



IARTEM *e-Journal* Volume 6 No 1

Volume 6 Number 1

Teaching and learning materials utilised in professional development for mentor teachers

Angelina Ambrosetti
Central Queensland University
Australia

Abstract

Mentoring in pre-service teacher education has gained prominence in Australia in recent times. In the context of pre-service teacher education, mentoring occurs during the pre-service teacher's professional placement. The professional placement involves a pre-service teacher being placed with a classroom based mentor teacher in order to learn and practice the craft of teaching. The professional placement is reported as the most valuable part of learning to teach by pre-service teachers, however the success of the placement is dependent on the teacher mentor and their ability to mentor the pre-service teacher. This paper investigates the role of professional development in the training of mentor teachers. Specifically, the paper investigates the types of teaching and learning materials used during professional development sessions with mentor teachers and the impact of these materials on the mentoring approach used by the mentor teacher. As such, the research reported on in this paper, focuses on what mentor teachers conveyed as the most effective aspects of the professional development and how different types of learning materials contributed to their learning.

Keywords. Mentoring, Mentor teachers, Professional development, Teaching and Learning materials.

1. Introduction

The use of mentoring in pre-service teacher education is often considered as a form of professional development for the classroom based teacher who volunteers to be a mentor. Mentoring offers the classroom based teacher an opportunity to critically reflect on their own practice as well as revitalize their teaching practices (Walkington, 2004). However, it is often assumed that

classroom based teachers will naturally know how to mentor (Valeni & Vogrinc, 2007). Research, according to Wang and Odell (2002, p.525), “suggests that mentor preparation can substantially influence knowledge of particular mentoring techniques and skills to shape their mentoring practice”. However, mentor preparation has not been a priority in many pre-service teacher education programs and there is limited research that focuses on the professional development a mentor teacher receives (Wang & Odell, 2002). This paper will firstly discuss research based literature which concerns mentoring in pre-service teacher education. This is followed by an examination of current professional development practices in education and the teaching materials that are used during such professional development. The methodology and context of the research undertaken will be considered before the results are presented and discussed. Finally conclusions will be made regarding professional development in pre-service teacher education and the materials that are utilised.

1.1. Mentoring in pre-service teacher education

There are many definitions of mentoring, however in the context of pre-service teacher education mentoring is often described as a complex, but mutually beneficial relationship where a more experienced teacher supports and guides a less experienced novice (Hall, Draper, Smith & Bullough Jr, 2008; Heirdsfield, Walker, Walsh & Wilss, 2008; Walkinton, 2005a). Ambrosetti and Dekkers (2010) describe mentoring in the pre-service teacher context as non-hierarchical and reciprocal, but despite this the mentor teacher often directs the mentoring relationship and guides the mentee towards achieving professional growth during a practical placement. Being a reciprocal relationship, there are specific roles that both the mentor teacher and the pre-service teacher undertake in a mentoring relationship. Through an examination of the literature it has been found that mentors consider their role as one of providing support for the mentee and may involve the giving of feedback, creating a comfortable learning environment, and providing an explicit representation of the job or skill that the mentee is learning (Hall, Draper, Smith & Bullough, 2008; Kwan & Lopez-Real, 2005). Mentors do this by offering encouragement and using specific strategies such as role modelling, observing the mentee in action and working alongside the mentee. The mentee’s role, according to Walkinton (2005a), is one of an active participant. That is the mentee is responsible for their own learning through the setting of goals, engaging in professional conversations and working with the mentor (Freeman, 2008; Walkinton, 2005a; Zanting, Verloop & Vermunt, 2001).

Mentoring a pre-service teacher has both benefits and limitations. Benefits for mentor teachers can also be seen as motivations for choosing to mentor pre-service teachers. Such motivations include the following:

- Self-reflection on existing practices and personal growth (Heirdsfield et al., 2008; Jewell, 2007; McGee, 2001; Orly, 2008)
- Self-improved work ethic (McGee, 2001; Walkinton, 2005a)

- Renewed enthusiasm for the job (Walkington, 2005b)
- Making a difference in another's personal and professional life (Lai, 2005; Walkington, 2005b)
- Enhanced collegiality (McGee, 2001)

Limitations of mentoring pre-service teachers, according to Walkington (2005b), include an increased workload, uncertainty about how to mentor, having to make a judgement about the performance of a pre-service teacher as well as added stress and responsibility. As such, in considering the complexity of mentoring, how are mentor teachers prepared for the mentor role?

