



*Investigation into the role of emotions in tertiary teaching: A pilot study into the emotions experienced by tertiary educators in their teaching contexts*

**Final Report**  
19 April 2010

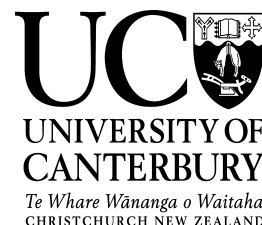
Researchers:

Dr Veronica O'Toole  
Alison Ogier-Price  
Andrew Hucks



**AOTEAROA**  
NATIONAL CENTRE FOR  
TERTIARY TEACHING  
EXCELLENCE

**Funded 2008 –2010 by  
Ako Aotearoa, Southern Regional Hub**



## **Acknowledgements**

We wish to acknowledge and thank AKO Aotearoa for funding this research. We thank Bridget O'Regan and Pat Robertson from AKO Aotearoa for their assistance. Veronica O'Toole acknowledges and expresses grateful thanks to Dr. Marion Bowl for her role as mentor at the commencement of this project. We thank Josephine Clark for her transcribing and preliminary data analysis. We are indebted to the participants who gave generously of their time over this lengthy project, and their willingness to share their emotional experiences and stories with us in the interests of research. This project would not have been possible without them. Finally we thank Dr. Deb Hill for editing and feedback.

## Introduction

Despite increasing international evidence of the importance of emotions in teaching, minimal attention has been paid to the role of emotion in advancing higher learning here in Aotearoa, New Zealand. Of the research that has been conducted, the evidence suggests that tertiary students' continued enrolment beyond the first year may depend quite significantly on teaching methods that provide excitement and create an interest for the student in a subject (Leach, Zepke & Prebble, 2006). Recent Ako Aotearoa-funded research has revealed this is particularly the case for Māori tertiary students. Greenwood and Te Aika (2009, p.7) reported that tertiary teachers' strong support of Māori students' "emotional and spiritual space" has been integral to these students' success in tertiary level study. Recognising the role that emotion plays in the tertiary teacher-learning nexus could make an important contribution to tertiary teaching.

There is now an extensive body of empirical evidence, over the past twelve years or more, of the importance of emotions in teaching (Hargreaves, 1998; Sutton, 2004; Sutton & Wheatley, 2003). Teaching may be regarded as an "emotional practice" (Hargreaves, p. 835). Teachers tend to put high expectations upon themselves, placing themselves at emotional risk if they fall short (Hargreaves, 1998). Hargreaves has also stated that "emotions are at the heart of teaching", and that "good teaching is charged with positive emotion" (p. 835).

Teachers are expected to emotionally engage their students in such ways as to display that they care (Hargreaves, 1998), and many teachers believe that they should not display negative emotions, such as frustration (Sutton & Wheatley, 2005). "Teaching is a profession that requires almost constant interactions with students," observed Naring, Briet and Brouwers (2006, p. 303). The ongoing self-regulation that is required by individuals to maintain, create, manage, and display the appropriate emotions for any given interpersonal situation is referred to as "emotional labor", a term first introduced by Hochschild (1983, p. 7). Hochschild investigated the emotional labor of professionals—including flight attendants, and health care workers—and revealed that certain emotions are required by caring professionals to conform to management norms. The teaching profession has similar demands of care. According to Hargreaves, "emotional labor is an important part of teaching, in many ways a positive one [which also] puts care into context" (1998, p. 840). Clegg (2000) has found that "significant" emotional labor is expended in tertiary contexts (p.460). For many teachers, teaching is a "labor of love" (Hargreaves, 1998, p. 840).

Sutton (2004) has found that teachers' emotional<sup>1</sup> regulation goals are a significant part of their teaching practice, and may be preventive or reactive. They may be conscious or unconscious and may be linked into their motivation for teaching and for using specific teaching strategies (Hargreaves, 1998; Sutton & Wheatley, 2003). Ideally, teachers should *genuinely* feel the important positive emotions, such as enthusiasm and passion (Hargreaves, 1998) without "surface acting" (Naring et al., 2006, p. 312), or consciously suppressing negative emotions, in order to prevent emotional exhaustion and burnout (Naring et al.). This genuine emotional experience is termed a state of "emotional consonance, which is the state of effortlessly feeling the emotion required" (Naring et al., 2006, p. 304). The converse experience is emotional exhaustion, which is a key characteristic of burnout syndrome.

Teaching as a profession has high rates of stress and high burnout (Kokkinos, 2007; Naring et al., 2006). Brackett et al. maintain however that "teachers who are more skilled at regulating their emotions tend to report less burnout and greater job satisfaction" (2009, p.336). As Naring et al. stated, "While it is important to investigate what makes people exhausted, there is increasing interest in what makes people enthusiastic about their work and what makes them feel competent" (2006, p. 313). This focus fits well with the approach taken within the field of positive psychology, which is described as "the study of positive aspects of human experience" (Csikszentmihalyi, 2003, p. 113). Csikszentmihalyi suggests that psychology should not just be about reducing pathology, but understanding qualities that make life worth living. There is empirical evidence that

---

<sup>1</sup> Emotional regulation is also referred to as "emotion" regulation by other authors eg Gross (2002). We choose to use the term "emotion regulation", and when citing other authors, we use their terminology.

emotional intelligence is associated with emotional wellbeing with research indicating that higher emotional intelligence is associated with less depression and greater optimism (Schutte et al., 1998). Other researchers, including Goleman (1995), and Salovey and Mayer (1990), have theorized that higher emotional intelligence leads to greater feelings of emotional wellbeing.

The present research responds to the call for more research into teachers' emotion regulation goals and strategies (Liljestrom, Roulston & Demarrais, 2007; Pekrun & Schutz, 2007; Sutton, 2007). In keeping with the goals of Ako Aotearoa, the focus of this research is to identify what emotions are reported by tertiary teachers, as well as the various ways that tertiary teachers may be supported in their wellbeing to promote a positive learning environment. The primary aims of this pilot research project were to identify what emotions are currently experienced by tertiary teachers in their teaching contexts, and what emotional management strategies, if any, they could identify. We also sought to ascertain how tertiary teachers might be supported in their wellbeing to promote a positive learning environment.

The specific research questions adopted were intended:

- 1) To identify the range of emotions experienced by tertiary teachers in teaching situations using Oatley and Duncan's (1992) diary method;
- 2) To explore the emotion regulation goals and strategies of tertiary teachers using Sutton's (2004) interview method;
- 3) To examine the self-reported subjective wellbeing and emotional intelligence of tertiary teachers;
- 4) To identify future directions for research into emotions in tertiary teaching in Aotearoa, New Zealand.

## **Methodology**

Four tertiary institutions (one university, one polytechnic, and two private training providers) were invited to participate in this project. Each institution gave permission for their staff to participate, with those willing then contacting the principal researcher— anonymously if they so wished. Participants were provided with structured diaries with which to record up to four emotional experiences per day for five days. On completion of this task, the principal researcher interviewed each participant. After the interview, participants were asked to complete a set of online subjective wellbeing questionnaires. All participant and tertiary institution data was then coded to protect the participants' anonymity. Fifteen participants across the four tertiary institutions completed dairies, fourteen of whom then attended the individual semi-structured interview. Twelve participants completed a set of online questionnaires using internet entries.

## **Participants**

All participants provided demographic information consisting of their age, gender, years of teaching experience, teaching qualifications, tertiary teaching context (public sector or private provider), and the gender composition of their classes. The demographic information is provided in Table 1 and Table 2, in Appendix A.

The mean age of all participants was 54, with an age range from 40 to 66 years. Six (40%) of all participants were female ( $M=50$ ,  $SD=5.73$ ), with an age range from 40 to 57, and nine (60%) participants were male ( $M=56.67$ ,  $SD=5.55$ ), with an age range from 49 to 66.

## **Data Gathering**

### **1. Emotion Diaries**

The diaries are based on Oatley and Duncan's (1992) exemplar (Appendix B). They provide an "intentional remembering" (Oatley & Duncan, 1992, p. 252) self-report system to encourage

participants to notice and record their emotions<sup>2</sup>, their internal experiences and external events. Participants were each given enough diaries to enable them to record up to four emotion events per day over five days. Diary data were entered into Microsoft Excel spreadsheets and imported into STATISTICA for further analysis.

## **2. Interviews**

The semi-structured interviews were based on Sutton's research (2004) with a focus on emotion regulation (Appendix C). Sutton's methodology is drawn from her years' of research focusing on teachers and as such appeared to have the most relevance for this pilot study. After completion of their diaries, participants attended an individual interview in a university office with the principal researcher. These interviews were tape-recorded and between 20 and 45 minutes in duration. The interviews were transcribed by a research assistant and were manually coded for categories based on Sutton (2004), and examined for themes.

