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## Reciprocal Mentoring: Can it Help Prevent Attrition for Beginning Teachers?

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# Reciprocal Mentoring: Can it Help Prevent Attrition for Beginning Teachers?

## **Erratum**

Australian teacher attrition rates were stated incorrectly in the initial version of this article. This has now been corrected.

## Reciprocal Mentoring: Can it Help Prevent Attrition for Beginning Teachers?

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*Abstract: Up to one third of all new teachers leave the profession in the first five years (Ingersoll, 2012; Watt & Richardson, 2011; Hartsuyker, 2007). Stress, induction failure and professional isolation have been identified as key attrition factors. Mentoring has been used both internationally and in Australia to enhance induction and reduce professional isolation; however, these mentoring relationships are often fragile and there is a need to establish more effective mentoring models (Paris, 2010; Hartsuyker, 2007). Reciprocal Mentoring (RM) pairs two equal, though differently skilled, experts who act in the role of mentor and mentee to each other for mutual benefit. The RM approach is designed to support beginning teachers as they transition to the profession and to facilitate improved retention. The 'Better Transition to Teaching' inquiry was initiated by Edith Cowan University in 2011. It investigated the impact of RM on the first year experience of 11 (visual arts) Western Australian beginning teachers, following their participation in an RM residency in 2010. A major outcome of the research was that at the end of the first year all beginning teacher participants were still working in the profession. All reported experiencing personal/professional challenges during their first year and, importantly, the support of mentors appeared to make a significant and positive difference to the participants' transition experience and their first year of teaching.*

### Introduction

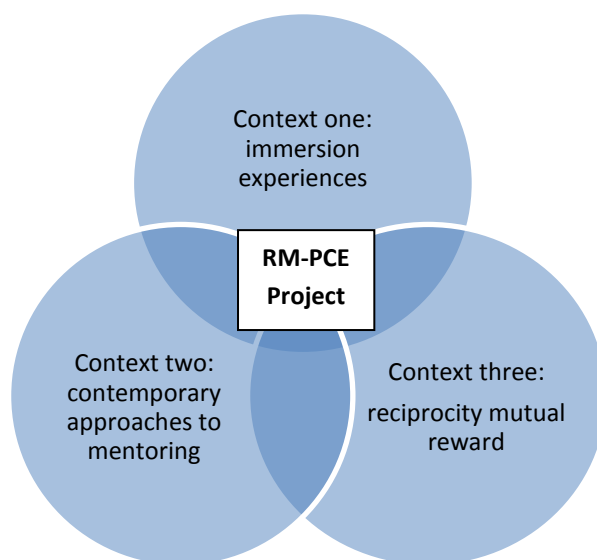
The first year of teaching can be fraught with difficulties for even the most capable graduates; and for many beginning teachers (BTs), in both Australia and abroad, a negative first-year experience results in them leaving the profession (Hartsuyker 2007). Ingersoll & Strong (2011) observed that this debilitating drain on the profession results in loss of public funding, instability in schools, and poorer outcomes for schools that experience high teacher turnover. The enduring high BT attrition rate over the first five years, combined with perceived declining educational standards, prompted the Australian government in 2010-2011 to address teacher retention, and enhance professional standards through initiatives such as the 'My Schools' website, 'AITSL Professional Standards for Teachers', and the 'Smarter Schools National Partnerships Program'. The 2007 House of Representatives Inquiry into Australian teacher education found BTs appeared ill-equipped to cope with the First Year Experience (FYE). The Inquiry called for greater involvement by universities in BT transition/induction, innovation in mentoring, and new forms of pre-service professional and community experience as a means of addressing early career attrition (Hartsuyker, 2007). Edith Cowan University responded to this challenge by re-designing its initial teacher education courses and increasing the professional-community experiences (practicum and others) offered to students (2010). The 'Reciprocal Mentoring Professional and Community Experience Project' (RM-PCEP) described in this paper is one such initiative. The operation of the Reciprocal Mentoring (RM) model while students are at university (phase 1) has been well documented (Paris, 2010 & 2009); however, the benefits offered by the program to

graduates during their transition to the profession and later induction (phase 2) are reported here for the first time.

In this paper I begin by identifying the conceptual framework for the research; this is followed by a review of curriculum renewal processes that have contributed to BT attrition and low mentor participation levels over the last three decades in Western Australia. I then argue for the importance of mentoring for new teachers and identify deficits in traditional mentoring models. Next I advocate the need for innovative and sustainable mentoring approaches; within this context, I promote 'immersion' principles as worthy of consideration. Finally, I introduce the RM model I developed (2007-2011) and present the results of Phase Two RM trials, which, as stated above, are quite positive in terms of securing mentor supply and enhancing graduate transition experience. I conclude with a brief consideration of 'work-access' as a BT equity issue and recommend a reconsideration of government sponsored 'bonded placements' as a solution.

### Conceptual Framework

The research reported here was undertaken in 2011; its main aim was to examine the first-year experience (FYE) of 11 Graduate Diploma (GD) visual arts BTs, each of whom participated in an RM residency (RMR) in 2010. Definitions of the RM model (RMM) and residencies are provided in the review of literature to follow, and the conceptual framework for the study is illustrated in Figure 1 (below). The research focus is positioned within the broader topic of early career retention of teachers and, more specifically, within three related community and professional experience contexts: 1) immersion experiences, 2) contemporary approaches to mentoring, and 3) reciprocity/mutual reward between mentors-mentees. Each context is explored in the article.



**Figure 1: RM-PCE conceptual framework**

In 2010 (Phase 1 of the RM-PCEP), 14 Graduate Diploma pre-service teachers from Edith Cowan University (ECU) completed an artist-in-residence (AiR) placement in a Perth school. The contractual nature of each of the visual arts residencies was negotiated between the participants, and the progress of each partnership was tracked and recorded by university staff. Creative projects undertaken within the program ranged from creating large-scale masks for permanent display in a school theatre, to miniature portrait paintings of staff for a

school administration area. Studio disciplines included painting, printmaking, mosaics, graphic design/computer generated imagery, textiles, ceramics and sculpture. Many of the completed projects involved collaboration between the AiR, students and staff at the school. Where possible, the completed projects were publicised in the local community newspaper so that participants received kudos/recognition for their achievements. Residents were encouraged by University staff to include this promotional material in employment applications and in their Curriculum Vitae. Three residents secured ongoing teaching positions (relief and part-time work) in their residency school; two others were able to use their placement host as a referee in employment processes. In the 2011 Phase 2 inquiry, the BT participants continued their 2010 (Phase 1) relationship with their RM residency placement host/mentor teacher (MT) as they transitioned from university to the profession. As the researcher, I monitored the BT-MT partnerships; however, no intervention was made (meetings, schedules etc) to facilitate mentoring interaction between the participants. Thus, the partnerships survived or failed according to participants' commitment to the mentoring process. My task was to assess whether the goodwill generated by the resident in Phase 1 was sufficient to sustain their mentoring partnership in Phase 2 during their FYE. While some feedback was received from mentors, I relied predominantly on data from the BTs themselves, which was largely perceptual in nature. The two-part research hypothesis was:

- a.* RM relationships established during pre-service education help BTs to successfully navigate transition and induction experiences.
- b.* RM relationships in FYE assist in improving BT retention rates (compared to new teachers in the profession generally).