1.2. Preparation for mentoring through professional development

Professional development opportunities for teachers are usually centred on curriculum and pedagogy; however as previously alluded to, professional development which centres on the practice of mentoring is limited (Wang & Odell, 2002). Preparation and/or training for mentoring when offered, is made available by the associated university and is usually program specific. Research which has investigated the impacts of mentoring on pre-service teachers suggests that mentor training increases the positive impacts that mentoring can have on both skills and knowledge of the mentee (Evertson & Smithey, 2000; Giebelhaus & Bowman, 2002). According to Tang and Choi (2007, p.386), "learning to mentor involves mentor trainees actively constructing and reconstructing their knowledge in the contexts of teaching and mentoring".

Professional development can be defined as "further training and/or education professionals receive during their employment that can enhance skills and knowledge and maintain currency" (Griffith & Kowalski, 2010, p.124). There are many models of professional development, however Wang and Odell (2002) identified three models for mentor preparation through professional development in the pre-service teacher education context. They are as follows.

- *Knowledge transmission model*: A facilitator presents information to the participants (mentor teachers) who then apply it in their own time and way. This model is widely used, is presented in a workshop structure and mentors develop their mentoring skills as well as knowledge of mentoring through knowledge transmission.
- *Theory and practice connection model*: The participants (mentor teachers) actively construct their knowledge and skills through practical application in the classroom with support of the facilitator. Knowledge of mentoring is gleaned from both research and the participants own knowledge. The mentors meet regularly with the facilitator throughout the field experience in order to problem solve, clarify and enhance mentoring practices.

- *Collaborative inquiry model*: The participants (mentor teachers) and facilitator work side by side to develop the specific skills and knowledge needed. Action research frames the structure of the model that is multi-layered, but this model is described as being time and resource consuming. Mentors and teacher educators actively inquire into mentoring practices as they are being carried out in the classroom with the pre-service teacher.

According to Hunzicker (2010, p.3), adult learners “prefer open ended learning opportunities and a voice in the direction and pace of the learning”. Hunzicker (2010) has identified five considerations when designing and evaluating professional development specifically for teachers. As such, the learning activities designed for professional development should be supportive, job embedded, instructionally focused, collaborative and ongoing. Table 1 outlines the considerations, as recommended by Hunzicker, to be used when designing professional development activities for mentor teachers. These considerations will be used to discuss the results of the research.

Table 1 – Professional development design considerations (Table adapted from Hunzicker, 2010)

Characteristics and considerations				
<i>Supportive</i>	<i>Job embedded</i>	<i>Instructionally focused</i>	<i>Collaborative</i>	<i>Ongoing</i>
<ul style="list-style-type: none"> • Needs • Interests • Learning styles 	<ul style="list-style-type: none"> • Relevance • Authentic • Analytical 	<ul style="list-style-type: none"> • Content differentiation • Pedagogical differentiation 	<ul style="list-style-type: none"> • Opportunities to share and problem solve • Opportunities to discuss and develop ideas • Opportunities to reflect 	<ul style="list-style-type: none"> • Contact hours • Interactions with content

1.3. Teaching and learning materials used in professional development

Within the teacher education context, limited information and research exists regarding the teaching and learning materials used in professional development activities. Research regarding teaching and learning materials used in professional development which specifically prepares mentor teachers for mentoring is even more limited as references to such materials are often referred to as an afterthought or are not explained and expanded upon. Although there have been many texts written about mentoring, there are none which can be used as a training textbook as such. In the absence of mentoring texts suitable for training purposes, ‘research’ itself can be used as a teaching and learning material (Wang & Odell, 2002).

Goranson (2005) examined the use of textbooks in the context of training fire-fighters. Her research identified that the teaching and learning materials being

used in training situations needed to be relevant to the context and the learners, as well as communicate new and up to date professional insights (Goranson, 2005). Thus, learning and teaching materials need to cater to the workplace culture and guide the learners on their own journey of development. Goranson (2005) also identified that the 'teacher' or professional development facilitator had the largest impact on how the text and other teaching and learning materials are being used; in particular the professional conversations the learning and teaching materials afforded the participants. It could be concluded from Goranson's research that teaching and learning materials need to be pertinent in order to engage the learners, however this is dependent upon how the trainer utilises them.

