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Pre-service teachers' reflections on critical incidents in their professional teaching experiences

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Pre-service teachers typically engage in a series of professional development experiences throughout their teacher education courses. These periods of learning enable them to develop as reflective practitioners under the mentorship of experienced school teachers. After these periods of intense learning, sometimes characterised by pedagogic epiphanies, they frequently report extreme experiences of success or failure which influence perceptions of their future teaching career. This study aimed to capture final year pre-service teachers' reflections of critical incidents in their past professional experience by especially focusing on their worst lesson experience. The qualitative research approach incorporated elements of critical incident research design from within a theoretical framework of reflective practice. The research was based on the assumption that pre-service teachers' experiences during professional practice influence their transition to the complex world of the workplace. Coding and analysis of their responses, gathered during written reflective practice sessions, were undertaken using the constant comparative method to determine the characteristics of their most concerning memories of their teaching experiences and their perceptions of the reasons behind these problematic moments. Findings indicate that, when pre-service teachers recall their worst teaching experience, their initial reflections are characterised by emotional distress, followed by concerns about classroom management and planning issues, with some concern also demonstrated about communication and learning issues. Implications of the findings are discussed in relation to course design recommendations and suggested strategies to assist teacher education graduates navigate uncertainty and complexity as they transition to their future workplaces.

Keywords: reflective practice, critical incident, teacher education

Introduction

One calamity is better than a thousand advices. *Bir musibet, bin nasihattan iyidir.*

-Turkish proverb

Throughout the course of engaging in the practical and theoretical components of a teacher education degree, pre-service teachers experience a range of professional teaching experiences. As they reach the end of their degree, they enter a transition phase between the bounds of university learning contexts and the unbounded workplace. Some experience this period as moving from a certain to an uncertain context. It is typically a time of looking backward (reflecting on their tertiary learning) and looking forward (positioning themselves in future employment). Recognising the connections between past recollections and future plans can be initiated by considering critical incidents or “bumpy moments” (Romano, 2006, p. 973) in past professional teaching experiences. The process of analysing problematic teaching episodes in professional development contexts has also been conducted with both pre-service (Goodell, 2006; Hanuscin, 2013; Howitt & Venville, 2009; Vandercleyen, Boudreau, Carliera, & Delens, 2014) and practising teachers (Shapira-Lishchinsky, 2010; Tripp, 1993, 2012). Typically, at the point of transition between university and the workplace, pre-service teachers are deeply concerned about how to navigate the uncertain and complex challenges before them. They are ideally situated to engage in a process of critically filtering key incidents during their last four years of tertiary learning to establish what they have achieved in their learning and what remains to be learned. The act of identifying critical points of experience helps pre-service teachers to reflect on their teaching by adopting a forward-focused approach which may also promote professional autonomy (Shapira-Lishchinsky, 2010). Instead of dwelling on the catastrophic nature of these memories, a consideration of these problematic teaching moments can be conducive to professional reflective practice and, hence, professional growth.

The study reported in this paper aimed to capture the reflections of pre-service teachers’ critical incidents in their professional experience. This investigation sought to explore and report on the surrounding conditions and emotional responses that accompanied their reflections regarding their worst lesson experience. Lessons learned via reflection are also included in this paper. The theoretical principles of reflective practice and critical incident research guided the gathering of data about prospective teachers' reflections on their worst lesson experiences to date.

Background literature

Professional experience is a required and integral component of teacher training in all states and territories in Australia. When pre-service teachers step into the classroom they are met with an array of challenges and complexities of practice. They are expected to have subject proficiency and suitable pedagogy, coupled with organisational skills. They are eager to develop a rapport with the students whilst attempting to master classroom management (Calandra, Brantley-Dias, & McNeal, 2007). Professional experience is valued because it enables pre-service teachers to develop as reflective practitioners under the mentorship of an experienced school teacher. After these periods of intense learning, which are sometimes characterised by pedagogic epiphanies (Denzin, 1989) or pedagogical dilemmas (Hanuscin, 2013), pre-service teachers frequently report on experiencing cases of success or failure. Some of these experiences become highlights in their teaching memories whereas others

constitute what they consider to be their worst lesson. The nature of these "bumpy moments" (Romano, 2006) or organisational incidents and negative emotional episodes (Vanderclayen, et al., 2014) experienced by pre-service teachers need to be considered. Bloomfield (2010) suggests that there are collective problems that exist among pre-service teachers. Romano (2006) used the "bumpy moments" that pre-service teachers encounter as a spring board for capturing reflections on problematic episodes. Romano's work found that, by investigating the "bumpy moments" of pre-service teachers through reflection, these novice teachers could understand how reflective practice was essential to the professional experience process. Carter (1988) concurs, suggesting that by recognising bumpy moments and identifying factors that led to the incident, pre-service teachers may develop an ability to solve classroom problems.