The rationale for the hypotheses is presented in the review of literature that follows.

## Reviewing the Literature

The following review of literature encompasses the themes of attrition, curriculum renewal and mentor shortages, teacher registration and mentor supply, new mentoring approaches, and reciprocal mentoring. The literature evidences the supportive role mentors can play in BT- FYE and attrition remediation.

### Attrition

The aforementioned 2007 House of Representatives 'Top of the Class' report on Australian Teacher Education suggested that as many as one third of Australian BTs had left the profession within the first five years (Hartsuyker, 2007). This seminal inquiry is now six years old; but according to Watt & Richardson (2011), who followed graduate outcomes through a longitudinal study of teacher retention and attrition (Fit Choice Project 2002 - 2011), Australian BTs continue to leave the profession at an alarming rate. Importantly, both Hartsuyker (2007) and Watt et al. (2011) noted attrition rates of 20% - 30% in all Australian states at the end of the first year. Poor BT retention rates have been attributed to a variety of factors, including work overload, professional isolation, and an increasingly performance-focussed profession exacerbated by challenging student behaviours (Watt et al., 2011, p.29). The high rate of attrition in the Australian setting is matched in most developed nations (Ingersoll & Strong, 2011; Hong, 2010; Feine, Wehman, Brannon, Jares, Burke & Young, 2009; and Parker, 2009).

Mentoring has long been acknowledged in the UK, US and Australia as an essential support for BTs (Ormond, 2011; Andrew, 2009; Hartsuyker, 2007). However, mentoring

relationships are often of variable quality, difficult to source, and hard to sustain (Paris, 2010; Martinez, 2004). Paris (2009), in a study of first year outcomes for Western Australian visual arts BTs, concluded that the RM model, with its bi-directional flow of benefit, led to enhanced satisfaction for many participants. The *'Better Transition to Teaching'* research reported here represents an extension of that initial investigation, with a specific focus on FYE for 11 visual arts graduates of Edith Cowan University (ECU). Since 2007, ECU has facilitated over 100 RM partnerships, which, encouragingly, have resulted in improved outcomes for graduate teachers and an increasing rate of repeat involvement by mentors. This is important because high BT attrition leads to diminished educational outcomes for students (Ingersoll & Strong, 2011; Fetherston & Lummis, 2012). Hobson, Ashby, Malderez, & Tomlinson (2009), Tait (2008) and Hartsuyker (2007), writing about attrition in the UK, USA and Australia, observed that BTs who succumb to attrition do so largely as a result of inadequate mentor support. Regrettably, mentor supply and retention has been a long-standing challenge for the profession (particularly during periods of curriculum renewal, such as the current move to a new Australian National Curriculum).

### **Curriculum Renewal and Mentor Shortages**

High attrition rates for BTs are often attributed to mentor shortfalls, which, in turn, are linked with heightened stress during periods of change in the profession (for example, curriculum renewal). Whereas international curriculum renewal cycles typically last for 20 years, in Western Australia (WA) there have been three distinct education reforms over the last 30 years. These encompassed: discipline-based education in the 1980s; outcomes-based education for years K-10 from the mid-2000s; and WA Curriculum Framework for years 11-12 from 2010 onwards. Note that even as implementation of the final reform (2010) reached completion in 2011, another reform - the new Australian National Curriculum (ANC) - was announced. Curriculum renewal processes are widely acknowledged as being highly stressful for teaching staff (novice and experienced alike), and the WA experience has been no exception, with its documented high rates of work-related stress and attrition over the last 30 years (IEU, 2004; DEST, 2003). Berlach (2004), reflecting on the WA experience, observed:

One could be forgiven for suggesting that schooling in WA best aligns with the 'meltdown' scenario. It is triggered by a rapidly ageing profession, exacerbated by low teacher morale. Crisis management predominates. Even in areas saved the worst difficulties, a fortress mentality prevails. (p.9)

Berlach (2004) also argued that the crisis was (in part) caused by teaching's unattractiveness and heightened dissatisfaction. Harper (2007) similarly observed that older Australian teachers nearing retirement often lacked the appetite for curriculum reform and many elected to take early exit options. Furthermore, less experienced teachers were frequently affected by heightened stress, and without the support of experienced colleagues, succumbed to attrition. Accordingly, in the lead-up to the new Australian National Curriculum (2012-2014), Harper's (2007) prediction of an exodus of experienced Australian teachers within 5 years is cause for concern. Ingersoll (2012) observed that inadequate mentor supply was similarly a cause for concern in the US, which he attributed to ballooning numbers of BTs and the large number of older teachers (baby boomers) at retirement age. Long, McKenzie-Robblee, Schaefer, Steeves, Wnuk, Pinnegar, & Clandinin (2012), reflecting on the New Zealand (NZ) experience, also predicted mentor shortages in that country. They identified mentor frustration as a "lack of time for meeting, discussion and relationship development" as a reflection of the low status afforded to mentoring in that

country, adding that mentoring was “undervalued and poorly resourced” by NZ school sectors (p.12).

It is apparent that inadequate mentor supply is a contributing factor to BT attrition worldwide (Ingersoll, 2012; Long et al., 2012; Harper, 2007). In Australia Ferari (2011) and Strong (2010) found that teacher resistance to the reforms of the new ANC was widespread. These authors observed the resistance was reflected in the general reluctance by experienced teachers to mentor others. The Australian Curriculum Assessment and Reporting Authority (ACARA) revealed in 2010 that 58 % of the consultation feedback it received from professional associations about the ANC had been unfavourable. Teachers from all Australian states complained of anxiety and stress arising from content overcrowding and ambiguity in the consultation documents (Strong, 2010). ACARA conceded that, in light of the wide variation in teachers’ depth and quality of understanding of their teaching obligations under the new approach, further reforms appeared likely (Ferari, 2011). Under such circumstances, mentor shortfalls are inevitable.

### **Teacher Registration and Mentor Supply**

In most Australian states BTs receive a provisional licence when they graduate from university and are required to apply for full teaching registration (FTR) after three years. In Western Australia applicants for FTR need to provide evidence that they have received at least 12 months of intensive mentoring from an experienced teacher; however, the registration body, the WA College of Teaching (WACOT), does not assign mentors or assist new teachers in finding one. In most instances, a mentor is secured only when the new teacher commences full-time work; then, typically, an experienced colleague at the same school is assigned to mentor them. Where no internal mentor is available, an external mentor can be used for FTR registration; and there are some advantages to having an external mentor. For example, the pressure for BTs to appear to be ‘perfect’ from the first day of their appointment may result in BTs being reluctant to seek assistance from workplace colleagues (O’Brien & Down, 2002). External mentors are inclined to be less judgemental, providing BTs with a ‘safe’ critical friend to whom they (BTs) can confide areas of weakness (Paris, 2009; DET, 2002). However, it is unrealistic to expect BTs to find their own external mentor.