2. Methodology and context

This study investigates a professional development program for classroom-based teachers mentoring a pre-service teacher. The professional development entitled 'Mentoring Certificate' focused specifically on mentoring practices and was non-program specific. That is, there were no references to program requirements or tasks that pre-service teachers were required to do whilst on their practicum. Teachers who participated in the mentoring certificate were able to claim eight hours of professional development towards the required thirty hours per year by the teacher registering body The Queensland College of Teachers. The professional development offered focused on standard ten from the Queensland College of Teachers Professional Standards: *Commitment to reflective practice and ongoing professional renewal*. Thus, the mentoring certificate was designed with two objectives in mind:

- To create opportunities for reflection on the participant's own teaching practice so that pre-service teachers are mentored by effective role models.
- To create opportunities for mentor teachers to identify their own mentoring style and consider mentoring processes in order to plan for mentoring.

Eleven teachers in total participated in the Professional Development (PD) – six in the first offering and five in the second offering. There was a mix of teachers who had previously mentored several pre-service teachers and those who had previously mentored one or none. As shown in Table 2, the mentoring certificate was delivered through four after school sessions. Each session was two hours in length and the sessions occurred weekly. The structure of the course was specifically designed so that participants had the opportunity to complete reflective homework activities between sessions. The PD used the knowledge transmission model for implementation and structure.

Table 2 – Mentoring Certificate Structure

Structure Outline - Mentoring Certificate Program			
Day 1 (2hrs)	Day 2 (2hrs)	Day 3 (2hrs)	Day 4 (2hrs)
<ul style="list-style-type: none"> • What is mentoring? • Benefits and limitations of mentoring • Mentor teacher role • Defining mentoring 	<ul style="list-style-type: none"> • Revisit mentoring definition • Role of a mentor • Role of a mentee (pre-service teacher) • Experiences of mentoring • How mentoring occurs • Process of mentoring 	<ul style="list-style-type: none"> • Introduction to the mentoring framework – linking the process to the framework • Factors which impact on mentoring process • Expectations of pre-service teachers 	<ul style="list-style-type: none"> • Personal mentoring plan • Strategies for difficult situations • Mentor/mentee profile

Two research questions were identified for the research:

1. How can professional development (which focuses on mentoring practices) impact on a mentor teacher's approach to mentoring a pre-service teacher?
2. What types of teaching and learning materials are useful for the mentor teacher's approach to mentoring a pre-service teacher?

A survey was used to gather data about the structure, content and teaching and learning materials used in the mentoring certificate. Participants were also asked to reflect on changes in mentoring practices. The survey used open ended questions as well as questions utilising Likert scales. All eleven of the participants who undertook the professional development course responded to the survey. Although the small sample size can be considered a limitation of the research the maximum response rate achieved ensures that the data is representative of each participant.

The professional development utilised a wide variety of teaching and learning materials as well as teaching and learning strategies. All teaching and learning materials were either created specifically by the facilitator or were accessed from research journals. Table 3 outlines the teaching and learning materials as well as the teaching and learning strategies used throughout the PD.