---

<sup>2</sup> Definitions of emotion: "Emotions derive from cognitive processes for integrating multiple and sometimes vague goals and for managing the associated plans that are enacted with limited resources in an uncertain environment, often in conjunction with other people" (Oatley, 1992, p. 43). "Emotions are, in effect, organized cognitive-motivational-relational configurations whose status changes with changes in the person-environment relationship as this is perceived and evaluated (appraised)." (Lazarus, 1991, p. 38)

### **3. Measuring Happiness**

In order to study happiness and wellbeing, it is necessary to be able to measure these variables. Since Flugel's 1925 study involving the self-recording and measurement of emotional moods, researchers have been using questionnaires based on scales to measure subjective wellbeing. Self-report measures will always be open to criticism because of the subjective nature of the responses, such as respondents' exaggeration of wellbeing in order to attain higher happiness scores (Veenhoven, 2000a). Veenhoven (2003) believes that happiness is a conscious state of mind that can be measured by asking single questions and documenting the subjective responses. A high correlation of positive emotions has meant that short questionnaires usually display strong reliability (Lucas, Diener, & Larsen, 2003). For example, the 5-item Satisfaction with Life Scale (included in this present study) estimates internal reliability over 0.80 (Diener, Emmons, Larsen, & Griffin, 1985). This study uses three commonly-used questionnaires that have been well validated to measure happiness, satisfaction, and positive and negative affect. The combined use of multiple and diverse scales for measurement allows for a multi-dimensional capture of emotional experience.

#### **3.1 Satisfaction With Life Scale**

The *Satisfaction with Life Scale* (Diener, Emmons, Larsen, & Griffin, 1985) was designed to measure life satisfaction using a five-item questionnaire with a seven-point Likert-type scale (Appendix D, Item 2). Responses are averaged to yield an overall score for each participant. Research has demonstrated acceptable psychometric properties for the scale (Diener, 1994). A reliability analysis for this study produced an acceptable Cronbach's alpha of .78.

An example of an item that appears on this scale is:

- In most ways, my life is close to ideal
- (Strongly disagree - 1 2 3 4 5 6 7 - Strongly agree).

#### **3.2 Fordyce Emotions Questionnaire**

The Fordyce Emotions Questionnaire (Fordyce, 1977) is a two-question, self-report measure of a person's current level of happiness (Appendix D, Item 3). This questionnaire has been commonly used in research into happiness over 30 years, and has been shown to have significant validity coefficients with other commonly used happiness indicators. For this study, only the first question about "perceived happiness" was used and employed a ten-point Likert-type scale. Reliability analysis was not performed on this scale because only one item was used. This question was:

- How happy or unhappy do you usually feel?
- Extremely happy – 1 2 3 4 5 6 7 8 9 10 - Very unhappy

#### **3.3 Positive and Negative Affect Schedule (PANAS)**

The *Positive and Negative Affect Schedule* (Watson, Clark, & Tellegen, 1988) is designed to measure the experience of positive and negative emotion, in order to appraise emotional state (Appendix Item 4). Watson et al's scale consists of 20 items that label different feelings and emotions that may have been experienced in the previous 24 hours. Ten of the items provide a subscale for positive emotion, and ten provide a subscale for negative emotion. Participants select on a five-point Likert-type scale from 'Very slightly or not at all', to 'Extremely'. The ten items in the positive subscale produced an acceptable Cronbach's alpha of .76 and the ten items in the negative subscale produced an acceptable Cronbach's alpha of .77.

Examples of positive and negative emotion items from this scale are, respectively:

- |            |                                       |
|------------|---------------------------------------|
| Interested | very slightly - 1 2 3 4 5 - extremely |
| Distressed | very slightly - 1 2 3 4 5 – extremely |

### **3.4 Assessing Emotions Scale**

The *Assessing Emotions Scale* (Schutte, Malouff, & Bhullar, 2009) is a 33-item self-report inventory focusing on typical emotional intelligence, based on the model of emotional intelligence developed by Salovey and Mayer (1990). Studies have shown the 33-item measure to have good internal consistency and test-retest reliability. A reliability analysis for this study produced an acceptable Cronbach's alpha of .93. Participants rated themselves on the items using a five-point scale (Appendix D 1). Total scale scores were calculated by reverse coding items 5, 28 and 33, and then summing all items. Higher scores indicate more characteristic emotional intelligence.

An example of an item from this scale is:

I know when to speak about my personal problems to others

(Strongly disagree - 1 2 3 4 5 - Strongly agree).

### **Results**

Fifteen participants completed dairies, fourteen of whom attended the individual semi-structured interview. Twelve participants completed a set of online questionnaires using internet entries.

### **Diary Results**

The daily reports of emotion incidents within the diary data generally address the first aim of this study: to identify the range of emotions experienced by tertiary teachers.

Table 1

Frequencies of emotions reported			
Positive Emotions	Frequency	Negative Emotions	Frequency
Caring	2	<b>Anger</b>	<b>13</b>
Comfortable	8	Boredom	4
Confident	6	Despair	6
<b>Enthusiasm</b>	<b>9</b>	Disgust	3
Fascination	2	<b>Disappointment</b>	<b>12</b>
<b>Happiness</b>	<b>14</b>	Disillusionment	9
Love	1	Fear	6
Pride	5	<b>Frustration</b>	<b>11</b>
<b>Satisfaction</b>	<b>10</b>	Guilt	3
Surprised	8	Powerlessness	6
		Sadness	6
		Stress	3
Total reported	65		82

As Table 1 shows, there were more negative than positive emotions reported overall (Negative = 82, Positive = 65, ns.) The most frequently reported positive emotion was happiness, reported 14 times, and the most frequently reported negative emotion was recorded 13 times. The three most frequently reported positive emotions also included satisfaction and enthusiasm. Disappointment and frustration were recorded the most as negative emotions.

The effects of positive and negative emotions on future plans are reported in Table 2.

Table 2

The effects on future plans by positive and negative emotions:

Effect on Future Plans	<b>Positive Emotions</b>		<b>Negative Emotions</b>	
Harder	4	9%	41	62%
No difference	9	21%	18	27%
Easier	30	70%	7	11%
	<u>43</u>		<u>66</u>	

Positive and negative emotions had different influences on later plans. 70% of positive emotions made the tertiary teachers' plans easier, compared to only 4 reported emotions (9%) making them harder. Conversely, 62 % of negative emotions made future plans harder compared to 11% (6 emotion reports) making them easier. Positive and negative emotions had respectively 21% and 27% rates of making no difference to future plans. Whereas these results might be expected *a priori*, these data provide empirical support to link "folk theory and scientific theory" (Oatley & Duncan , 1992, p. 280).



Like Oatley and Duncan (1992), we were also interested in the types of autonomic system disturbances for both positive and negative emotions. These have been collated and presented in Table 3.

Table 3

Numbers of specific bodily sensations reported for positive and negative emotions

Type of Sensation	Positive Emotions	Negative Emotions
Tenseness	2	7
Trembling	1	0
Stomach	2	3
Heart beating	2	4
Feeling sweaty	1	4
Feeling hot	1	5
Feeling cold	0	2
Other	0	2

Negative emotions were most frequently associated with tenseness, feeling hot, heart beating, and feeling sweaty. One tertiary teacher felt bodily tension that “lasted the rest of the day thereafter” following an experience of feeling disappointed. This teacher had been “working toward an exercise for weeks one-on-one” and something happened that had the effect of having “the whole thing kicked out from under you (tension plus!).” On a different occasion, this same teacher reported the contrasting experience of feeling “surprise and warmness” for three to four hours, which he described as “the rest of that late morning” as the result of an event that “was one of the days when it happens for the student—They have done it and [they] saw for themselves”. Another tertiary teacher experienced the full gamut of autonomic disturbance for 15 minutes when necessary equipment was unavailable in the classroom, despite pre-planning.

The next diary question asked participants about the types of thoughts they had associated with the emotions being recorded. These results are presented in Table 4. As shown, both positive and negative emotions elicited the highest rates of thinking “what will I do next?” Positive and negative emotions were associated with similar rates of replaying an incident from the past.

Table 4

The frequencies of types of thoughts reported for positive and negative emotions

Type of Thought	Positive Emotions	Negative Emotions
Replaying an incident from the past	5	6
Thinking what I will do next	10	14
Thinking that this goes in a completely different direction from what I expected	2	8
Other	2	3

The next question was to identify the perceived causes of the emotional incident. Responses to this question are presented in Table 5. Students were the most commonly attributed causes or “triggers” (Sutton & Conway, 2001, p. 6) for both positive and negative incidents. What tertiary teachers thought they had or had not done was the next most frequent trigger. There were also similar numbers of incidents in which the emotion “seemed not to be caused by anything in particular” or were due to “none” of the options provided.