One alternative for graduates without full-time work and a school-appointed mentor, is to pay an independent training provider (ITP), such as the Australian Professional Skills Institute or another registered training organisation. The ITP presents the BT with a series of accredited mentoring modules, which the BT completes under the supervision of a ‘mentor-advocate’ (<http://www.apsi.wa.edu.au>). But the cost of module completion (around \$1800) is likely to be prohibitive for many of the new teachers in such circumstances. Data on mentor shortfalls in WA are not available from either WACOT or APSI; however, anecdotal evidence suggests that BTs who fail to achieve full-time employment shortly after graduation (i.e. those employed in a relief or part-time capacity) often miss out on mentoring. Therefore, achieving FTR, or even surviving the transition-induction experience, can be difficult or impossible for some BTs – thus adding to already high attrition rates. Even where mentors are secured, the success of the mentoring is not assured because of a lack of suitable (trained) mentors and resources. These transition challenges are endemic in many countries. In the US, Kent, Feldman & Hayes (2009) observed that:

Many past mentor programs have failed after having been implemented too quickly, with mentors having no standards for modelling appropriate practices and no plan for evaluating performance. These programs were

also plagued with unrealistic and/or unreasonable expectations of both mentor teachers and new teachers. (p.75)

Hobson et al (2009) similarly observed that in Australia not all mentoring programs were of the same standard; furthermore:

... in spite of the explicit aim of mentoring programs being to reduce teacher attrition, the lack of trained (mentors offering) social and psychological support has actually been a contributing factor. (p.211)

The failure of past mentoring approaches to ameliorate attrition trends has been attributed to the changing nature of the Australian teaching profession over a long period (Devos, 2010). He observed that the demands of beginning teaching continue to grow, whereas mentors are more often than not provided with less training, support, or reward for their role. Devos (2010) continued that the teaching forms and technologies that predominate within the profession are complex, yet the related roles assigned to mentors seemed to narrow conceptions of good teaching (p.1219). These comments correspond with Hartsuyker's (2007) observations that mentoring approaches in Australia have been slow to change in an increasingly technological, regulated, and complex profession, and subsequently out of step with BTs' actual needs. He conceded, however, that too much was asked of mentors, and noted that in many instances after a short period they simply succumbed to fatigue and withdrew.

The mentoring literature suggests that attrition of experienced teachers is correlated with reduced or inadequate availability of mentors for BTs. In turn, it leads to poorer educational outcomes for students. Accordingly, new approaches to achieving sustainable, improved mentoring are needed; however, the timing and placement of mentoring in the teacher life-cycle is equally important. Fantilli & McDougall (2009), among others, have noted that many BTs do not receive mentoring when they need it most – during the transition and early career phase. They observed:

The experiences novices encounter upon their transition often results in creative and talented teachers finding their work frustrating, unrewarding and intolerably difficult, which ultimately increases their risk of becoming a casualty of the profession. (p.814)

Where it is available, mentoring can be effective. However, according to Hartsuyker (2007), access to mentoring/induction was variable in each Australian state and mentoring programs were often poorly organised. Devos (2010) agreed, but went further, noting that even in fortuitous circumstances, current approaches to BT mentoring were largely 'tinkering at the edges'. He advocated that reforms based on more rigorous research-informed practice were needed:

This means we need to do research that enriches our understandings of mentoring, rather than stick to a current narrow focus on aspects of mentoring program design and teacher quality improvement, or the 'improvement imperative'. (p.1223)

Hobson et al. (2009) had earlier similarly observed that new conceptions of pre-service mentoring and in-service support/induction were needed and calls for new mentoring forms gained momentum.

### **New Mentoring Approaches**

Lave and Wenger (1991) rejected traditional knowledge acquisition paradigms in which assimilation of abstract knowledge occurs out of context. They advocated 'situated



learning' as an authentic experience, encompassing 'knowledge or competency transference' within 'communities of practice':

Learning is embedded within activity, context and culture. It is also usually unintentional rather than deliberate. This a process of "legitimate peripheral participation"... social interaction and collaboration are essential. Knowledge needs to be presented in authentic contexts. In such situations learning has deeper layers. (Lave & Wenger, 1991, p.1)

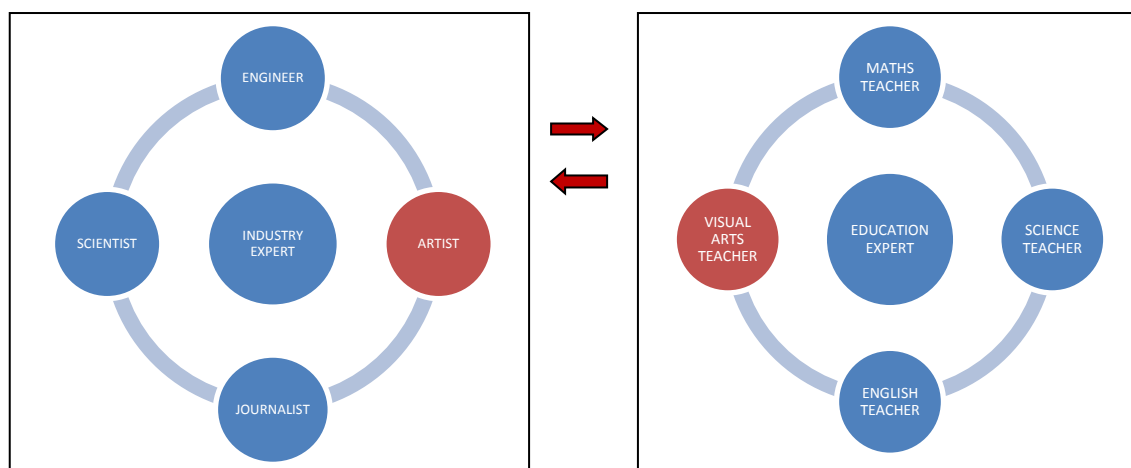
Universities and governments in Australia have traditionally been slow to embrace these situated learning principles in teacher education, preferring de-contextualised models of pre-service training (based in the university classroom and away from real school environments). Le Cornu & Ewing (2008), building on the work of Lave & Wenger (1991), noted that while the teaching practicum had evolved from the skills-focussed approaches of the 1970s and 1980s to the reflective orientations of the 1990s, a more contemporary approach encompassing 'reciprocity' was needed to address some of today's issues in pre-service education, which they saw as being:

- 1) The difficult environment surrounding pre-service teacher education, which they describe as being "under attack" (p.1799) due to the "multiplicity of political, professional and economic issues surrounding professional placements". (p. 1800)
- 2) A lack of mentor teachers/opportunities for placement of pre-service teachers, which they attribute to: "the low morale of the profession, inadequate resources, the intensification of teachers' work coupled with pressure from an increasing number of teacher education providers". (p.1800)

Le Cornu and Ewing (2008) championed the need for "reciprocal relationships amongst early career and experienced teachers" and professional experiences that "also have the potential to be extremely valuable for experienced mentor teachers". (p.1799) To this end, Le Cornu and Ewing (2008) introduced their third orientation for professional experiences, which they suggest is the need for a 'learning community' approach that: "Like the reflective model...is underpinned by a constructivist view of learning but further extends this conceptualisation ...moving from an individual focus to a shared focus" (p.1803). Moreover, they argue strongly for the need for a "commitment to reciprocity and reciprocal learning relationships", as follows:

By emphasising the reciprocal nature of the learning process ... very different professional experiences not only for pre-service teachers but also for their mentor teachers and university mentors are possible... we must value the contribution that pre-service teachers can make to their professional learning (p.1809).