Table 3 – Materials and strategies utilised

Teaching and Learning Materials	Teaching and Learning Strategies
<p>1. Research based readings: Ambrosetti, A. (2010). Mentoring and learning to teach: What do pre-service teachers expect to learn from their mentor teachers? <i>The International Journal of Learning</i>, 17(9), 117- 132.</p> <p>Ambrosetti, A. & Dekkers, J. (2010) The interconnectedness of the roles of mentors and mentees in pre-service teacher education mentoring relationships. <i>Australian Journal of Teacher Education</i>, 35(6), 42-55.</p> <p>Hays, T., Gerber, R. & Minichiello, V. (1999). Mentorship: A review of the concept. <i>Unicorn</i>, 25(2), 84-95.</p> <p>Walkington, J. (2005). Becoming a teacher: encouraging development of teacher identity through reflective practice. <i>Asia-Pacific Journal of Teacher Education</i>, 33(1), 53-64.</p> <p>2. Mentoring framework</p> <p>3. Personal Mentoring Plan</p>	<p>1. Reflective strategies</p> <ul style="list-style-type: none"> • Frayer Model • Think, Pair, Share • PMI • SWOT analysis • Scenarios <p>2. Professional conversations</p> <ul style="list-style-type: none"> • Discussions (facilitated) • Sharing experiences <p>3. Knowledge development</p> <ul style="list-style-type: none"> • Brainstorming • Concept Mapping • Expert Jigsaw • Comparison table • Inside/Outside circle <p>4. Knowledge application</p> <ul style="list-style-type: none"> • Personal mentoring plan <p>5. Homework</p> <ul style="list-style-type: none"> • Reading: application to practice

The choice of teaching and learning materials for the course was specifically linked to the outcomes to be achieved, namely self-reflection on current teaching and mentoring practices and the identification of a mentoring style that was both personalised and planned. Thus the primary function of each of the learning and teaching materials was to contribute towards the achievement of the outcomes. The teaching and learning strategies used to implement the course were chosen as those which would create a seamless link between the teaching materials and the achievement of outcomes.

The results of the survey are presented below. A discussion of the results will follow using the considerations outlined in Table 1.

3. Results

3.1 Survey section 1

The survey began by firstly asking the participants to identify their reasons for participating in the course. All participants responded that they wanted to ensure that they were being an effective mentor through a more thorough understanding of the role they had undertaken. In this first section of the survey, the participants were also asked about the structure and content of the course. The responses were generally positive indicating that the professional development provided depth of content as well as a suitable structure for the participants as shown in the following comments.

I liked the shape and direction of the course. Respondent A

I feel that the course content was quite comprehensive and relevant.
Respondent B

The course was well structured in that the sessions were all connected and flowed. Respondent C

3.2 Survey section 2

The second section of the survey focused on the actual learning and teaching materials used in the professional development course. In this section, the participants were asked to rate the usefulness of the three types of teaching and learning materials used in the PD, as listed in Table 3. They were provided with a Likert scale that consisted of three options, namely not useful, useful and highly useful. The majority of the participants (80%) indicated that the research based readings, the mentoring framework and the personal mentoring plan were highly useful teaching and learning materials. None of the participants indicated that the materials were not useful.

Following on from this, the participants were also asked to expand on how the teaching and learning materials were useful, by way of four descriptive statements. Participants were required to choose one statement for each of the teaching and learning materials that described the specific usefulness of each of the three materials.

The professional development course used four research readings that were specifically chosen due to their particular mentoring focus. All of the participants (100%) chose the following statement regarding the usefulness of the research based readings: 'the readings were informative and enabled me to confirm and/or extend my knowledge about mentoring and my role in the process'. The following comment from one participant exemplifies this result.

The readings were thought provoking and prompted me to reflect on my practice, leading to change in my attitude to and practise of mentoring.
Respondent A

The mentoring framework was developed by the professional development facilitator and was research based. When describing the mentoring framework, half of the participants chose the following statement: 'the mentoring framework clarified the role I play in mentoring a pre-service teacher'. One of the participants expanded on this by commenting as follows.

It certainly changed my perceptions of the role of a mentor & compelled me to examine my motivations for volunteering to mentor prac students year after year! Respondent C

The remaining participants described the mentoring framework as one that clarified the complexity of mentoring. The following comments from two of the participants confirm this finding.

I started the course thinking there was a clear 'role' and specific jobs covered by the mentor – the course certainly clarified my understanding that mentoring is not clear cut. Respondent E

I have a greater understanding of the mentoring process and a more professional approach to my teaching. Respondent G

The personal mentoring plan was also developed by the professional development facilitator. The plan used the mentoring framework as its underpinnings and provided the participants with the opportunity to develop their own mentoring plan. Despite all participants indicating earlier that the personal mentoring plan was a useful resource, not all participants agreed on how it was useful. Half of the participants indicated that: 'the mentoring personal plan was easy to complete and helped me to organise a process that suits my own style'. Of the remaining participants 40% indicated that 'the personal mentoring plan enabled me to create a plan for myself' and 10% indicated that 'the personal mentoring plan is good in theory, but not practical in reality'. The following comments rationalise the variance in this finding.