It is evident that professional experience is a vital component of teacher education and foundational to becoming a teacher, but it is also essential that pre-service teachers value-add to their professional experience by critically reflecting on their experiences. Dewey (1933) was one of the first to suggest that reflection be used when faced with a problem. He suggested that, in order for intelligent action to result, students need to develop the habit of reflection. Hrevnack (2011) holds that teacher candidates use their capability of reflective practice to enhance classroom management and instruction. The importance of preparing thoughtful reflective practitioners is discussed at length in Bruster and Peterson's (2013) work. Furthermore, Chitpin and Simon (2006) found that a reflective approach can aid pre-service teachers when they are learning to handle complex teaching situations.

Reflective practice is linked with the use of critical incidents (Preskill, 1996; Tripp, 1993, 2012). Dewey (1933), Schön (1987) and Tripp (Tripp, 1993, 2012), as reported by Bruster and Peterson (2013), all advocate reflection in professional practice as an essential part of learning professional judgement. Furthermore, critical incidents are seen as turning points by which individuals can gauge effectiveness or success (Thuynsma, 2001). The Critical Incident Technique (CIT), developed by Flanagan (1954), has become the benchmark method for collecting participant feedback which identifies either the success or failure of a given incident. This qualitative method has been used in a variety of sectors including nursing (Byrne, 2001), psychology (Caldwell & Vera, 2010), dietetics (Marquis & Gayraud, 2002), children's services (Legg, 2001), and hospitality (Callan, 1998). The CIT requires the respondent to relate in written form to a positive or negative experience. In the education arena, students reflect and record a brief description of experiences or events that are significant and memorable, either good or bad. Bruster and Peterson (2013) point out that these incidents tend to be personal and only become critical or problematic if the individual sees them as such.

There is support for using critical incidents to not only guide and direct pre-service teachers' reflections on their teaching experiences but also to explore accompanying emotions that coincide with the critical incident. When a critical incident occurs, it is usually accompanied by an emotion. Some research indicates that emotions, including but not limited to anxiety, are a by-product of worst lessons or troublesome experiences (Bekdemir, 2010; Vanderclayen, et al., 2014). In a study by Bertone, Méard, Euzet, Ria and Durand (2003) it was evident that novice or pre-service teachers were affected by their emotions, triggered by their perception of how the lesson was progressing in the classroom.

The research

The research reported in this paper encouraged pre-service teachers to reflect on their role as educational practitioners during a period of transition between the end of their university course and the beginning of their employment in schools. The practical application of their four years of study to the field of primary school teaching provided the pre-service teachers in this study with a specific setting in which to contextualise their recollections of their worst lessons. The decisions associated with the methodological design of the study were made according to its overall aim and intended outcomes. Ethical approval for this research was granted by the Human Research Ethics Committee at Avondale College of Higher Education.

This investigation adopted a qualitative approach where the participants were asked to reflect on their professional experiences in schools over the duration of their four year teacher education program. The methodology includes aspects of critical incident research design (Byrne, 2001; Tripp, 1993, 2012) in which participants reflect on and record their experiences and observations while engaging in reflective practice. These reflections were collected and analysed to determine similarities and key identifiable contributing factors that may help explain the nature and cause of the critical incidents experienced by the participants. Kain (2004) explains that this approach to collecting data helps make sense of such experiences:

The critical incident technique provides a systematic means for gathering the significances others attach to events, analyzing the emerging patterns, and laying out tentative conclusions for the reader's consideration (p. 85).