Table 5

Numbers of types of cause reported for positive and negative emotions

Type of Cause	Positive Emotions	Negative Emotions
Student	14	13
You did or didn't do	5	8
Remembered past experience	5	2
Imagined something	5	3
Nothing in particular	3	3
None of above	5	3

## Interview Results

The interview data pertains primarily to the second research aim, to explore the emotion regulation goals and strategies of tertiary teachers. The results of the fourteen participants who were interviewed are reported. When asked what first comes to mind when thinking about emotions and classroom teaching, several themes emerged, which are presented in Table 6.

Table 6

Saliency

When you think about emotions and classroom teaching what comes to mind?

Specific emotions mentioned

Tertiary Teachers (n=14)

Within self

8

1. Disheartened, scary (noticing my own emotions)
2. Lose the plot (anger)
3. Anxiety x 2
4. Empathy
5. Stress
6. Different emotions all the time
7. A whole plethora of emotions
8. like your feelings when you go to class, and those feelings can be born out of it"

In relation to students

4

1. Love, compassion, caring, anger (teaching topics)
2. I may have a personal reaction to something which happens in my class Irritation
3. yeah it's an emotion that they've caused that puts you in a mood possibly for the rest of the day. Angry (bad mood)
4. Negative when something falls below my expectations & positive when they've gone beyond

Emotion-regulation issues mentioned or implied

6

1. I just take it as it comes, I approach the classroom with no expected hiccups
2. "lack of emotions" trying to keep your cool
3. Emotions are temporary they can't really be controlled (yet later did explain how he does control them)
4. What you're feeling usually is projected into your teaching
5. So yeah, at times you're not on edge, but you're aware of the fact that you're doing something fairly important. However, the role that I play in the class requires that I stand back from that. (also refers to coming back to it to "settle" the emotion)
6. Probably if it was a positive I'd be more inclined to smile or show some outward sign. If it's negative, over the years I've developed showing absolutely nothing.

---

Some overlap of the frequencies as some teachers reported more than one issue.

Showing similar trends to those of Sutton (2004), Table 6 indicates that a number of the tertiary teachers spontaneously talked about emotion self-regulation (n= 6, 42% of the sample). Their statements have been grouped in relation to whether they referred solely to tertiary teachers' emotions or made some reference to the students. Of the four statements referring to students, three related to student behaviours as stimuli for tertiary teachers' emotions.

Each tertiary teacher responded to the question: Off the list, which one, two or three seem most relevant to you when teaching? (List: *anger fear sadness joy disgust surprise love affection*). The total frequencies of the emotions from the list as expressed by the fourteen tertiary teachers are set out in Table 7.

Table 7

Frequencies of listed emotions:

Emotion	Frequency
Anger	9
Fear	0
Sadness	4
Joy	6
Disgust	2
Surprise	4*
Love	1
Affection	4

The frequencies are higher than  $n$  because some teachers reported more than one emotion  
\* one of these was a negative surprise

As Table 7 shows, anger was the most frequently identified (nine teachers) followed by joy reported by six teachers. Affection, sadness and surprise were relevant to four teachers, with one of the surprises being a “negative” type. These frequencies were similar in ranking to those reported in the diaries. Other emotions not on the list were also mentioned again by some of the tertiary teachers as part of their answers. These were disappointment (at students 1, at self 1), Stress (1), Disheartened & frustrated (1), Not quite joy, happy (1), Not joy (but) not tired or drained

In answer to the fourth general question asking if there was anything else they would like to say at this stage, the tertiary teachers raised a variety of issues including emotion regulation, management and staff morale, including restructuring. Examples of such responses include the following:

“So I was sort of thinking the other day, when I was going back through some stuff here (in emotion diary) that you know how a doctor gets removed from the situation? Well I sort of felt in my way that working with the class is a bit, that, detached. If you don't get too emotional and too into it ..... you don't end up getting upset .... Someone was telling me that something like one in four people are on some kind of medication these days”.

“That a person who, a teacher who is able to process their emotions and recognise them, and work with them is possibly a more perceptive engager of the person that they are teaching”.

“Yeah, well I think, that's what keeps me in the job, I mean, I love the teaching, I really do. To me it's a passion, it's a calling. It's taken me some years to realise that, you know, whereas, the fact that it's just gone, it's gone way beyond now just being a job. I can't imagine myself doing anything else now, apart from training or teaching. I just love it so much”.

“It would be reasonably important not to let the students see that they had actually triggered something with you. Particularly if it was a negative, because I believe others may see it and it becomes a manipulation tool. So I would work very hard at making sure that was never shown as a weakness. Not a weakness, but as a negative point that they could use. The happiness one, it doesn't bother me because that's something to be celebrated”.

“In tertiary, a lot of the emotion came from the management of us ... because we had to restructure, and we took that into the classroom with us, some of it was classroom-evoked”.

When asked if they do ever try to mask, regulate, or control their emotions, thirteen of the fourteen tertiary teachers said ‘yes’ that they do try to regulate, control or mask their emotions. One tertiary teacher said ‘no’, yet later interview data gave evidence that this tertiary teacher does in fact regulate emotions very effectively. This may reflect the wording of the question as ‘try’. This tertiary teacher does not have to make a conscious effort, yet does regulate emotions. All fourteen tertiary teachers were able to provide an example of a time when they had regulated their emotions. Thirteen of the fourteen tertiary teachers interviewed gave an example from their classroom engagement where their negative emotions had been triggered by students. The fourteenth tertiary teacher described a situation where a “management induced thing” had resulted in that tertiary teacher feeling “instant anger because of stupidity”. This tertiary teacher went on to explain:

“So if it comes from that source, I would never take that into the classroom, well obviously it goes with me into the classroom, but I never let the students know because as soon as you let the students know that you're in deep trouble and you actually can't show that. You have to go into the classroom, deep breath, and lock down into your lesson”.

In contrast one tertiary teacher explained that he does sometime use anger as a management strategy. He explained:

“I sometimes assume anger. Although joy is sometimes assumed, it's usually genuine – I usually feel joy for a reason rather than assuming joy. A teacher is always acting. Teaching is a constant performance, sometimes I need to perform anger”.

All fourteen tertiary teachers reported preventative strategies at the start of the day, in response to the question of whether they did anything to regulate their emotions as preparation for the day. Their answers are presented in Table 8.

Table 8  
Preventative strategies reported by tertiary teachers

Preventative Strategies	When strategy is used	N using the strategy	Examples of strategies
Conscious cognitive-strategies	Before school	2	“put the ‘hat’ on/go into role
		2	Dissociate
		4	Self-talk
		1	Let it go (not clear if done through self-talk)
		3	
Unconscious cognitive strategy			Arriving at work, being in front of class dissipates the negative emotion
		2	
Behavioural strategies		1	Cup of coffee routine
		2	“fess up” to the class about emotional state Remove myself from people until something positive has happened/ “hanging out for the positive; if you wait I won’t be grumpy

The tertiary teachers’ answers were grouped in cognitive and behavioural responses, subdivided for conscious and unconscious strategies based on the data (Table 8). The present data appeared to fit within the broad categories of Gross’s (1998) process model of emotion regulation (p. 282). In keeping with John and Gross’s (2004) more specific focus on cognitive reappraisal and expressive suppression, it was decided to use cognitive and behavioural categories for the present data. Within both categories, we have also included a subdivision of conscious and unconscious where the data include this distinction. Table 8 shows the higher frequencies of cognitive strategies over behavioural. Three tertiary teachers described the automatic effect of arriving at work and being in front of the class—creating the change to a positive state for teaching—as an unconscious process. Two tertiary teachers used the terminology of “putting the hat on”, while two used the word “dissociate”. One tertiary teacher explained a method of waiting for something positive to happen to change emotional state:

“I would actually remove myself from people until something positive in the day had happened. So I think I'm hanging out for that positive thing to happen to actually make me feel like I can cope with the day. ... I put my hat on...I am very good at acting”.

All fourteen tertiary teachers were able to describe their responsive strategies at the time of the emotion cue (Table 9) and at the end of the day (Table 10).

Table 9  
Responsive strategies reported by tertiary teachers

Responsive Strategies	When strategy is used	N using the strategy	Examples of strategies
Conscious cognitive-strategies	At the emotion cue	6	“split second” think about it try to be normal; quickly thinking what do I do here?; in your mind you’re going, “I can see how you are feeling”; I just note this is not the time or place to let my emotions show;
		1	self talk pep talk;
Conscious behavioural Strategies	At the emotion cue	3	Physically distance oneself
		2	Physiological – deep breaths, go cold
		1	Verbalize to the student
		1	Laugh it off, it’s about acting
		1	Wish I could laugh it off
Unconscious behavioural strategies		1	Bite my tongue
		1	It’s almost like I don’t think “I’m going to walk away. I literally just do it. It’s like a subconscious reaction to this feeling that I have inside

The responses were also categorized by behavioural and cognitive. Tertiary teachers used differing methods within these categories.

