr>
<td>Support from friends</td>
<td>.04</td>
<td>.28</td>
<td>.80</td>
<td>.14</td>
<td>.74</td>
</tr>
<tr>
<td>Smooth transition to my authority</td>
<td>.81</td>
<td>.19</td>
<td>.13</td>
<td>.13</td>
<td>.73</td>
</tr>
<tr>
<td>Balance personal and professional demands</td>
<td>.59</td>
<td>.01</td>
<td>.40</td>
<td>-.08</td>
<td>.65</td>
</tr>
<tr>
<td>Effective at classroom management</td>
<td>.88</td>
<td>.13</td>
<td>-.05</td>
<td>.20</td>
<td>.83</td>
</tr>
<tr>
<td>Students accept me as their teacher</td>
<td>.82</td>
<td>.22</td>
<td>.01</td>
<td>.16</td>
<td>.75</td>
</tr>
<tr>
<td>Effective time management/organisational skills</td>
<td>.52</td>
<td>.09</td>
<td>-.15</td>
<td>.49</td>
<td>.54</td>
</tr>
<tr>
<td>Teaching experiences will be free of stress</td>
<td>.64</td>
<td>.30</td>
<td>.00</td>
<td>-.23</td>
<td>.54</td>
</tr>
<tr>
<td>Accepted as teacher rather than student</td>
<td>.42</td>
<td>.54</td>
<td>.12</td>
<td>.27</td>
<td>.55</td>
</tr>
<tr>
<td>Reliable, punctual, and dependable</td>
<td>.07</td>
<td>.20</td>
<td>.14</td>
<td>.79</td>
<td>.69</td>
</tr>
<tr>
<td>Fit in with teachers in the staff room</td>
<td>.03</td>
<td>.75</td>
<td>.12</td>
<td>.34</td>
<td>.69</td>
</tr>
<tr>
<td>Values will match those held by state schools</td>
<td>.11</td>
<td>.73</td>
<td>.12</td>
<td>-.17</td>
<td>.59</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>6.06</td>
<td>2.31</td>
<td>1.33</td>
<td>1.19</td>
<td></td>
</tr>
<tr>
<td>% of Variance</td>
<td>35.62</td>
<td>13.59</td>
<td>7.83</td>
<td>7.01</td>
<td></td>
</tr>
</tbody>
</table>

Factor: Classroom Acceptance, External Support, Preparation.
<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Communalilty (h²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academically prepared</td>
<td>.36</td>
<td>.50</td>
<td>-.03</td>
<td>.38</td>
</tr>
<tr>
<td>Emotionally prepared</td>
<td>.16</td>
<td>.80</td>
<td>.12</td>
<td>.68</td>
</tr>
<tr>
<td>Literacy skills are sufficient</td>
<td>.62</td>
<td>.32</td>
<td>-.08</td>
<td>.50</td>
</tr>
<tr>
<td>Support from associate teachers</td>
<td>.45</td>
<td>.40</td>
<td>.08</td>
<td>.36</td>
</tr>
<tr>
<td>Support from lecturers</td>
<td>.68</td>
<td>.24</td>
<td>.15</td>
<td>.54</td>
</tr>
<tr>
<td>Support from family</td>
<td>.84</td>
<td>.05</td>
<td>-.02</td>
<td>.70</td>
</tr>
<tr>
<td>Support from friends</td>
<td>.81</td>
<td>.16</td>
<td>.13</td>
<td>.70</td>
</tr>
<tr>
<td>Smooth transition to my authority</td>
<td>.42</td>
<td>.54</td>
<td>.32</td>
<td>.58</td>
</tr>
<tr>
<td>Balance personal and professional demands</td>
<td>.23</td>
<td>.74</td>
<td>.05</td>
<td>.61</td>
</tr>
<tr>
<td>Effective at classroom management</td>
<td>.18</td>
<td>.82</td>
<td>.18</td>
<td>.74</td>
</tr>
<tr>
<td>Students accept me as their teacher</td>
<td>.11</td>
<td>.45</td>
<td>.64</td>
<td>.62</td>
</tr>
<tr>
<td>Effective time management/organisational skills</td>
<td>.40</td>
<td>.48</td>
<td>.27</td>
<td>.46</td>
</tr>
<tr>
<td>Teaching experiences will be free of stress</td>
<td>-.25</td>
<td>.26</td>
<td>.65</td>
<td>.54</td>
</tr>
<tr>
<td>Accepted as teacher rather than student</td>
<td>.57</td>
<td>.42</td>
<td>.21</td>
<td>.54</td>
</tr>
<tr>
<td>Reliable, punctual, and dependable</td>
<td>.64</td>
<td>.48</td>
<td>.06</td>
<td>.64</td>
</tr>
<tr>
<td>Fit in with teachers in the staff room</td>
<td>.52</td>
<td>.24</td>
<td>.50</td>
<td>.59</td>
</tr>
<tr>
<td>Values will match those held by state schools</td>
<td>.28</td>
<td>-.27</td>
<td>.77</td>
<td>.75</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>4.12</td>
<td>3.80</td>
<td>1.99</td>
<td></td>
</tr>
<tr>
<td>% of Variance</td>
<td>24.26</td>
<td>22.33</td>
<td>11.72</td>
<td></td>
</tr>
</tbody>
</table>

Factor: Support/Acceptance

Efficacy Confidence
Table 3

*Descriptive Statistics for the Significant Effects Obtained for the Factors of the Concerns About Teaching Scale (Smith, Mobley, & Klein, 2007; modified with permission) by Time of Administration*