The objective of the study was to identify any critical incidents reported by two cohorts of final year pre-service teachers as they transitioned from their university course to their anticipated workplaces in primary schools. Just as Romano (2006) explored “the use of ‘bumpy moments’ as a stimulus for capturing reflection as teachers experience problematic episodes and are asked to recall their reflections on those moments” (p. 974), this study recognises that critical incidents can represent significant turning points in a pre-service teacher's career. This research sought student input, at the point of their transition into the workplace, into the more negative classroom experiences they have had in their professional experience. It was anticipated that, by enabling reflection on their ‘critical incidents’, pre-service teachers may be able to use these experiences to reduce some of the uncertainty and complexity they would be feeling as they move into their first professional teaching role. The overall outcomes of the study will also be used to help students in their earlier years of teacher education to anticipate and interpret critical incidents in their professional teaching experiences. The five steps of the Critical Incident Technique developed first by the psychologist John Flanagan (1954) and reported by Byrne (2001, p. 536), have been used to design the methods by which the investigation's aims, data collection and analysis processes were identified. These being:

1. Identify the aim of the study.
2. Plan how data will be gathered about specific critical incidents in relation to the aim of the study, including developing criteria that would be used to help identify which critical incidents to focus upon and analyse.
3. Collect data using techniques such as interviews or report writing.

4. Analyse the data in a way that they can be meaningfully summarised and applied to practice.
5. Interpret the requirements of the incidents being studied. (Byrne (2001, p. 536)

Participants for this study were made up of two cohorts of final year primary education students. They were asked to engage in a written interview session during which they were guided through the process of reflecting on their professional experiences. As part of this process, they were asked to respond to a series of specific questions that they may be asked in a formal interview for a teaching position. This paper focuses particularly on their responses to the question: *Describe the worst lesson I gave on prac. Why was it the worst?* In 2013, 24 responses were gathered from 45 students and in 2014, 34 responses were gathered from 38 students, resulting in an overall participation rate of 70% and a total data set of 58 participants (n=58).

Coding and analysis of their responses were undertaken using the constant comparative method (Glaser & Strauss, 1967; Thomas, 2009), using NVivo qualitative data analysis software, to determine the characteristics of their most concerning memories of their teaching experiences to date and their perceptions of the reasons behind these problematic moments. These responses formed the basis for coding into categories and themes. Part of this process involved analysing the responses to the point where individual 'stand alone' incidents could be identified and placed into themes (Glaser & Strauss, 1967). As Lincoln and Guber (1985) suggest, using this method provides findings that both describe the critical incidents and help to explain them, which aligned with our research intention and our research question: *As pre-service teachers reflect on their professional experience, what are the perceived drivers of a "bad classroom experience"?* Furthermore, the description of the constant comparative method described by Taylor and Bogdan (1984) indicates the value of this approach to this particular study:

... in the constant comparative method the researcher simultaneously codes and analyses data in order to develop concepts; by continually comparing specific incidents in the data, the researcher refines these concepts, identifies their properties, explores their relationships to one another, and integrates them into a coherent explanatory model (p. 126).

Results

Reports of critical incidents over two years from two groups of pre-service teachers were analysed. Data were drawn from a total of 58 participants in the final year of their teacher education degrees. Creswell's (2005, pp. 441, 444) explanation of the outcome of coding was used to identify responses, causal conditions, strategies, contextual and intervening conditions, and consequences in relation to the core phenomenon under study (that is, the students' memory of their worst lesson experience). While the research aimed to capture the reflections of pre-service teachers' critical incidents in their professional experience, it also sought to explore the surrounding conditions and responses that accompanied their reflections regarding their worst lesson experience. Based on the findings of the data analysis, it appears that, when pre-service teachers in the fourth year of their teacher education course reflect on their worst lesson experience to date, the problems they encountered were typically

connected to the emotions they experienced. They also identified causes and factors influencing these problems and, in many cases, ways in which they planned to modify their practice in the future as a result of engaging in reflection. Figure 1 outlines the themes that emerged from analysing the data, with shading to indicate the most prominent themes.