The theory was good, but I like to have 'tools' to use the next day. Respondent A

Mentoring depends on the situation, environment and individual people involved. You have to plan accordingly. Respondent D

3.3 Survey section 3

The third section of the survey focused on the five teaching and learning strategies, used throughout the professional development, as listed in Table 3. The participants were firstly asked to rate the teaching and learning strategies as either not effective, effective or highly effective. The learning strategies incorporated into the PD included reflective strategies, professional conversations, knowledge development strategies, knowledge application strategies, and homework tasks. All of the respondents rated the professional conversations as a highly effective teaching and learning strategy. The 'highly

effectiveness' of the professional conversations are indicated in the following comments.

The depth of discussion and experiences of the cohort was only limited by the number of participants. Respondent A

The professional conversations were very stimulating and were a great opportunity to pick up strategies used by other mentors. Respondent B

I really enjoyed the conversations with other teachers. Respondent F

The majority of the participants (90%) rated reflective strategies and knowledge application strategies as highly effective. The participants indicated that the reflective strategies prompted them to reflect upon their own practice as a teacher and how this impacted upon how they mentored the pre-service teacher.

The reflective activities prompted me to reflect on my own practice and think about how I am a role model to the pre-service teacher. Respondent B

The knowledge development strategies used within the course were seen as highly effective by many of the participants (80%). In particular, the knowledge development strategies provided the participants with the knowledge to work more effectively with a pre-service teacher, as indicated in the following comment.

Having an in-depth understanding of what mentoring is and the types of roles I need to undertake made me realise that I need to think more carefully about what I need to do in order to assist my pre-service teacher. Respondent F

The homework activities were the least effective of the teaching and learning strategies. The homework activities were not meant to be intrusive, rather they often followed up on mentoring topics or asked the participants to action their learnings. Only 60% of the participants rated them as highly effective with 10% indicating that they were not effective.

4. Discussion

According to Piggot-Irvine (2007) professional development that achieves the outcomes it was designed for does not occur in isolation. As such Piggot-Irvine (2007) identifies that research into both the topic and the structure of effective professional development are crucial for success. Phillips (2008) also identifies the use of professional conversations and reflective activities as essential components of effective professional development for teachers. This research confirms that the use of professional conversations and reflective activities created a worthwhile professional development course for the participants. However, little is identified in the research literature that concerns the teaching and learning materials used for effective professional development, therefore comparisons cannot be made in this respect.

The design of this professional development course was centred on the outcomes to be achieved. It was based on research that informed the content of the course and thus the teaching and learning materials, as well as the structure of the program. Research about best practice in teaching and professional development informed the delivery of the program.

As identified previously, the professional development was structured so that it occurred over a four week period which provided opportunities for the participants to reflect upon the content of each afternoon, complete simple homework tasks and apply the knowledge to their context. The findings from this investigation indicated that the weekly structure of the program was well suited to their needs as mentor teachers and the course didn't overload the participants with new content. Participants also commented that they were able to reflect, apply and build their understandings over the course of the program. However one participant did comment that she would like follow up interactions after the professional development had finished. This comment indicates that 'the knowledge transmission model' of professional development may not suit all participants' needs and that a model such as the 'theory and practice connection model' may need to be considered as a design basis (Wang & Odell, 2002).

The findings of this research indicated that all participants considered the professional conversations as a highly effective teaching and learning strategy. The professional conversations were integrated throughout the professional development. As such the professional conversations were used to discuss the research readings, examine the mentoring framework and to share the personal mentoring plan. The professional conversations were also used in conjunction with other strategies such as knowledge development and application as well as in a reflective capacity. Because the professional conversations were used throughout the PD, a collaborative learning environment was created and the conversations became a rich and deep source of information transfer. Collaborative learning can be considered as both an active and interactive process as it provides opportunities for problem solving, reflection and sharing. Goranson (2005) found in her research that opportunities for professional discourse amongst the participants of PD or training is far more valuable than reading a textbook or other such written information. The findings of this research support this.