<table>
<thead>
<tr>
<th>Factor</th>
<th>First Admin.</th>
<th>Second Admin.</th>
<th>Third Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n  M   SD</td>
<td>n  M   SD</td>
<td>n  M   SD</td>
</tr>
<tr>
<td>Support/Acceptance</td>
<td>85 4.80 1.36</td>
<td>85 5.24 0.65</td>
<td>85 7.43 0.59</td>
</tr>
<tr>
<td>Efficacy</td>
<td>85 4.24 1.10</td>
<td>85 4.67 0.71</td>
<td>85 7.01 0.65</td>
</tr>
<tr>
<td>Confidence</td>
<td>85 4.16 0.86</td>
<td>85 3.99 0.88</td>
<td>85 6.20 0.83</td>
</tr>
</tbody>
</table>

*NOTE.* Higher scores indicate decreased levels of concern.
Table 4

*Correlation of the Average Scores on the Three Factors from the Final Administration of the TES (short form) (TES; Tschannen-Moran & Woolfolk Hoy, 2001) with the Average Scores on the Efficacy Factor from the Final Administration of the CAT (Smith, Mobley, & Klein, 2007; modified with permission)*

<table>
<thead>
<tr>
<th>TES</th>
<th>CAT Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
</tr>
<tr>
<td>Efficacy In Student Engagement</td>
<td>85</td>
</tr>
<tr>
<td>Efficacy in Instructional Strategies</td>
<td>85</td>
</tr>
<tr>
<td>Efficacy in the Classroom Management</td>
<td>85</td>
</tr>
</tbody>
</table>
**Concerns About Teaching**

A number of statements about teaching follow. The purpose is to gather information about your expectations about teaching. There are no correct or incorrect answers. Thank you for your participation!

**Instructions:** Please indicate your personal opinion about each statement below by filling in one box at the right of each statement that best indicates your level of concern for that item. Use the following scale:

**Key:**
- 6 = Strongly Agree
- 5 = Moderately Agree
- 4 = Agree slightly more than disagree
- 3 = Disagree slightly more than agree
- 2 = Moderately Disagree
- 1 = Strongly Disagree

1. I am academically prepared to teach my subject areas.

2. I am emotionally prepared to be a teacher.

3. I am confident that my literacy skills are sufficient for planning lessons and preparing teaching materials.

4. I will receive support from my associate teachers while I’m on practicum.

5. My College of Education lecturers will be supportive.

6. My family will be supportive of my becoming a teacher.

7. My friends will be supportive of my becoming a teacher.

8. The transition from the associate teachers’ authority in the classroom to my authority in the classroom will go smoothly.

9. I will be able to balance my personal and professional demands.

10. I will be effective at classroom management.

11. The students in the classroom will readily accept me as their classroom teacher.

12. I will have effective time management and organisational skills to get everything done.

13. My teaching experiences will be free of stress.

14. I will be accepted as one of the teachers rather than as one of the students in the school.

15. I will be a reliable, punctual, and dependable colleague.

16. I will fit in with the other teachers in the staff room environment.

17. My values will match those held by state schools.
If you have any concerns in addition to those listed, or would like to further explain a response, please do so here: 
______________________________________________________________________________
______________________________________________________________________________

*Figure 1. Concerns About Teaching (CAT) adapted with permission. Five items added to the original CAT are preceded with an asterisk.*
1. When you become a teacher, to what extent do you see yourself as responsible for:
   a. students’ learning?
   b. students’ achievement?
   c. students’ welfare?

2. How do the personal attributes that you bring to teaching impact your students’ learning?

3. What concerns do you have about becoming a teacher with your own classroom/students?

4. How much do you see students’ home life affecting what you can achieve in the classroom?

5. How much do you see your personal life affecting what you can achieve in the classroom?

6. To what extent is it important for the students to accept you as their teacher?

7. When you begin teaching in your first position, what issues (if any) do you anticipate encountering with other, more established teachers?

8. Is teaching efficacy same as confidence?

9. Is teaching efficacy hard-wired…is it something you have or don’t have, or can you develop it?

10. As the year progresses, how do you think your concerns about teaching or teacher efficacy might change?
   a. What changes, if any, did you notice after your practica, when you are actually face-to-face with the realities of a classroom and being part of a school? Another way to think about this is, how have your perceptions about the role of the teacher changed since the beginning of the year? (Focus Groups 2 and 3)
   b. Does teacher efficacy decline when you are presented with the magnitude of a teacher’s role/responsibilities? How? (Focus Groups 2 and 3)

11. Is there anything we can do in the programme to help you with your concerns about teaching, or to help build your teaching efficacy?

12. Is there anything more you’d like add?

13. Has your teaching philosophy changed at all since the beginning of the year? In what ways? (Focus Groups 2 and 3)
14. How have your perceptions about the role of the teacher changed since the beginning of the year? (Focus Groups 2 and 3)

15. Does “liking” or “identifying with” your associate teacher have an effect on you? If so, how? (Focus Groups 2 and 3)

16. Have you been surprised with the time commitment involved with teaching? How have you managed to “get it all done” and keep the rest of your life sane? (Focus Groups 2 and 3)

17. How did assessing the students and communicating their results affect your teaching efficacy? (Focus Group 3)

*Figure 2. Questions to Guide the Focus Groups*
Figure 3. Mean responses for each CAT factor over time.