Table 10

Responsive strategies reported by tertiary teachers at the end of the day

Responsive Strategies	When strategy is used	N using the strategy	Examples of strategies
Conscious cognitive-strategies	At the end of the day	4	Personal strategies eg. Previous personal development experience; I do a quick think around – is this an implication for me (will student complain?); I don't let them wind me up (in the first place);
		3	Self-talk
Conscious behavioural Strategies		3	Taking physical space or time not engaged with others
		1	Go into my bedroom
		4	The drive home
		3	Talk to others
		1	Breathing exercises

Examples of strategies from the categories are listed below:

**Cognitive**

“Just, observing that I reacted that way, or felt that. I do a quick little think around, ‘now is this an implication for me?’

“And I think about things during the day and I just let it go. Just let it go. Just do not stress, breathing”.

**Space**

“Sometimes I drive home and that is a thirty-minute drive. And I don't have the radio on; I just have a white space”.

“My partner leaves me alone for half an hour. My partner says absolutely nothing to me, just leaves me alone for half an hour, and I guess that's my way of dealing with it”.

**Talking**

“Certainly talking to my other colleagues, I'll tend not to take it home, I'd talk to other colleagues, talk to my superiors, if it warranted it. On a moral level, it would be colleagues, on a major level I'd go up the chain of command”.

“I might speak to a friend but not mention any names, or this is the situation and I dealt with it this way, I think I was right”.

When asked if they try to regulate or modify their positive emotions, twelve tertiary teachers said that they do not try to regulate positive emotions, with one stating a resistance to any behavioural expressions of positive emotions such as hugging. Two said that they do try to regulate positive emotions. One tertiary teacher explained that the students should be “not too happy, not too silly-happy, because they need to be there and learn”. The other tertiary teacher said that when the situation is humorous, “I find quite often sometimes that I have to peg myself back on that. Really the way I control is I look at the clock and think, “Oh dear, is that the time?”

*Tertiary teachers' perceptions of their success at controlling, masking or regulating their emotions*  
 Ten tertiary teachers said that they thought they were successful in regulating their emotions, and two thought that were not always successful.

*Reasons why they regulate their emotions*

The tertiary teachers gave a variety of reasons why they tried to regulate their emotions in a situation that they recalled during the interview (Table 11).

Table 11

Reasons why tertiary teachers regulated their emotions in a situation

<u>Reason</u>	<u>Number of tertiary teachers</u>
Concern about the negative effect on <u>student</u>	2
To get a positive effect for the <u>student</u>	1
To protect the <u>teacher student relationship</u>	2
Concern about negative effect on teaching	1
To control the situation	4
Professionalism	1
To give the teacher time to deal with a serious situation	1
To protect self (grievance x 1; not be involved x 1; To not be manipulated x 1)	3

Some overlap of the frequencies as some teachers reported more than one issue.

Four tertiary teachers stated aims in relation to controlling the situation, with one tertiary teacher stating “professionalism” aspects of their work as the reason why they tried to regulate their emotions in a specific situation (Table 11). Three answers related specifically to student outcomes, including the tertiary teacher-student relationship. Teaching-related reasons included control and teaching effectiveness, while four responses related to the tertiary teacher’s need for self-care.

When asked about the effect of controlling your emotions during teaching, a number of tertiary teachers talked about the emotional effects on the tertiary teacher. These are presented in Table 12

Table 12

Emotional effects of regulating one’s own emotions in teaching on the teacher

<u>Teacher statement</u>	<u>Number of tertiary teachers</u>
Flattens emotions	1
Hugely stressful (tough to do)	1
People could get stressed	1
Space to think & remove self	1
Personality gets numbed (but also not mired down)	1
You have a better experience	1
Not letting them know too much about yourself & what upsets you	1

Emotional effects ranged from feeling stressed to feeling numbed or flattened. Regulating one’s own emotions also provided space for one tertiary teacher and privacy for another, so that students cannot know what is upsetting to the tertiary teacher. The consequences of not



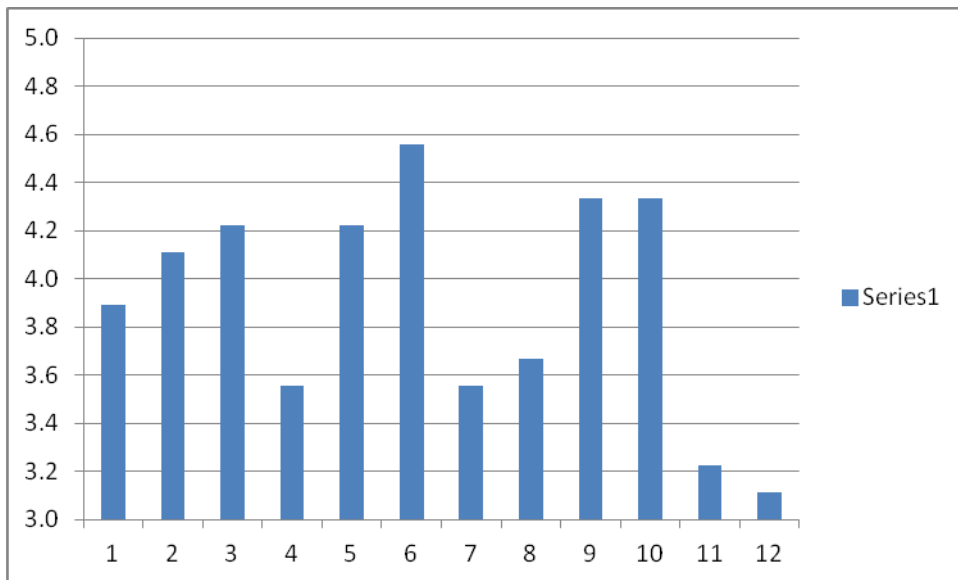
controlling one’s emotions were congruent with the above. Thirteen tertiary teachers said that this would have negative effects: on teaching (3), on learning (2), on students (2) on the tertiary teacher (5) and “losing the [attention of the] class” (2). Specific effects on the tertiary teacher were stated as “let myself down”, “nasty person”, “manipulated”, “feel bad”, and “self doubt as to why I am teaching”.

### Online Questionnaire Results

This section presents the results of the analyses of the 12 participant responses to the online questionnaires. Because of the small sample size of this pilot study, results of significance tests will be considered as estimates. Five scales were assessed, providing the five dependent variables. These are Assessing Emotions Scale (EI), Satisfaction with Life Scale (SWL), Fordyce Emotions Questionnaire (FE), Positive Affect Scale (PA) (subscale of Positive and Negative Affect Scale), and Negative Affect Scale (NA) (subscale of Positive and Negative Affect Scale). Consideration was given to the assumption of normality for the data, using the Shapiro-Wilks *W* test (Shapiro & Francia, 1972)<sup>3</sup>. Tables 3, 4 and 5 (Appendix E) show the results of descriptive data analysis.

### Emotional Intelligence Score

A principal components’ analysis was conducted to determine the factorial structure of the Assessing Emotions Inventory. Due to the small sample size, we were uncertain whether the four factor structure found in previous research (measuring perceptions of emotion, use of emotion, management of own emotion, and management of others) would persist. Upon analysis of the results, we concluded that a one-factor structure— suggesting a single ‘Emotional Intelligence (EI)’ score—was more appropriate. EI scores were measured using a 5-point Likert Scale with high scores indicating greater emotional intelligence. All further analyses make use of the average EI score which was obtained by aggregating the Assessing Emotions Inventory items. The average EI scores are presented in Figure 1.



**FIGURE 1** Emotional Intelligence Scores for Tertiary Teachers 1 - 12

<sup>3</sup> No violations of the assumption of normality were identified (Wilks  $p < 0.001$ ). All Dependent Variables (EI, SWB, FE, PA, NA) had a skew of either less than two, or greater than negative two.

As shown in Figure 1, average EI scores ranged from 3.1 to 4.5 (Mean = 3.8). There were no significant gender differences across the 12 tertiary teachers.

### **Inferential Statistics**

A Multiple Regression analysis was conducted by regressing the four categorical interview questions onto the participants' average EI scores. This analysis showed that the four interview questions explained a significant amount of variance in participants' EI scores ( $R=0.60$ ). Question 3 "Do you ever try to control, regulate or mask your emotions in the classroom?" and Question 12, "How successful are you when you try to control regulate or mask your emotions?" were both negatively correlated with EI ( $\beta$ 's=-0.38 and -0.26). Question 9, "Do you try to regulate positive emotions?" and Question 15, "Do you ever try to artificially create positive emotions in the classroom?" were positively related to EI ( $\beta$ 's=0.26 and 0.25). These results indicate that tertiary teachers in this sample with higher EI are less likely to try to regulate their emotions in the classroom, and are less likely to believe that they are successful when they try. This counter-intuitive finding will be addressed in the discussion. The tertiary teachers with higher EI do believe that they try to regulate positive emotions and they report that they do try to deliberately create positive emotions in the classroom.