One example of an 'immersion experience' that embraces notions of 'situated learning' and 'professional learning communities' in the Australian teacher education setting is the Reciprocal Mentoring–Professional and Community Experience Project (RM-PCEP), which was developed at ECU in 2007. It was conceived that mentoring in the RM model should be a partnership in which two equal (though differently skilled) professionals work collaboratively to support one another. Whereas traditional approaches to mentoring entail a mostly one-directional flow of benefit from mentor to mentee, RM makes possible bi-directional benefit for participants.



**Figure 2: The Reciprocal Mentoring Process**

At ECU it was decided that the RM approach would be best suited to BTs who are completing a Graduate Diploma (GD) because (unlike their undergraduate counterparts) GD students typically come to teacher training from industry settings, having worked and acquired expertise over several years. However, these attributes tend not to be recognised and valued in retraining contexts. All pre-service teachers tend to be viewed from a deficit perspective – that is, as novices with a lack of teaching knowledge and skills. Within an RM framework, however, prior skills and expertise are overtly acknowledged and, hopefully, highly valued. The (ECU) RM-PCEP is distinctive because both parties to the mentoring arrangement have the opportunity to derive *equivalent* benefit; the relationship in each setting is potentially a rewarding collaboration with bi-directional flow of benefit. Figure 2 (*above*) presents the RM process graphically.

### **Reciprocal Mentoring (RM)**

In Phase 1 (residency) the GD student is offered to schools as an artist-in-residence (AiR), a discipline expert who can enhance the school’s learning program. They are present in the school for several hours each week over one or two school terms, as negotiated by the AiR and the placement school. The residency occurs outside of the students’ usual pre-service education and practicums. The resident mentors staff and students on a complex high-end project that falls within the resident’s expertise (for example, high end graphic design or sculpture skills). In Phase 2 (induction) the mentoring process is reversed, and the resident (now a novice teacher) is mentored by the placement host. Thus, the RM experience is a ‘quid pro quo’ exchange of support that spans two consecutive years. Figure 3 (*below*) presents the RM model.

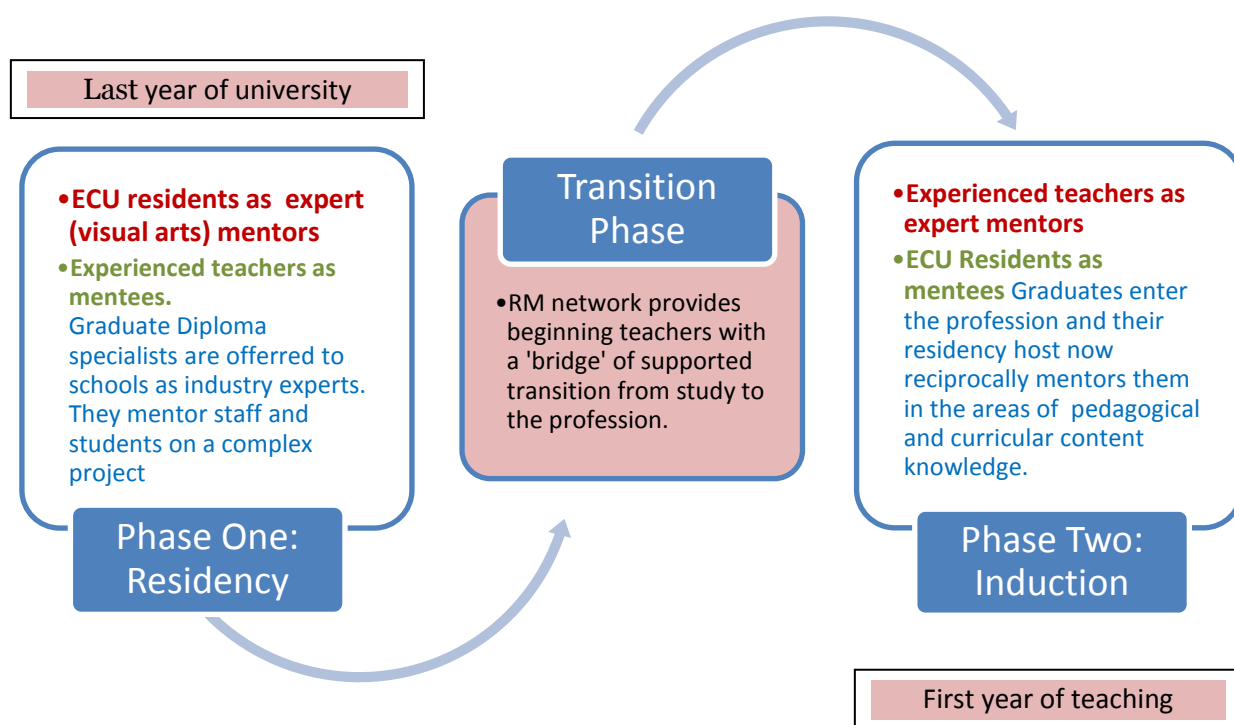


Figure 3: The Reciprocal Mentoring Model

The resident is matched to a host school on the basis of his/her high-level expertise/skills and the school's requirements. Schools are asked to describe a project that they would like the resident to undertake with students, and which is complementary to the skills of staff employed in the school. Careful matching of residents' skills to school needs/requests ensures they are viewed as an asset. There is a clear distinction between the standing of the resident in his/her role as an RM-AiR or RM-MiR etc and as a practicum teacher in training. Ideally, the residency school is not a teaching practicum school, so staff interactions with the resident are always framed as a meeting of differently skilled experts (e.g. an expert artist or musician paired with an expert teacher). The status residents are afforded in the school is important, because it affects their sense of self-efficacy. Retaining self-efficacy (confidence and belief in one's competency) has the potential to imbue the developing teacher with 'robust hope' and optimism for a positive future in teaching (Paris, 2010). In short, the RM residency is a situated learning context that allows legitimate peripheral participation in workplace learning over the course of a semester. The RM residency experience has the potential to enhance GD students' on-campus studies through two complementary streams of learning: one as expert mentor to others; the other as novice pre-service teacher immersed in school culture. Figure 4 (*below*) illustrates the residents' learning journey.