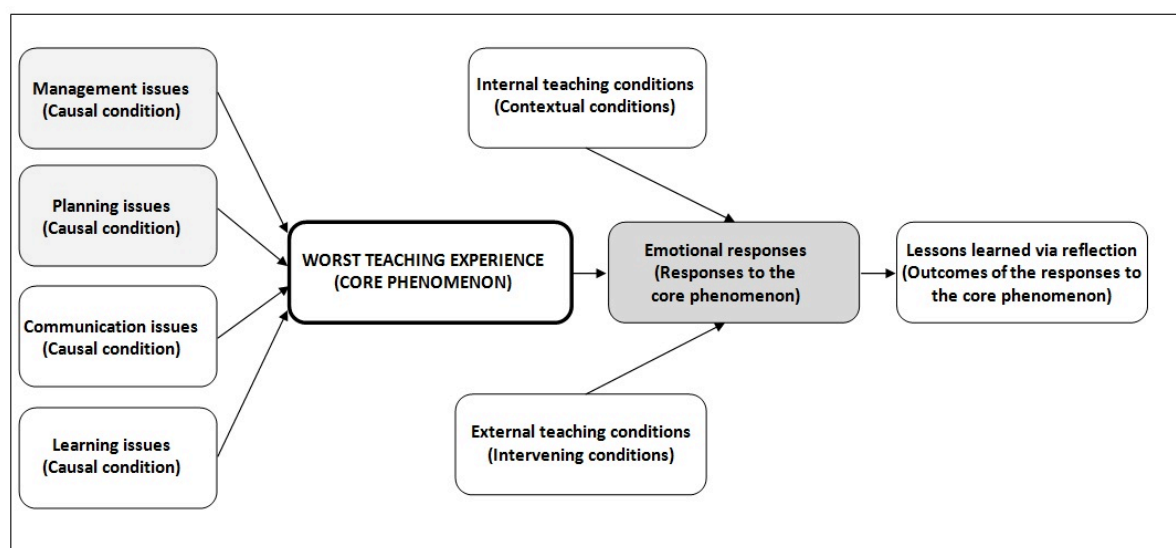


Figure 1: Thematic map that emerged from analysis of worst lesson experiences

When recalling their worst lesson experiences, the participants in this study typically responded emotionally at first, as indicated in many cases by reports of feeling frustrated, drained, confused, embarrassed and overwhelmed. To explain their emotional distress, they used terms such as: “I was upset and drained mentally and emotionally”, “I was feeling really down and felt horrible”, “I became all flustered and embarrassed” and “I ended up getting so frustrated and discouraged that I broke down in front of the class”. However, from their sometimes desperate feelings, many of them learned from their experiences. In over two thirds of all cases (40 cases out of a possible 58) the pre-service teachers’ descriptions of their worst lesson experience showed evidence that they engaged in reflective consideration and, consequently, made plans to modify and improve their practice in the future.

Whereas most participants’ reflections about their worst lesson experience began with an emotional response, four main themes also emerged as causal conditions that were identified as influencing their worst lesson experience, ordered below from the most frequently discussed to the themes found less frequently.

1. **Management issues** related to lack of control, students’ behaviour and dealing with the consequences of misbehaviour.
2. **Planning issues** related to organisation and materials.
3. **Communication issues** related to providing instructions and information to students.
4. **Learning issues** related to content taught, the lesson itself and the students’ learning.

In addition to the causal conditions that pre-service teachers identified as the reasons behind their worst lesson experiences, intervening and contextual teaching conditions were also

identified. Not only were the participants aware of the reasons that caused their worst lessons to occur, they were also aware of the wider conditions that influenced their teaching situations. The intervening teaching conditions included specific and situational factors that influenced the context of their worst lesson. Examples of these intervening teaching conditions included the school environment, family issues and the weather. The contextual teaching conditions identified included year level and the key learning area being taught.

Of the 58 pre-service teachers who participated in the 2013 and 2014 stage of the study, most described their worst experiences in English or Mathematics lessons. While this finding may simply reflect the proportion of these two subjects as they are taught in the curriculum, it may also show that these are areas of concern for many of the pre-service teachers in this study. While many participants did not identify which year level they were teaching when they experienced their worst lesson, the most frequently reported year levels were the lower primary levels (Kindergarten, Year 1 and Year 2).

Overall, the results indicated the pre-service teachers' emotional responses appear to have prompted them to express what they had learned and what they planned to learn in the future. Additionally, the results illustrate the complexity of the context of pre-service teachers' professional experience and the consequences of their memories of their worst lesson experiences.

Discussion and implications for practice

Earlier studies that have engaged pre-service teachers in reflective practice using the Critical Incident Technique (CIT) have typically focused on the practical aspects of teaching. This study also used the CIT as a framework for reflective practice with pre-service teachers but it extended previously used approaches by reporting on the pre-service teachers' emotional responses.

The study took a broad approach, examining pre-service teachers' reflections across a range of subject areas. The findings showed that emotion, especially negative emotion, was entrenched in pre-service teachers' reflections of their own teaching. Overlaying many of their memories was an awareness of their emotional responses to the situation, some of which were very strong and long-lasting. Just as these results found that emotion was often a precursor to learning, Vandercleyen, et al. (2014) also found that: "Emotions play a major role in the learning of pre-service teachers" (p. 164). In this research, the major role of emotion was to bring the pre-service teachers to a point where they used their negative past experiences to constructively plan for future improvement.