Another regression model was calculated to predict subjective wellbeing scores. "Subjective wellbeing" (SWB) is defined as the sum of life satisfaction plus positive affect and minus negative effect. Having made this calculation SWB scores were regressed onto both average EI scores and combined PANAS scores. Both independent variables had positive correlations with subjective wellbeing, indicating that higher levels of emotional intelligence and positive emotions are related to higher levels of subjective wellbeing. While this model explained slightly less than half of the variance in subjective wellbeing ( $R=0.43$ ) it was not statistically significant because of the low sample size. This model suggests that (1) one's PANAS score explains 31% of the variance in subjective wellbeing when controlling for emotional intelligence and (2) one's emotional intelligence explains 37% of the variance in subjective wellbeing when controlling for PANAS scores for this sample.

In addition to these regression models, the statistical analyses revealed a number of interesting relationships among the demographic variables and the self-report measures. There was a negative correlation between age and emotional intelligence ( $r=-0.28$ ) suggesting that increased age is related to lower emotional intelligence scores for this sample. There was also a negative correlation between emotional intelligence and the proportion of male students in the classroom ( $r=-0.40$ ) which would suggest that tertiary teachers with a higher percentage of male students tend to have lower emotional intelligence scores. Also, a strong negative correlation was found between Question 12, "How successful are you when you try to regulate or mask your emotions," and one's negative affect score ( $r=-0.69$ ); indicating that a more negative state of mind corresponds to lowered levels of perceived emotional regulation success.

### **Triangulating the Results**

Given the limited statistical significance of the findings for this sample owing to the small sample size the data are nonetheless relevant in understanding the unique experience of individual tertiary teachers. For example, Tertiary Teacher-4 scored around the mean (for this group) for emotional intelligence (EI) and was amongst the lowest scores for the happiness scale (FE). This tertiary teacher stated that "I'm not very good" at dealing with work-related emotions at the end of the day, giving the example below

" I don't have any strategies ... Yesterday there was a situation that happened, it was more tutor-related, but even going home I was still wound up about it. And it probably took several hours last night for me to just talk to myself, "There's nothing you can do about it, just put it away." It took a long time .....it was a constant thought that was going through my mind, was reliving that, that had made me feel frustrated. So I'm not very good".

Despite this teacher's negative attribution, the participant did describe a cognitive strategy which worked eventually. It just "took a long time". This teacher also gave at least two examples of emotion regulation of anger during the day by walking away. Consistent with this tertiary teacher's EI average score falling around the mean for this group of participants, this person demonstrated EI skills. The daytime strategy of walking away is more immediately effective than the cognitive retrospective method at the end of the day. The main difference in effectiveness between these strategies appears to be the time-frame.

In contrast, Participant Number 6 had the highest EI score, had reported the highest PA and NA, and had above average satisfaction with life and SWB scores. This person also said no to Question 9—"Do you try to regulate positive emotions?" However, as the interview progressed, it was clear that this teacher did use strategies. When asked to give an example, this participant was able to give an example of having felt "challenged" during class and waited until class was over to discuss the problem with the student. This was also a timing issue in that the tertiary teacher was able to control the immediate emotional response and wait till it was a more appropriate occasion arose to deal with the trigger to the event.

## **Discussion**

In this pilot study, we first sought to identify the range of emotions experienced by tertiary teachers in teaching situations. The positive and negative emotions most frequently reported were happiness/joy and anger respectively, followed by disappointment, frustration, satisfaction, and enthusiasm. The tertiary teachers' experiences of anger and frustration were similar to those reported by middle school tertiary teachers (Sutton & Conway, 2001). For both samples also, students were the main catalysts for these negative emotions. It was interesting to note that caring and love were reported only twice and once, respectively, by the tertiary teachers, considering that these two emotions are those "most often discussed in the literature" (Sutton & Wheatley, 2003, p. 332). This may reflect the differences in ages of the groups being taught by tertiary and middle school teachers. The experiences of joy and satisfaction—in both relationships with students and in students' success—were similar, as were the reports of the negative equivalent of disappointment. The almost parallel rates of happiness and anger reported are mirrored in previous research (Sutton & Wheatley, 2003).

Lazarus describes the core relational theme for anger as "a demeaning offence against me or mine" (p.122), and for happiness as "making reasonable progress toward the realization of a goal" (p. 122). Sutton and Wheatley (2003) explain a number of goal incongruencies that might impede tertiary teachers' academic goals for their students. These include student behaviour problems, outside factors, uncooperative colleagues, and students' laziness. These are consistent with the descriptions from the tertiary teachers of their experience, and may have some bearing on their emotion regulation goals, be they conscious or unconscious. At the other end of the spectrum, like Sutton (2004) we found that on occasion a tertiary teacher might "assume/act" or fake anger as a management strategy.

The tertiary teachers reported a number of autonomic effects of negative emotions, which should be a cause for concern. The highest rates of tenseness, heart beating, feeling sweaty, and feeling hot were more frequently associated with negative emotions, which could persist all day or for several hours over an evening for some. Previous research has shown that feelings of stress predicted emotional exhaustion in primary school teachers (Kokkinos, 2007) and are often associated with a breakdown of emotion regulation (Sutton, 2004). In contrast, one tertiary teacher recorded two events of feeling positive emotions for as long as five hours, these emotions also coinciding with this teacher's statement "I love my students". It was noted that the frequencies of happiness/joy marginally outnumbered all the other emotions over the whole sample and often individually. Sutton (2004) has suggested that there might be an optimal ratio of positive to negative emotional experiences required, depending upon novice or competent status, to ensure that tertiary teachers will continue in the profession.

Future research should focus on the elements and experiences of positive emotions in teaching. For example, tertiary teachers' enjoyment of teaching is more likely to create "flow" experience

(Csikszentmihalyi, 1975), which may improve creativity and problem-solving (Isen, 1990). Similarly, it is more likely to engender teaching-based positive mood-congruent recall (Mayer, McCormack & Strong, 1995). For example, future research could explore what enabled three of the participants to go immediately into a positive state upon arrival at work.

We next sought to identify the specific emotion regulation goals and strategies of tertiary teachers. Interview results showed that all the tertiary teachers in this sample used strategies to regulate their emotions, with some not even having to consciously try to use strategies. Future interview research could review the interview stems to minimise any confusion as to what is being asked. Both diary and interview self-reports showed similarly high rates of cognitive and behavioural methods—both at the beginning of the day in advance of emotion cues, and in responding to emotion cues at the time. The tertiary teachers' emotion regulation goals were entwined with their teaching goals. In keeping with Sutton's (2004) results, the tertiary teachers in this study linked emotions and teaching to self-regulation and professionalism before being asked specifically about these. Of interest, one tertiary teacher was aware of the risk of artificially enacting emotions, which was feared might be picked up on by the students, a response indicative of this tertiary teachers' awareness of emotional intersubjectivity, the latter being defined as "an interactional appropriation of another's emotionality such that one feels one's way into the feelings and intentional feeling states of the other" (Denzin, 1984, p.130). Emotional intersubjectivity between teacher and student indicates that an emotional connection is an important part of teaching and learning. Greenwood and Te Aika have recently shown that tertiary teachers' strong support of Māori students' "emotional and spiritual space" (2009, p.7) was integral to these students' success in tertiary. Furthermore, "the onus of such recognition rests with the teaching staff" (p. 90), rather than on the institution. These findings support the importance of further exploration into the intentional creation of positive emotions among tertiary teachers.

Our third aim was to explore the self-reported subjective wellbeing and emotional intelligence of the tertiary teachers. The statistical results of this pilot study indicate that emotional intelligence in tertiary teaching is an area rich in measurable relationships. Further research with an increased sample size, and extending the methodology would allow for more detailed models of emotional intelligence. For example, it was interesting to find that teachers with higher emotional intelligence scores reported that they were less likely to try to regulate their emotions in the classroom and less likely to believe that they are successful when they do try. Yet when given the opportunity to describe an example in which they had regulated their emotions, all participants were able to describe in detail the emotion regulation methods they used in their example. As noted above this counter-intuitive finding perhaps reflects the wording of the question. Alternatively, it may also reflect the potential for participants to underestimate their abilities (Rivers, Brackett & Salovey, 2008). Rivers et al cited previous findings that "undergraduates' self-reports of their EI correlated less than 0.20 with their performance on an ability test of EI in three separate studies" (Brackett et al, 2006, cited in Rivers et al, 2008, p. 443). The potential for response bias in either under- or over-estimating one's EI (eg for social desirability), can be addressed in the type of measure used. In this study we used a simple self-report measure, whereas the findings indicate that a more objective measure of EI would be in order. The research implications for future research with tertiary teachers would be to consider using an EI test that includes testing the participants' EI skills also. This confirms a useful contribution of this present research. Having obtained interview and diary data in addition to EI scores, we have confirmed the potential for response bias as also demonstrated by Rivers et al (2008). We have been able to address this through triangulation of multiple sources of data which Rivers et al addressed by having more than one component in their EI measure.