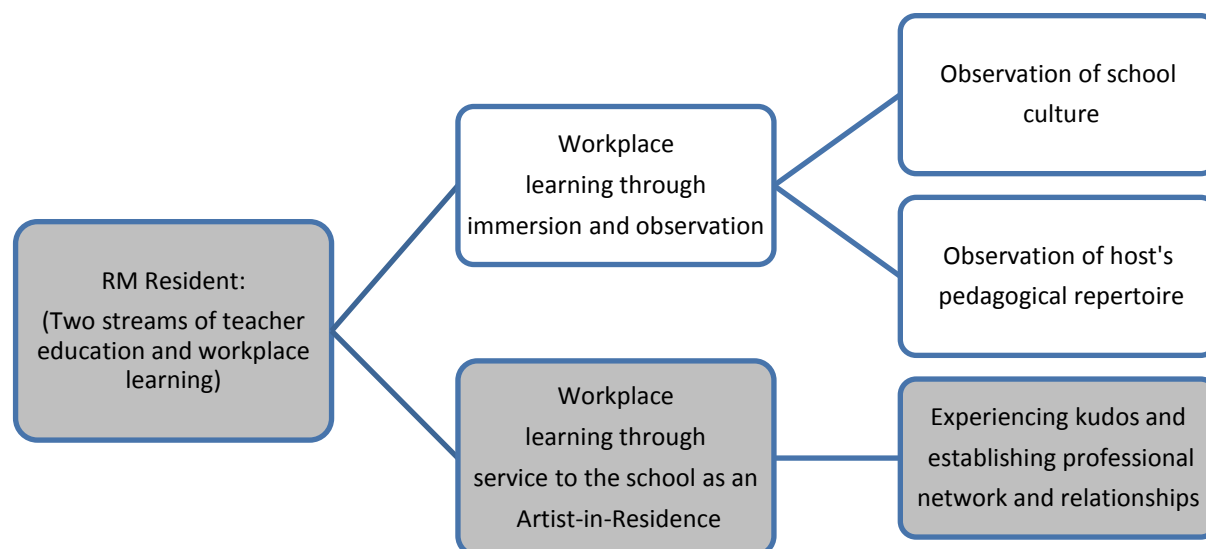


Figure 4: RM-PCE Residents' learning journey

In each of the six years (2007-2012) the RM program has been operating at ECU, 10-15 Graduate Diploma pre-service teachers have participated in residencies for a duration of one term (around ten weeks); occasionally, complex projects have been extended by mutual agreement. All visual arts GD students at ECU during this period were encouraged by university staff to participate in the RM program; additionally one music and three drama students have participated. The only requirements for involvement were expertise in a discipline area, and availability and willingness to take part. The program was voluntary, and not all visual arts GD students elected to participate in any given year (around 10% opted out). When demand for GD AiRs exceeded supply, other visual arts teacher education students from the Bachelor of Education (B Ed) program were invited to participate in the program. Whereas the B Ed participants generally had solid foundation knowledge in an art discipline, they typically lacked the high-end skill/expertise of their GD counterparts because they had not worked in an industry setting. They were, therefore, assigned to primary schools where classroom teachers tend to be generalists (with few skills in visual arts), thereby ensuring the AiR would be viewed as an expert by the placement host. Placement in a primary setting was deemed appropriate because WA art teachers are frequently required to work in both primary and secondary settings. The prospect of gaining experience working with younger children while developing a professional network was therefore attractive to the graduating B Ed students. As participants completed their residencies and shared anecdotes from their experiences with peers at ECU, the popularity of the program among new students increased. A 2007 pre-service teacher participant observed:

I feel that this type of mentoring has much merit as it allows a student to participate in a school setting without the pressure of assessment. Often our practicum experiences are so stressful and busy that you don't have the opportunity to simply step back and absorb the school environment from an observer's viewpoint. (Paris, 2009, p.105).

Increasingly, mentor teachers who hosted a residency have requested another in subsequent years. In this way, RM appears to offer at least a partial solution to the problem of 'mentor supply' through mutual reward and reciprocity. The *continuation* rate for mentors (i.e. remaining in the program from Phase 1 to Phase 2 in consecutive years and continuing to take on Phase 1 AiRs) has been 60% over the period 2007 to 2012. This continuation appears at odds with the literature, which suggests that most mentors complete one period of mentoring and then leave the mentoring program. The retention of mentors, therefore, is an

encouraging finding from the RM-PCEP research. Comments, such as the one below, typify previous mentor feedback about their program involvement:

Yes, my year 12 visual arts students were doing a chair sculpture project, so my AiR was perfect because she was able to show them some model making skills which I didn't have; and she was able to show us (staff) some new techniques involving plaster and a range of cutting edge effects. (2012 mentor).

Though much remains to be done in the area of attrition remediation, the research about 'reciprocity' and 'mutual reward' in FYE is producing encouraging results (Paris, 2010). The material that follows (RM-PCEP Phase 2) reveals findings that provide the basis for further inquiry and likely expansion of the existing program.

### **RM-PCEP Phase 2 trials**

The purpose of the RM-PCEP Phase 2 research was to examine whether FYE for visual arts BTs could be enhanced through the RM relationships established prior to course completion. The reciprocal dimension was particularly important because there is evidence that mentoring relationships generally have a high attrition; participants frequently suffer burnout or a loss of commitment to the mentoring process (Paris, 2010). The 2007 House of Representatives Inquiry into Teacher Training acknowledged the lack of sustainability in mentoring and called for universities to prioritise BT mentoring and induction processes. However, external agencies (i.e. those beyond universities) are often ill-equipped to facilitate new teachers' access to the mentoring they require because the costs are prohibitive. University staff, however well intentioned, cannot keep track of the progress of every graduate; as a result, mentoring partnerships tend to survive or fail on the basis of participants' commitment to one-another and the mentoring process. The RM model has been configured with this in mind, and draws on the following key concepts/understandings to facilitate strong mentoring relationships:

1. *Participant commitment to one-another* as the key mechanism for sustaining mentoring relationships over time.
2. *Residencies as the vehicle for building participant commitment* through reciprocity and mutual reward.
3. *The University as the facilitator of the residencies/mentoring*, acknowledging its positioning at the nexus of key stakeholder agencies/individuals (school sectors; professional associations; mentors; pre-service teachers).
4. Mentoring relationships that provide *critical support for BTS during transition/induction*. Acknowledgement that for some BTs this will avert attrition.

Moreover, the model has a simple design template that is not limited to any specific teaching specialisation:

- a. All GD students have high-end expertise arising from undergraduate studies and or industry experience.
- b. All GD specialists can enhance a school's learning program (especially if their skills are not present among the school staff).
- c. Successful residencies have the capacity to translate to strong mentoring relationships that survive over time, thereby contributing to attrition remediation.
- d. Ergo, if the model is successful in one discipline (e.g. art education), it is plausible to assume it may work equally well in others.