Using the considerations for designing and evaluating professional development specifically for teachers as identified by Hunzicker (2010), the results indicate that the professional development was both supportive and job embedded. At the time of the PD each of the participants was currently mentoring a pre-service teacher and they indicated that the learning and teaching materials and strategies used were relevant to their current role as a mentor teacher and supported their needs within that role. As such, the content covered by the course was described as comprehensive and connected. The learning and teaching materials such as the research readings were used in conjunction with the reflective and knowledge development strategies. Thus this combination of strategies and materials provided the opportunities for the participants to

discuss their own mentoring experiences and analyse their own practice in order to build their own personalised mentoring plan.

The course was also specifically designed to be instructionally focused, but yet cater for each of the current mentoring situation the mentor teachers were experiencing. Therefore the teaching and learning strategies that were used, rather than the materials, provided the differentiation that was needed. It can be concluded that although the teaching and learning materials were static the teaching and learning strategies were interactive, thus providing the ability for the course to be differentiated. In particular, the knowledge development and knowledge application strategies that were used afforded both the opportunity to develop depth to their existing knowledge and critically apply their knowledge to their own context. The mentoring framework as a teaching and learning material supported and assisted in structuring this extension of knowledge. To a lesser extent, the homework activities also provided the opportunity to extend the knowledge application. However, the 'homework' wasn't always completed by the participants and not all participants rated the homework as an effective strategy.

5. Conclusion

In the absence of a textbook or ready-made teaching and learning materials, this professional development utilised materials that were created specifically to achieve the identified objectives and outcomes. Although the research sample is small in size, the findings indicate that the professional development was a worthwhile experience for the participants. The results of this research have identified that the materials created met the needs of each of the participants and allowed them to achieve the outcomes of the course. Thus the specifically designed teaching and learning materials proved to contribute to the positive results of the professional development and a clear connection was made between the teaching and learning materials and the teaching and learning strategies used. In particular, the teaching and learning materials and associated strategies provided opportunities for professional dialogue between the participants which then lead towards a change in mentoring practices as shown in Figure 1.

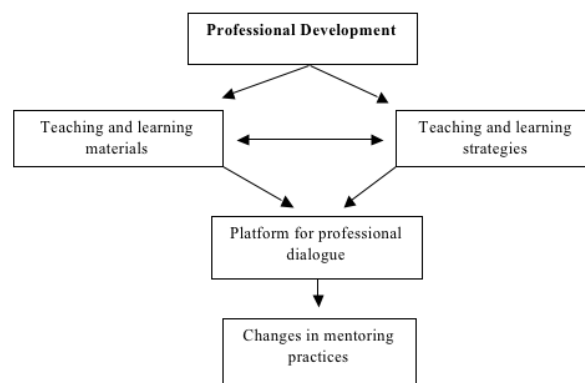


Figure 1 - Interconnectedness of teaching and learning materials and strategies

As a final conclusion, this research has shown that teaching and learning materials are not used in isolation, but are connected to the structure and goals of what they are being used for. Similarly there is a distinct connection between the materials being used and the teaching and learning strategies that embed the materials into the program. Thus teaching and learning materials and strategies need to be carefully matched during the design period of the program. It can be concluded from this research that learning and teaching materials are only as effective as the strategies that accompany them.

References

Ambrosetti, Angelina. & Dekkers, John. (2010) "The interconnectedness of the roles of mentors and mentees in pre-service teacher education mentoring relationships", *Australian Journal of Teacher Education*, vol 35, no. 6, pp. 42-55

Evertson, Carolyn. & Smithey, Margeret. (2000) "Mentoring effects on protégés' classroom practice: An experimental field study", *The Journal of Educational Research*, vol 93, no. 5, pp. 294-304

Freeman, Holley Raye. (2008) *Mentoring is a two way street: An examination of mentor/mentee relationships in a pre-service, residency-based, teacher education program*. Boston College, Boston

Giebelhaus, Carmen. & Bowman, Connie. (2002) "Teaching mentors: Is it worth the effort?" *The Journal of Educational Research*, vol 95, no. 4, pp. 246-254

Goranson, Anna. (2005) "The textbook as bridge or fire wall between practioners and theorists in vocational training", In Eric Brulliard, Bente Aamotsbakken, Susanne V. Knudsen & Mike Horsley (Eds). *Caught in the web or lost in the textbook?* Conference volume from the Eight International Conference on Learning and Educational Media, Caen October

Griffith, Kathlyn. & Kowalski, Helen. (2010) *Dictionary of education terms*. South Melbourne, Australia: Oxford University Press.