The findings also suggest that higher levels of emotional intelligence and positive emotions are related to higher levels of subjective wellbeing for this sample. These findings are consistent with Brackett et al.'s (2009) report of greater job satisfaction for tertiary teachers being associated with greater skill in emotion regulation. There has been a growing acceptance of the importance of emotional intelligence in the workplace (Goleman, 1995). This has led to the development of emotional intelligence training programmes to develop and enhance the ability to manage one's own emotions, and interact with others (Boyatzis, 2009; Brackett et al., 2009) (For an in-depth

critique of EI training see Ecclestone & Hayes, 2009) Preliminary findings have suggested that school-based workshop interventions (Maurer & Brackett, 2004) can lead to an increase in reported emotional intelligence scores over time, and, even more importantly, a significant increase in academic performance of students (Brackett et al., 2009). A study by Ogier-Price (2007) demonstrated that a training programme that included the theory and application of concepts of positive psychology as well as interventions designed to increase subjective wellbeing, could have significant benefits to the wellbeing of adult learners, and decreases in reported symptoms of depression. Future research may consider the efficacy of a training programme for tertiary teachers, and the effect on tertiary teacher subjective wellbeing, emotional intelligence and student outcomes.

Current research has tended to focus on the emotions of teachers generally (Hargreaves, 1998; Sutton & Wheatley, 2003). There is a growing research literature on teachers' emotion regulation with little research focusing on generating positive emotion specifically. This research adds to the existing literature through its focus on tertiary teachers and its findings on the significance of emotional intelligence and wellbeing. Further exploration is needed into ways in which tertiary teachers may enhance their emotional experience of teaching, for the best outcomes for students and for their own enjoyment of work and life.

### **Concluding Remarks**

This study has opened a brief window into the emotional experiences of a small number of tertiary teachers across public and private providers in Aotearoa New Zealand. These teachers have generously shared their experiences and understandings of emotion in tertiary teaching. A brief summary of outcomes and implications from this project are listed below. Whereas these findings cannot be generalized because of the limited number of participants, the similarities established with previous research about teachers generally, suggest that we need to pay attention to the emotions of teachers in tertiary teaching.

### **LIMITATIONS**

We wish to acknowledge a number of limitations in the present study, limitations that also have relevance for future research on emotions in tertiary teaching. The first concerns the size of the sample. This was a very small sample which although we included tertiary teachers from a range of tertiary contexts the sample was not large enough to generalize about tertiary teachers' emotion experience, emotion regulation goals and strategies, or their emotional intelligence and related characteristics measured. On the other hand, this small sample has shown similar trends to previous research and as such suggests that we need to look at teachers as a profession as a whole across the spectrum of teaching contexts. The second limitation relates to the continuing debate about the validity and reliability of self-report as a methodology. Oatley and Duncan (1992) sum up the two sides of the debate as follows: (1) people's behaviour and mental states may be influenced by factors that cannot be accessed even through reflection; and (2) we should take a "more pluralistic view" rather than an "outmoded" behaviourist perspective (p. 281). They argue that "most emotions as people experience them are subjective phenomena and have an objective existence" (p. 282). Csikszentmihalyi and Larsen (1992) and Lazarus (1991) present similar arguments. Csikszentmihalyi and Larsen, for example, state that self-reports can be defended as "a very useful source of data" (p. 26), especially emotion data (Lazarus, 1991). The third limitation is reactivity, a happenstance that occurs when repeated self-assessments of emotions lead people to apply unusual attention to their internal states and own behaviours (Rathunde, 1993). Fourth, we have not considered the role of gender, culture, cultural beliefs or differences in cultural norms of emotions or emotion regulation in this study. However, the findings from each component of this multi-method study are sufficiently consistent in pattern with findings from previous similar research to suggest that they warrant attention.

## Summary of Findings and Implications

- Overall, the tertiary teachers' experiences of, and their stated beliefs and understandings about, emotions in teaching and learning demonstrate their professionalism and commitment to quality learning experiences for their students. They reveal that these tertiary teachers expect a high level of emotional engagement from themselves.
- The emotional intelligence of tertiary teachers is a potentially significant characteristic. Similar to previous research findings found among teachers, the tertiary teachers' EI scores were related to higher levels of subjective wellbeing. Higher emotional regulation skills, which form part of EI, are related to job satisfaction in other teacher groups. This positive correlation needs to be considered for tertiary teachers in Aotearoa New Zealand.
- The limited statistical results of this pilot study indicate that emotional intelligence in tertiary teaching is an area rich in measurable relationships. Further research with an increased sample size would allow for more detailed models of emotional intelligence.
- Tertiary teachers need to be able to regulate their own emotions in order to prevent emotional exhaustion, which is a predictor of burnout. Previous research has shown that teachers who have higher emotional regulation skills report fewer instances of burnout. Tertiary teachers might benefit from empirically proven emotional intelligence training workshops.
- At the conclusion of this project, a number of the participating tertiary teachers stated that they think it is good for student outcomes if tertiary teachers are aware of their own emotions. Reasons given included its usefulness in self-reflection, and the importance of not bringing their own negative emotions into class. Modelling how to handle these situations was also seen to be beneficial for positive student learning,
- Most of the tertiary teachers expressed their belief that positive emotions did not have to be regulated because of the positive effects such emotions had on students and their learning. Of the few who thought that positive emotions *should* be regulated, their reasons included not having students "too silly-happy" and the tertiary teacher needing to keep on track in a humorous situation. The significant effect of happiness and other positive emotions, as researched within the domain of Positive Psychology, is an area that has been generally under-researched in education.

Given the findings of this pilot study, in conjunction with the recent New Zealand research from the perspective of student success in tertiary, it can be argued that future research needs to focus on the ways in which tertiary teachers may enhance their emotional experience of teaching, for the best outcomes for students and for their own wellbeing or enjoyment of work and life more generally.

## References

- Boyatzis, R. E. (2009). Developing emotional, social, and cognitive intelligence competencies in managers and leaders in educational settings. In M. Hughes, H.L. Thompson, & J.B. Terrell (Eds.). *The handbook for developing social and emotional intelligence* (pp. 359–377). San Francisco, CA, US: Pfeiffer/John Wiley & Sons.
- Brackett, M. A., Patti, J., Stern, R., Rivers, S., Elbertson, N., Chisholm, C., & Salovey, P. A. (2009). Sustainable skill based approach to developing emotionally literate schools. In M. Hughes, H.L. Thompson, & J.B. Terrell (Eds.). *The handbook for developing social and emotional intelligence* (pp. 329–358). San Francisco, CA, US: Pfeiffer/John Wiley & Sons.
- Clegg, S. (2008). Knowing through reflective practice in higher education. *Educational Action Research*, 8(3), 451–469.
- Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco, CA: Jossey-Bass.

- Denzin, N. K. (1984). *On understanding emotions*. San Francisco: Jossey-Bass.
- Diener, E. (1994). Assessing subjective wellbeing: Progress and opportunities. *Social Indicators Research*, 31, 103–159.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Ecclestone, K. & Hayes, D. (2009) Changing the subject: the educational implications of developing emotional wellbeing. *Oxford Review of Education* 35 (3), 371-389
- Fordyce, M. W. (1977). Development of a program to increase personal happiness. *Journal of Counseling Psychology*, 24, 511–520.
- Greenwood, J., & Te Aika, L-H. (2009). *Hei Taura: Teaching and learning for success for Māori in tertiary settings*. New Zealand: AKO Aotearoa.
- Gross, J. L. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression and physiology. *Journal of Personality and Social Psychology*, 74(1), 224–237.
- Isen, A. M. (1983). Positive affect and decision-making. In M. Lewis & J.M. Haviland (Eds.). *Handbook of emotions*, (2<sup>nd</sup> ed.). (pp. 261-277) New York: Guilford Press
- John, O. P. & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, 47(6), 1301–1314.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835–854.
- Hochschild, A.R. (1983). *The managed heart: The commercialisation of human feeling*. Berkeley: University of California Press.
- Isen, A. M. (1990). The influence of positive and negative affect on cognitive organisation: Some implications for development. In N. L. Stein, B. Leventhal & T. Trabasso (Eds.), *Psychological and biological approaches to emotion*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77(1), 229–243.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- Leach, L., Zepke, N., & Prebble, T. (2006). Now you have got them, how do you keep them? Relationships and the retention puzzle. *New Zealand Journal of Education Studies*, 41(1), 113–132.
- Liljestrom, A., Roulston, K., & Demarrais, K. (2007). "There's no place for feeling like this in the workplace": "Women teachers' anger in school settings. In P.A. Schutz & R. Pekrun (Eds.). *Emotion in education*. (pp. 275–292). Amsterdam: Elsevier.
- Lucas, R. E., Diener, E., & Larsen, R. J. (2003). Measuring positive emotions. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (1st ed.), (pp. xvii, 495). Washington, DC: American Psychological Association.