## Methods in the RM-PCE Project

During Phase 1 (2010) the residents maintained a log book of work completed, and collected visual material (photographs) of their work in progress. At the end of their Phase 1 placement, each of the residents responded to a lengthy evaluation survey describing:

- the completed project (for example, large scale painted mural, sculpture garden, staff professional development visual arts workshops etc)
- timeline
- resources/materials
- budget (e.g. school funded versus sponsorship)
- school sector (Dept of Education: DoE; Catholic Education: CEO; Independent Schools: AISWA) and primary or secondary
- placement host (role within the school – Head of Learning Area - HOLA; Teacher in Charge of Art - TiC etc)
- student involvement
- residency outcomes and official opening arrangements (coverage by the local newspaper etc)
- the impact the residency had on the then pre-service teacher's perception of their teacher education, readiness for teaching, and long-term suitability to the profession

The Phase 1 residents' 2010 surveys were used as a reference point, for qualitative and quantitative data gathered from BTs in 2011, their first year of teaching (Phase 2). The data were framed by BTs' perception of their mentoring experience and their success during their first year of teaching, and encompassed:

- initial surveys (collected March- April 2011)
- qualitative interviews (collected May-June 2011)
- evaluative surveys (collected July- August 2011)
- email communication during the year.

In conjunction with the administering of surveys and interviews to BTs, the mentors (MTs) were invited to comment on any aspect of the material they wished to question or clarify. Some MTs agreed to be interviewed about their role, but there were too few to be used only as a triangulation source for BT responses, so mentor data have been used in an ancillary capacity throughout this report. However, email communications between myself as the researcher and BTs/MTs during the entire data collection period (March – December 2011) were taken into consideration. BTs were provided with a research journal in which to record anecdotes, experiences and observations about their Phase 2 experience, but none of the journals were returned for analysis. Moreover, an incomplete set of final questionnaires was returned. As a result, the findings of this small inquiry derive predominantly from analysis and interpretation of BT perceptual data collected in the Phase 2 interviews, questionnaires, and email correspondence.

### Beginning Teacher Participants (BTs)

The BTs were of varying age (20s – 50s) and gender. They held either a Graduate Diploma (GD) or a Bachelor of Education (B Ed) from Edith Cowan University. Each had completed a RM residency in 2010 (Phase 1) under the supervision of an experienced teacher, who continued as their mentor during this inquiry. Therefore, a relationship already existed between each MT-BT pair prior to the research. Only 4 of the 11 BT participants

were working full-time at the commencement of the research, with the remainder looking for work, working in part-time or relief capacity, or working in an ancillary role (e.g. as a visual arts technician in a school).

### **Mentor Teacher Participants (MTs)**

The MTs were recruited from the Art Education Association of WA (Industry Professional Association); they had expressed interest in the program, were available to mentor, had 5 or more years' teaching experience, and had been involved in an RM residency before this research. They represented DoE, CEO and AISWA sectors. Each of the mentors was provided with training for their role prior to the commencement of the Phase 1 residency (facilitated by ECU). The AEA/WA has a long history of visual arts education advocacy for pre-service teachers; however, mentor supply has been particularly problematic in recent years as previously described (e.g. in response to curriculum renewal pressures). It was hoped that, among other outcomes, the research might establish the efficacy of RM in addressing mentor supply shortages.

### **Survey 1 (Pre-Test)**

The intent of the first questionnaire was to record the BTs' optimism and resilience as they moved from university to work. Hong (2009) identified resilience as a key determinant in BT retention and, as such, it was deemed important in the inquiry. The research instrument was framed on BT expectations of the support their RM mentor would provide in the transition-induction period (typically the first six months) and beyond. The questionnaires were scheduled to be administered in January 2011 (before most BTs had commenced work), but due to external delays in research funding it was conducted via email; it comprised 30 questions, with an associated 5-point Likert Scale. Participants were invited to make additional comments at the end of the survey, but the majority declined to do so. The surveys were coded by:

- grouping similar questions into key sets,
- quantifying the response rate as a percentage agreement within the group, and
- calculating an associated mean score for the set.

The results of the initial survey are presented in Table 1 (below) identifying the frequency of BTs who afforded particular rankings to a given question. The data are followed by a brief analysis and conclusions. The analysis of the questionnaires revealed '% agreement' rankings between 70-90 % in each of the four sets (pastoral care, professional knowledge, planning and control of the mentoring process) thus indicating that BTs held moderate to high positive/optimistic expectations of mentor support.

The details of the four sets follow:

- Set One (Pastoral Care): 80% of BTs expected the mentor would offer encouragement, advice and emotional support.
- Set Two (Professional Knowledge): 90% of BTs expected that their mentor would provide support through the sharing of knowledge, resources and experience.
- Set Three (Planning): 70% expected the mentor to assist with professional reflection and strategic planning.
- Set Four (Control): 70% of BTs expected that the mentor would control (direct) and sustain the mentoring process.

Question	Not at all	To a minor extent	To a moderate extent	To a major extent	Can't judge	% Agreement
1			3 (BTs of 11)	8 (BTs of 11)		100%
12		1	4	6		90%
13		1	5	4	1	80%
14	3		3	1	4	40%
25			2	9		100%
26			4	7		100%
27		3	4	4		70%
29	2		4	5		80%
<b>Set Mean</b>						<b>80%</b>

Set 1: Pastoral Care (BT expectation of the mentor's capacity to provide emotional support)

Question	Not at all	To a minor extent	To a moderate extent	To a major extent	Can't judge	% Agreement
2		1 (BT/11)		10 (BT/11)		90%
3		1		10		90%
7			3	8		100%
8		2	4	5		80%
9		2	6	3		80%
<b>Set Mean</b>						<b>90%</b>

Set 2: Knowledge (BT expectation that the mentor has valuable knowledge-expertise to share)

Question	Not at all	To a minor extent	To a moderate extent	To a major extent	Can't judge	% Agreement
4	2 (BT/11)		4 (BT/11)	5 (BT/11)		80%
5	4		5	2		60%
6		2	5	4		80%
10	2	1	7	1		70%
11	3		5	3		70%
15	2	1	6	2		70%
16	1	2	7	1		70%
17		1	8	2		90%
<b>Set Mean</b>						<b>70%</b>

Set 3: Planning (BT expectation that the mentor will collaboratively plan for success)

Question	Not at all	To a minor extent	To a moderate extent	To a major extent	Can't judge	% Agreement
18		2 (BT/11)	4 (BT/11)	2 (BT/11)	3 (BT/11)	50%
19	1		4	2	4	50%
20		3	3	5		70%
21		2	9			80%
22		2	8		1	70%
23	2		5	3	1	70%
24		4	5	2		60%
28	2	1	6	2		70%
30		2	9			80%
<b>Set Mean</b>						<b>70%</b>

Set 4: Control (BT expectation that the mentor will direct/manage the mentoring process)

**Table 1: BT Survey 1 – Results**

The positive results are unsurprising because Phase 1 *Residency* placement evaluations were enthusiastic and optimistic, as in the following example:

BT-1: *I had a great experience ... it was a great fit ... I had skills in areas that my mentor did not. This meant I was able to provide some form of learning for both the students and teachers. My mentor will be writing an article in the Art Education Association journal about the experience of having an artist-in-residence and some of the work we did will be displayed in the end of year*



*exhibition. I'd rate this experience very highly ... it assisted me a great deal learning to become a teacher*

## Interviews

The interview schedule was administered and coded by two research assistants (RAs) and analysed by the researcher. One interview was unable to be collected.