Four main issues were identified that pre-service teachers recognised as influencing their worst lesson experiences: management, planning, communication and learning issues. While communication and student-focused learning issues were recognised as important, management and planning issues dominated their reflective comments. Although perceptions of critical incidents in past teaching experiences are naturally personal to the participant (Bloomfield, 2010), teaching problems identified in this study were also reported in other studies about pre-service teachers' perceptions of their teaching. Similarly, the clear identification of classroom management issues in relation to worst lesson experiences align with the findings of previous studies which have also found that pre-service teachers were typically more concerned about management issues than learning issues (Calandra, et al.,

2007; V. Carter, Orr, & McGriff, 2014; Curtner-Smith, 1996; Goodell, 2006; Silverman, 1998).

Although not requested to do so, 40 of the 58 participants in our study volunteered ideas about how they planned to transform their practice as an outcome of engaging in reflection about their worst teaching experiences. Interestingly, their improvement-focused reflective comments were often preceded by expressions of emotion. These findings are resonant with Cole and Throssell's (2008) discussion of the "transformative effects of pedagogic epiphanies" (p. 180) which also acknowledges the importance of sensing and feeling beyond the rational aspects of education. However, the relationship between reflective practice, pre-service teachers' emotions and expressions of intentions to improve, as reported in this paper, have yet to be fully explored in teacher education literature. Expressions of emotions appear to precede and activate the participants' intentions to improve their future teaching practice. Based on this outcome, a number of implications for practice emerged.

The implications of the findings from this study are offered for consideration by other teacher educators. An unexpected result of this research was the additional and unexpected information volunteered by students. This included the emotive reactions the students had to the critical incidents they were reporting and, in many cases, tactics they envisaged for improving or overcoming the deficit they felt when reflecting on the incident. Perhaps teacher education could spend more time focusing on key areas where things may go wrong for young teachers and alert them to the emotions they may feel at the time. A debrief and analysis of such experiences could be helpful in preparing students to navigate uncertainty and complexity in their future workplaces. This leads to the idea that, because it is so important to professional experience in the classroom, critical reflection needs to be taught to undergraduates and not just assumed.

Apart from the need to teach students to deal with their emotive responses, this research also identifies the value of teaching students to be able to make decisions in critical situations or uncertain conditions (Bruster & Peterson, 2013; Schön, 1987). Teacher educators need to be prepared to deal with emotive responses in verbal debriefing sessions. This research demonstrates the willingness of students to share their 'bumpy moments'. Furthermore, our findings support the placement of opportunities for critical reflection on these 'bumpy moments' towards the end of a teaching degree. Evidence is provided for how the careful positioning of reflective practice components in a teacher education degree could engage final year pre-service teachers in the process of converting their past-focused reflective thoughts about worst lesson experiences into future-focused improvement plans to modify their teaching practice in their workplaces.

Finally, this research supports the national initiative for teacher education to place more importance on the five National Priority Areas in Australian schooling (Board of Studies Teaching and Educational Standards NSW, 2015). Students reported issues with classroom management, which is one of the priorities, and 'worst class' scenarios were reported most frequently in mathematics and literacy classes which is another national priority.

Conclusion

This study illustrated the multiple and differing realities of pre-service teachers' worst lessons and elucidated the factors, conditions, emotional responses and issues contributing to them. By gathering data through a process of reflective practice at a point of transition in their careers, pre-service teachers' perceptions of problems in their teaching were explored. Recollections of their worst lesson experiences can be seen as representative moments in their reflective memories in which they navigated uncertainty and complexity. Their ideas about what they had learned from these experiences were typically more diverse than the 'bumpy moment' itself; the process of reflecting on their past teaching dilemmas instigated expressions of intention regarding how they planned to improve their future practice.

The intensity of the pre-service teachers' emotional reactions towards their worst lesson was a valuable finding. The study extended our understanding of the role of emotions associated with problematic teaching episodes. The findings suggest that pre-service teachers need to be taught how to recognise triggers of negative emotions, to develop strategies on how to minimise the impact of negative emotions and to use these emotions constructively to plan for future improvement in teaching.

In summary, if we expect that pre-service teachers will be able to successfully navigate from the bounds of university into the uncertainty and complexity of the unbounded workplace, it is crucial to educate them on how to reflect critically, to be able to deal with their emotional responses and to learn from the critical incidents they experience in their professional practice.

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