- Mayer, J. D., McCormack, L. J., & Strong, S. E. (1995). Mood-congruent memory and natural mood: New evidence. *Personality and Social Psychology Bulletin*, 21(7), 736–746.
- Maurer, M., & Brackett, M.A. (2004). *Emotional literacy in the middle school*. Port Chester, New York: Dude Publishing.
- Naring, G., Briet, M., & Brouwers, A. (2006). Beyond demand-control: Emotional labor and symptoms of burnout in teachers. *Work & Stress*, 20(4), 303–315.
- Oatley, K. (1992). *Best laid schemes: The psychology of emotions*. Cambridge: Cambridge University Press.
- Oatley, K., & Duncan, E. (1992). , Incidents of emotions in daily life. In K. Strongman (Ed.), *International Review of Studies on Emotion*, 2. (pp. 249 –293). Chichester, West Sussex: Wiley & Sons.
- Ogier-Price, A. (2007). Can happiness be taught? The effects on subjective wellbeing of attending a course in positive psychology that includes the practice of multiple interventions. New Zealand: University of Canterbury. Unpublished Masters Thesis.
- Pekrun, R., & Schutz, P. (2007). Where do we go from here? Implications and future directions for inquiry on emotions in education. In P.A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 313- 331). Amsterdam: Elsevier.
- Rathunde, K. (1993, April 12–16). *Measuring the experience of motivation: Contributions of the experience sampling method to educational research*. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Salovey, P., & Mayer, J. D. (1989). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211.
- Schutte, N.S., Malouff, J.M., & Bhullar, N. (2009). The assessing emotions cale. In C. D., Saklofske & J. Parker (Eds.), *The assessment of emotional intelligence* (pp.119–135). New York: Springer.
- Seligman, M. E. P., & Csikszentmihalyi , M. (2000). Positive Psychology: An introduction. *American Psychologist* , 55(1), 5–14.
- Sutton, R. (2007). Teachers' anger, frustration and self-regulation. In P.A. Schutz & R. Pekrun (Eds.), *Emotion in education*. (pp. 259 – 274). Amsterdam: Elsevier.
- Sutton, R. E. (2004). Emotional regulation goals and strategies of teachers. *Social Psychology of Education*, 7, 379–398.
- Sutton, R., & Conway, P. (2001, December 7). Teachers' experiences of anger and frustration: Preliminary findings from a diary study. Paper presented at the New Zealand Association for Research in Education (NZARE) Conference, Christchurch, New Zealand.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15 (4), 327–358.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.



**APPENDIX A**

**Demographic Data**

**Table 1: Descriptive Data - Categorical**

Gender	(N=15)	Male	9 (60%)	Female	6 (40%)
Qualifications	(N=15)	Yes	12 (80%)	No	3 (20%)
Tertiary Context	(N=15)	Public Sector (Polytechnic, University)	8 (53%)	Private Provider	7 (47%)
Male and Female class gender		Male	4 (27%)	Female	0 (0%)
		M&F	11		(73%)

**Table 2: Descriptive Data - Continuous**

Dep.Var.		Mean	Min	Max	Variance	SD
Age	(N=15)	54	40	66	40.71	6.38
Experience	(N=15)	9.53	0	30	58.45	7.64
Male Balance (Class %)	(N=14)	65.21	5.00	100.00	0.13	0.36
Female Balance (Class %)	(N=14)	34.79	0.00	0.95	0.13	0.36

## APPENDIX B

### 1. EMOTION DIARY<sup>4</sup>

DAY \_\_\_\_\_

[ONE SET OF UP TO FOUR PER DAY START EACH DAY WITH NEW SET AND FILL IN WHICH DAY]

I would like you to keep this special diary of your emotions and moods over 5 days.

You can recognize an emotion when

- a bodily sensation happens (such as your heart beating faster), or
- you have thoughts coming into your mind that are hard to stop, or
- you find yourself acting or feeling like acting emotionally.

You can recognize a mood when

- you have a feeling of some kind that lasts for more than about an hour.

*Please complete a diary page as soon as possible after any emotion or mood happens during your teaching day that is strong enough for you to notice.*

*Please complete one set of pages for each of your next four emotion events or moods*

#### Personal

*Please be as frank as possible. I only want to know about your emotions generally, so please don't put your name on your diary. I will not keep a record of which diary belongs to any particular person.*

*I would like some personal information though, if you would not mind.*

1. Age .....
2. Sex (please tick) Male  Female
3. No. of years tertiary teaching experience .....
4. Do you have any teaching qualifications? (please tick) Yes  No 
  - If so, name of qualification .....
5. Tertiary Context (please tick) University  Polytechnic  Private Provider
6. Gender balance of classes you teach: All male  All female  Males & females
7. If your classes include both males and females, please write in the approximate % in the boxes: Males  Females

#### NO. 1 DIARY ENTRY

How many emotion or mood incidents did you notice today? Please write the number in the box  
Emotion/s  Moods

FOR THE FIRST FOUR INCIDENTS USE AN INDIVIDUAL FORM  
(Questions 1 – 16)

1. Was it an emotion  or mood  ? (Please check one.)
2. What name would you give the emotion or mood? .....
3. Would you call it a type of any of the following? (Check one or more or none.)

Happiness/joy	<input type="checkbox"/>	enthusiasm	<input type="checkbox"/>
Sadness/grief	<input type="checkbox"/>	satisfaction	<input type="checkbox"/>
Anger/irritation	<input type="checkbox"/>	caring	<input type="checkbox"/>
Fear/anxiety	<input type="checkbox"/>	surprised	<input type="checkbox"/>
disappointment	<input type="checkbox"/>	confident	<input type="checkbox"/>

<sup>4</sup> Adapted from Oatley and Duncan (1992)

disgust   
 guilt   
 boredom   
 love   
 frustration   
 fascination

pride   
 comfortable   
 powerlessness   
 disillusion   
 despair   
 stressed

**4. How sure are you of your choices in question 2? (Circle one below.)**

Not sure at all    0 1 2 3 4 5 6 7 8 9 10    Completely sure

**5. How strong was the feeling? (Circle one below.)**

Not really noticeable    0 1 2 3 4 5 6 7 8 9 10    As intense as I have ever felt

**6. Was the feeling mixed, so that there was more than one emotion or mood at exactly the same time? (Check one.)**

No  Not sure  Yes

If yes, what emotions or moods were in the mixture?

..... and .....

**7. Did the emotion or mood stay the same or did it change? For instance, did you start feeling angry and later feel sad, or feel happy and later anxious, or suchlike? (Check one.)**

It was the same until it finished.  It changed.

If it changed: Please say from what ..... to what .....

**8. Please say in your own words what you were doing, and what happened to start the emotion or mood.**

.....  
 .....  
 .....  
 .....  
 .....

**9. Did you have any bodily sensations? (Check one or more or none.)**

tenseness (of body, jaw, fists)                       feeling sweaty   
 trembling     feeling hot   
 stomach (nausea, churning, butterflies)                       feeling cold   
 heart beating noticeably

**10. Did thoughts come into your mind that were hard to stop, and made it hard to concentrate on anything else? (Check one or more or none.)**

Replaying an incident from the past.   
 Thinking what I will do next.   
 Thinking that this goes to a completely different direction from what I expected.   
 Other (please specify):

**11. Did you act or feel like acting in some way? (Check one or more or none.)**

Did you generally act emotionally, such as talking a lot, or not at all?   
 Did you make a facial expression, such as laughing, crying, frowning?   
 Did you feel an urge to act or actually act emotionally towards someone, by  
   moving closer   
   making an aggressive move   
   withdrawing   
   other (please specify):

**12. When did the emotion or mood start? Time ..... Date .....**

**13. Roughly how long did it last? ..... hours ..... minutes**

**14. What kind of thing caused the emotion or mood? (Check one or more.)**

- A student (or students or somebody else in the classroom) said something, did something, or didn't do something.
- Something you did, or didn't do.
- You remembered a past experience.
- You imagined something that could happen.
- It seemed not to be caused by anything in particular.
- None of the above.

**15. Did the emotion(s) or mood(s) make it harder or easier for you to do something you were going to do? (Check one.)**

- Made things more difficult.
- Made no difference.
- Made things easier.