- The interview schedule comprised 5 key categories configured as semi-structured questions designed to allow a conversational exchange between the RA and respondent.
- The research instrument was trialled with three of the mentors.
- Minor changes were made and two sets of BT interviews were conducted.
- Each interview had a duration of 30-40 minutes.
- The first set of five interviews was audio recorded, transcribed verbatim and also coded using Artichoke software. Emergent themes were extracted from the data and a matrix was constructed.
- The second set of five interviews was collected via telephone, with responses tabulated into the matrix and reconciled against the emergent themes arising from the first set. Any additional themes arising from the second set were embedded in the matrix.

Interviews were initially coded through the use of *Artichoke*, which is a computer program specifically designed for handling audio-recorded and video-recorded qualitative data (Fetherston, 2009). Artichoke allows:

- Each 30-second segment of (recorded) interviews to be open-coded.
- The open-coding captures participants' beliefs, as well as the patterns among their statements, by establishing the frequency of the topics reflected in their beliefs.

The (Artichoke) coding revealed 8 perceptual sub-topics in the interview responses:

ST-1: The impact of the residency on teacher education.

ST-2: Access to employer-provided induction was highly variable.

ST-3: Mentors (RM and others) made a positive difference.

ST-4: There were professional challenges.

ST-5: Counselling and emotional support/mentoring.

ST-6: Pedagogical/subject discipline/curricular content knowledge mentoring.

ST-7: Strategic planning for improvement mentoring.

ST-8: Reciprocity between mentors and mentees.

Following the identification of sub-topics, I:

1. interrogated each interview record for BTs mention of the eight sub-topics;
2. assigned a value (ranging from '5' to '1') to each sub-topic for each BT
  - 5 = evident to a major extent
  - 4 = evident to a moderate extent
  - 3 = evident to a minor/some extent
  - 2 = not evident at all
  - 1 = can't judge/not mentioned in the interview
3. calculated the percentage agreement across the group using the *frequency* with which a value of '5' (evident to a major extent) or '4' (evident to a moderate extent) was assigned to a particular sub-topic.

The BT evaluations of the RM-PCEP Phase 2 mentoring experience collected in surveys 1 and 2, qualitative interviews and also as expressed in email correspondence, were collated into the research matrix and confirmed with participants. The matrix was configured as a

table with the assigned value for % agreement for each BT against each sub-topic tabulated at the intersection.

**Member Checks**

The RAs undertook member checks via telephone with as many of the BTs and MTs as possible to confirm that the assigned matrix values aligned with their intended description of experiences and perceptions.

**Emergent Sub-Topics**

**The Impact of the Residency**

‘Competency transference’ was a focus of this sub-topic. The AiRs were asked whether their experience in the residency exerted any impact on their teacher education outcomes or confidence about their suitability to the profession. Table 2 (*below*) presents the interview response values for this sub-topic. Please note that each BT has been ascribed a number and represented as BT-1, BT-2 etc.

Scale	5 – to a major extent	4 – to a moderate extent	3 – to some extent	2 – not at all	1 - cant judge					
Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Residency Impact	5	5	5	4	3	4	4	3	3	3

**Table 2: Impact of the residency on pre-service training and readiness for teaching**

The significant result on this sub-topic is that RM Residencies appeared to both complement and enrich university-provided practicum and teacher education experiences for the BTs. The majority of BTs in the research considered that the ‘behind the scenes’ understanding of school operations afforded by the residency enriched their teacher education studies and enhanced their readiness for teaching.

**Employer-provided induction**

Induction programs for BTs are supposed to introduce and initiate BTs to their school environment; this includes familiarisation with school policies and protocols specific to individual workplaces and, more generally, to the profession as a whole. The BTs in this study were working in various employment contexts (from full-time to relief work) and over half encountered difficulties in accessing employer-provided induction. Effective induction was most readily available for those in full-time (ongoing or fixed term) employment, and those with periodic employment were at risk of missing out altogether. Table 3(*below*) presents the interview response weightings on this sub-topic.

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Phase 2	4	3	3	5	3	1	4	3	3	2

**Table 3: Access to induction**

Because of the small sample and the fact that so few of the participants were in full-time work, the effectiveness of employer-provided induction programs could not be evaluated. Importantly, however, the ECU RM-PCE program mentors provided BTs fortunate enough to be in full-time employment with insider knowledge about schooling and a critical safety net.

**Mentors as Critical Friend**

A critical friend is “a trusted person who asks provocative questions and critiques a person’s work” (Costa & Kallick, 1993, p.1). Ideally, mentors who act in the role of critical friends offer the BT a safe context in which to talk openly about their experiences, fears and aspirations. As noted in the review of literature, BTs who are unable to access the support of a mentor are at high risk of succumbing to attrition, whereas BTs in receipt of mentoring support generally experience improved outcomes (Hartsuyker, 2007). In this study, *all ten* BTs who agreed to be interviewed claimed they had been able to access the support of mentors/critical friends in Phase 2 (induction). Four BTs identified their RM mentor as their main support; three identified other mentors as their main support; one relied equally upon RM and other mentors; still another said she valued mentors as professional contacts but did not consider she *needed* a mentor in order to cope with professional challenges. Notably, the first mentor relationship each BT developed was one facilitated by the university in either the practicum or Phase 1 research context, with the latter continuing in the form of *external* mentoring in Phase 2. Table 4 (*below*) presents the interview weightings on this sub-topic.

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
RM mentor	3	5	5	3	4	3	3	2	4	4
Other mentor	5	3	-	4	5	4	-	-	-	-

**Table 4: Mentors as critical friends**

The main result for this sub-topic was that MTs in their roles as critical friends made a positive difference in FYE. The BTs reported experiencing several challenging circumstances and negative emotions during the first year. Many conveyed that their mentor helped them to identify and implement practical solutions to the challenges they encountered. *Reciprocal* Mentoring (i.e. Phase 2 mentoring in return for BT contributions in Phase 1) was critical for two of the BT participants in surviving FYE, with the remainder ascribing benefits ranging from collegial networks to more general support.

**Navigating Professional Challenges**

Attrition forces for BTs worldwide include professional isolation, heavy workload, irregular access to paid work, school politics and culture, generalised personal stress and anxiety, and loss of self-efficacy (Johnson et al, 2010). Five of the BTs in this research encountered professional challenges that required the support of a mentor; two reported significant/major negative impact from professional challenges; and three other BTs described moderate negative impact. Four experienced little impact; and one reported no

discernible negative impact. Table 5 (*below*) presents the interview response weightings for this sub-topic.

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Negative Impact	2	5	4	4	3	5	3	4	3	3

**Table 5: Impact of professional challenges mentoring**

The significant result on this sub-topic was that securing employment was challenging for the group as a whole. The MTs were particularly helpful in this regard, with many securing relief and part-time employment opportunities for the graduates in their own (the MTs) school or acting as referees for their BT, for positions at other schools. The Australian education profession has not yet responded to the question of assured access to employment for BTs. It seems reasonable to assume that, in the face of non-employment, many graduates would re-evaluate their suitability to teaching.