Hall, Kendra. M., Draper, Roni Jo. Smith, Leigh K. & Bullough, RobertV. (2008) "More than a place to teach: Exploring the perceptions of the roles and responsibilities of mentor teachers", *Mentoring and Tutoring*, vol 16, no. 3, 328-345

Heirdsfield, Ann M., Walker, Sue, Walsh, Kerryann. & Wilss, Lynn. (2008) "Peer mentoring for first-year teacher education students: The mentors experience", *Mentoring and Tutoring*, vol 16 no. 2, pp. 109-124

Hunzicker, Jana. (2010) *Characteristics of effective professional development: A checklist*, ERIC database.

Kwan, Tammy. & Lopez-Real, Francis. (2005) "Mentors' perceptions of their roles in mentoring student teachers", *Asia-Pacific Journal of Teacher Education*, vol 33, no. 3, pp. 275-287

Lai, E. (2005) "Mentoring for in-service teachers in a distance teacher education programme: views of mentors, mentees and university teachers", paper presented at the Australian Association for Research in Education International Education Research Conference. Parramatta December. Accessed 20 May 2009 <http://www.aare.edu.au/05pap/lai05100.pdf>

McGee, Christy D. (2001) "Calming fears and building confidence: A mentoring process that works", *Mentoring and Tutoring: Partnerships in Learning*, vol 9, no. 3, pp. 201-209

Orly, Michael. (2008) "Mentoring mentors as a tool for personal and professional empowerment in teacher education", *International Journal of Evidence Based Coaching and Mentoring*, vol 6, no. 1, pp. 1-18

Phillips, Paulina. (2008) "Professional development as a critical component of continuing teacher quality", *Australian Journal of Teacher Education*, vol 33, no. 1, pp. 1-9

Piggot-Irvine, Eileen. (2007) "Establishing criteria for effective professional development and use in evaluating an action research based programme", *Journal of In-Service Education*, vol 32, no. 4, pp. 477-496

Tang, Sylvia Yee Fan. & Choi, Pik Lin. (2007). "Connecting theory and practice in mentor preparation: Mentoring for the improvement of teaching and learning", *Mentoring and Tutoring*, vol 13, no. 3, pp. 383-401

Valeni, Milena. & Vogrinc, Janez. (2007) "A mentor's aid in developing the competencies of teacher trainees", *Educational Studies*, vol 33, no. 4, pp. 373-384

Walkington, Jackie. (2005a) "Becoming a teacher: Encouraging development of teacher identity through reflective practice", *Asia-Pacific Journal of Teacher Education*, vol 33, no. 1, pp. 53-64

Walkington, Jackie. (2005b) "Mentoring pre-service teachers in the preschool setting: Perceptions of the role", *Australian Journal of Early Childhood*, vol 30, no. 1, pp. 28-35.

Walkington, Jackie. (2004). *Mentoring pre-service teacher: Recognising the importance of the teachers' personal and professional self in the mentoring relationship*. Paper presented at the 3rd International Biennial SELF conference, Berlin. Accessed 21 July 2008
http://www.self.ox.ac.uk/Conferences/2004_Walkington.pdf

Wang, Jian. & Odell, Sandra .J. (2002) "Mentored learning to teach according to standards based reform: A critical review", *Review of Educational Research*, vol 72,no. 3, pp. 481-546

Zanting, Anneke. Verloop, Nico. & Vermunt, Jan.D. (2001) "Student teachers' beliefs about mentoring and learning to teach during teaching practice", *British Journal of Educational Psychology*, vol 71, pp. 57-80

Biographical Note

Dr. Angelina Ambrosetti is a lecturer in the School of Education and the Arts at Central Queensland University (Australia). Her research centres on mentoring relationships and the interactions that mentors and mentees engage in during workplace learning. She is also interested in professional development and training for mentoring, as well as the development of mentoring frameworks for specific workplace learning contexts.