**16. About how long after the emotion or mood are you filling in this page?**

..... hours ..... minutes

Thank you

**FINAL PAGE**

**Please fill in this page when you have done all four diary pages**

**Did you miss completing a diary page for any emotions or moods?**

**Number of emotions missed .....**

**Number of moods missed .....**

**How easy or difficult was it to do this diary?**

**Please say briefly .....**

**How accurate do you think you were?**

**Rather rough . Moderately accurate  Almost completely accurate**

**Are there important things about your emotions that we have not asked about? Please say briefly**

.....  
.....  
.....

## APPENDIX C

### FORMAT FOR SEMI-STRUCTURED META-EMOTION INTERVIEW<sup>5</sup>

**PART I:** Four core questions as used by Sutton (2004).

- (1) When you think about emotions and classroom teaching what comes to mind?
- (2) You mentioned the emotion(s) ..... Other common emotions are on the list I am giving you. Could you look at the list and tell me which 1, or 2 or 3 seem most relevant to you when teaching?  
(List: Anger, Fear, Sadness, Joy, Disgust, Surprise, Love/Affection)
- (3) Do you ever try to control, regulate or mask your emotional experiences in the classroom?
- (4) Is there anything else you would like to say about emotions and teaching?

### **PART 2:**

Probes associated with the interview question on emotional regulation. Do you ever try to control, regulate or mask the emotional experiences in the classroom?

(If yes),

- Please describe a scenario where you tried to control, mask or regulate your emotions? (Use the term the respondent used e.g. control, mask).

#### ***Probes***

- Why did you try to regulate, (mask or control) your emotions in that situation?
- What do you do to try to control (or mask or regulate) the emotion?
- What strategies do you use to try to control (or mask or regulate) an emotion while teaching?
- (If the respondent has only discussed negative emotion) Do you try to regulate positive emotions as well as negative emotions?
- (If the respondent has only discussed positive emotions) Do you try to regulate negative emotions as well as positive emotions?
- What strategies do you use to cope with the emotion after the incident is over, at the end of the school day?
- If you ever come to school and you are not in a good place, maybe the traffic is bad, you had an argument with your partner, the baby was up all night (whatever is relevant to the respondent), is there anything you do to try to prepare yourself for the day?
- How successful are you when you try to control (or mask or regulate) your emotions?
- What are the consequences of controlling (or masking or regulating) your emotions while teaching?
- What are the consequences of not controlling (or masking or regulating) your emotions while teaching?
- (If the respondent says s/he doesn't regulate his/her emotions) One of the things that some teachers have told me is that, when they get angry, they try to monitor pretty closely, or try to mask, because they are a little worried about what they might say and they might go over some line. Do you ever worry about that?

---

<sup>5</sup> Based on Sutton, 2004

**APPENDIX D**

**1. Questionnaire: Assessing Emotions Scale**

For each statement below, please select the number between 1 and 5 that is most appropriate to you.

1: Strongly Disagree    2: Moderately Disagree    3: Neither agree nor disagree    4: Moderately Agree  
5: Strongly Agree

Statement	1	2	3	4	5
I know when to speak about my personal problems to others .....					
When I am faced with obstacles, I remember times I faced similar obstacles and overcame them .....					
I expect that I will do well on most things I try .....					
Other people find it easy to confide in me .....					
I find it hard to understand the non-verbal messages of other people.....					
Some of the major events of my life have led me to re-evaluate what is important and not important .....					
When my mood changes, I see new possibilities.....					
Emotions are one of the things that make my life worth living .....					
I am aware of my emotions as I experience them.....					
I expect good things to happen.....					
I like to share my emotions with others.....					
When I experience a positive emotion, I know how to make it last.....					
I arrange events others enjoy .....					
I seek out activities that make me happy .....					
I am aware of the non-verbal messages I send to others.....					
I present myself in a way that makes a good impression on others .....					
When I am in a positive mood, solving problems is easy for me.....					
By looking at their facial expressions, I recognize the emotions people are experiencing .....					
I know why my emotions change .....					
When I am in a positive mood, I am able to come up with new ideas .....					
I have control over my emotions .....					
I easily recognize my emotions as I experience them.....					
I motivate myself by imagining a good outcome to tasks I take on.....					
I compliment others when they have done something well .....					
I am aware of the non-verbal messages other people send .....					
When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself.....					
When I feel a change in emotions, I tend to come up with new ideas .....					
When I am faced with a challenge, I give up because I believe I will fail .....					
I know what other people are feeling just by looking at them .....					
I help other people feel better when they are down .....					
I use good moods to help myself keep trying in the face of obstacles .....					
I can tell how people are feeling by listening to the tone of their voice .....					
It is difficult for me to understand why people feel the way they do.....					

**2. Questionnaire: Satisfaction With Life**

For each of the following statements, please select the point on the scale that you feel is most appropriate in describing you.

1: Strongly Disagree, 2: Disagree, 3: Slightly Disagree, 4: Neither agree nor disagree , 5: Slightly Agree, 6: Agree, 7: Strongly Agree

Statement	1	2	3	4	5	6	7
In most ways, my life is close to ideal .....							
The conditions of my life are excellent .....							
I am satisfied with my life .....							
So far, I have got the important things I want in life .....							
If I could live my life over, I would change almost nothing .....							

**3. Questionnaire: Fordyce Emotions Questionnaire (Happiness)**

In general, how happy or unhappy do you usually feel? Select the option that best describes your average happiness.

- Extremely happy ...(feeling ecstatic, joyous, fantastic!)
- Very happy .....(feeling really good, elated!)
- Pretty happy .....(spirits high, feeling good)
- Mildly happy .....(feeling fairly good and somewhat cheerful)
- Slightly happy .....(just a bit above neutral)
- Neutral.....(not particularly happy or unhappy)
- Slightly unhappy ...(just a bit below neutral)
- Mildly unhappy ....(just a bit low)
- Pretty unhappy .....(somewhat 'blue', spirits down)
- Very unhappy .....(depressed, spirits very low)
- Extremely unhappy (utterly depressed, completely down)

**4. Questionnaire: PANAS (Positive and Negative Affect Scale)**

This scale consists of a number of words that describe different feelings and emotions.

Read each item and then indicate to what extent you have felt this way during the past 24 hours, by selecting an option on the scale next to the item.

1: very slightly or not at all    2: a little    3: moderately    4: quite a bit    5: extremely

	1	2	3	4	5
Interested, Curious .....					
Distressed.....					
Excited .....					
Upset .....					
Strong.....					
Guilty .....					
Scared .....					
Hostile.....					
Enthusiastic.....					
Proud.....					
Irritable .....					
Alert .....					
Ashamed .....					
Inspired .....					
Nervous.....					
Determined .....					
Attentive .....					
Jittery, Jumpy.....					
Active, Energetic .....					
Afraid .....					

## APPENDIX E

**Table 3: Assumptions Testing**

N=12 Dep.Var.	DV Description	Shapiro-Wilks W (p)	Skew	Kurtosis
EI (EQ)	Emotional Intelligence	.87 (p=.06)	-1.55	3.56
SW (Pos)	Satisfaction with Life	0.98 (p=.99)	-0.17	0.53
FE (Pos)	Fordyce Emotions Questionnaire	0.78 (p=.0056)	0.17	-0.09
PA (Pos)	Positive Affect Subscale	.90 (p=.14)	-0.99	0.74
NA (Neg)	Negative Affect Subscale	.91 (p=.20)	1.06	1.07

**Table 4: Descriptive Data**

N=12 Dep.Var.	DV Description	Mean	Min	Max	Variance	SD
EI (EQ)	Emotional Intelligence	126.50	84.00	147.00	270.82	16.46
SW (Pos)	Satisfaction with Life	4.98	2.80	7.00	1.23	1.11
FE (Pos)	Fordyce Emotions Questionnaire	8.75	8.00	10.00	0.39	0.62
PA (Pos)	Positive Affect Subscale	34.50	22.00	43.00	38.09	6.17
NA (Neg)	Negative Affect Subscale	18.75	10.00	34.00	48.39	6.96

**Table 5: Correlations**

N=12 Dep.Var.	DV Description	EI (EQ)	SW (Pos)	FE (Pos)	PA (Pos)
SW (Pos)	Satisfaction with Life	0.30 (p=.338)			
FE (Pos)	Fordyce Emotions Questionnaire	<b>0.58 (p=.047)</b>	0.36 (p=.246)		
PA (Pos)	Positive Affect Subscale	0.42 (p=.176)	0.54 (p=.071)	0.20 (p=.530)	
NA (Pos)	Negative Affect Subscale	<b>0.65 (p=.023)</b>	0.20 (p=.523)	<b>0.78 (p=.003)</b>	0.19 (p=.555)