**Pastoral Care, Emotional Support, Counselling, Guidance/Advice**

In this study, six of the ten BTs who agreed to be interviewed reported major or moderate positive impact from pastoral care ‘counselling or emotional support’ mentoring. Over time there was some evidence that the mentoring helped develop resilience. Table 6 (*below*) presents the interview response weightings for this sub-topic.

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Pastoral Care	3	5	5	4	2	3	4	2	4	4

**Table 6: Pastoral care, counselling and emotional support mentoring.**

The significant result for this sub-topic was that pastoral care helped avert attrition for at least two of the BTs (BT-2 and BT-3). The emotional support implicit in pastoral care (combined with reflective practice) allowed the BTs to acknowledge their successes and it cushioned negative feelings of self-doubt. It seems fair to conclude that the MTs who offered strong pastoral care to their mentee helped the BTs to remain optimistic about their suitability for the profession.

**Professional Knowledge Deficits**

In this study the MTs were all drawn from the Art Education Association of WA (industry association); they had 5 or more years teaching experience, with many holding positions of seniority within their school. As a result, they exemplified the benefits identified by Ingersoll and Strong (2011) for shared conceptions of teaching (art teacher mentor- art teacher mentee). Additionally, when the MTs were not based at their BTs’ employer-school, they were willing (at the commencement of the Phase 2 research) to meet regularly with their mentee. It seems likely that this willingness emanated at least in part from the relationship established in the phase 1 residencies in the previous year (2010). The interview data revealed that six of the ten BTs described major or moderate benefit from being able to access their mentor’s subject discipline and related professional knowledge on the following matters:

- visual arts matrices, yearly programs and specific art projects
- studio materials/techniques

- art history movements and visual arts concepts
- work samples and studio exemplars (actual student work etc)
- visual arts teaching strategies (demonstrations etc)

Table 7 (*below*) presents the interview responses on this sub-topic.

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Professional Knowledge	3	4	5	4	2	3	4	2	5	5

**Table 7: Professional knowledge mentoring**

The significant result for this sub-topic was that, despite their ‘expert’ status as artists (and pre-service teacher training), many of the BTs lacked confidence in fulfilling their professional teaching responsibilities. BTs’ mentors were able to support their FYE through the provision of guidance and advice, particularly in programming and delivery of age-appropriate projects.

*7. Planning strategically for improvement:*

In this research six of the interviewees thought mentoring that encompassed strategic planning for improvement exerted a major or moderate beneficial impact on their FYE. A further two assessed that this had been the case to a minor/some extent, with the remaining two reporting no discernible impact from forward planning for improvement. Table 8 (*below*) presents the interview responses for this sub-topic.

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Strategic Planning	3	4	5	4	2	3	4	2	5	5

**Table 8: Strategic planning mentoring**

The key result in this sub-topic was that the support of the external critical friend (combined with reflective practice) enabled the majority of BTs to safely voice their fears, acknowledge their successes, and strategically plan for success.

**Reciprocity in Reciprocal Mentoring Relationships**

In both phases (Phase 1 residency and Phase 2 transition/induction) the RM model embraced the concept of mutual reward as a means of sustaining meaningful mentoring relationships. The MTs’ contribution is tangibly rewarded in the RM-PCE project; however, in reverse order. In an innovative variation on past approaches, the mentor is offered reward *in advance* in return for ‘future’ mentoring. Overall reciprocity allows both participants the potential for an ‘egalitarian’ exchange of knowledge and expertise, which in turn has the capacity to sustain their relationship as they move from Phase 1 to Phase 2. Without exception, the BTs in this study reported having had a reciprocal experience in the Phase 1 (residency), where they both learned from and taught something to their mentor. They described teaching art techniques to their mentor; and learnt/observed their mentor using effective behaviour management strategies. In this way the Phase 1 experience had a reciprocal dimension and offered both participants mutual reward. Six BTs reported reciprocal mentoring in Phase 1 *alone*, though the majority rated this as evident only to some/minor extent; four reported some evidence of reciprocity *in both* phases, with this occurring to a ‘major extent’ in Phase 1 and less so in Phase 2. Although there was evidence of MTs being ‘emotionally invested’ in the success of their BT across the first year, the data did not support any meaningful conclusions about reciprocity *between* phases (i.e. mentoring

support in phase 2 as a ‘return on investment’ of goodwill generated by the BT in phase 1). Table 9 (*below*) presents the interview response weightings for this sub-topic:

Interviews	BT-1	BT-2	BT-3	BT-4	BT-5	BT-6	BT-7	BT-8	BT-9	BT-10
Phase 1	5	4	5	3	3	3	3	3	3	5
Phase 2	3	5	5	-	-	-	-	-	-	3

**Table 9: Reciprocity in mentoring relationships**

The key result for this sub-topic was that *reciprocity* was a mechanism that sustained some of the mentoring relationships in a ‘quid pro quo’ exchange of skills/knowledge in both of the discrete phases (1 or 2). However, evidence of Phase 2 interactions being a pay-back for services rendered by the BTs in Phase 1 remained inconclusive. In the absence of MTs declaring this as their motivation for supporting the BT in Phase 2 (or the BTs expressing this view), the research questions remains unanswered in this regard. A more comprehensive investigation of MT motivation/BT perception is therefore warranted.

### Survey 2 (Post-Test)

The purpose of the final questionnaire was to ascertain the BTs’ perception of the quality and efficacy of the RM-PCEP mentoring experience at the *end* of their first year of teaching. Despite the researcher’s and RAs’ attempts to collect a final questionnaire from each BT, only three were returned. Each survey response had similar rankings for the questions, indicating that the three participants considered:

- their RM mentor had made an invaluable contribution to their FYE
- induction had been adequate
- they were coping effectively with the demands of teaching and felt they were likely to be working in the profession in 5 years’ time.

As it happened, these conclusions correspond with the findings of the interviews.

### Results and Recommendations

In this study I examined the FYE of 11 beginning visual arts teachers following their participation in a RM residency facilitated by Edith Cowan University in 2010. BT and MT data were collected through surveys, interviews, and email correspondence, which upon analysis suggested the residencies were successful in both primary and secondary schools. These are the study’s key findings:

1. Phase 1 residencies complemented and enriched practicum and teacher education learning experiences.
2. In the Phase 2 program MTs provided BTs access to insider knowledge about schools/schooling.
3. MTs made a positive difference in Phase 2 FYE, and actually helped avert attrition for some BTs.
4. Securing employment was challenging for the BTs as a whole. The mentors were particularly helpful in this regard, with many sourcing/securing relief and part-time employment in their school and acting as referees for positions in others for their BT.
5. The pastoral care provided by MTs in Phase 2 helped avert attrition for some BTs. BTs acknowledged that the emotional support they received (combined with reflective practice), helped them to face challenges and celebrate successes.

6. Notwithstanding their 'expert' status as artists (and their intensive pre-service teacher training), most of the BTs lacked confidence as practitioners. Their mentors were able to support them through the provision of guidance and advice particularly in curriculum programming and delivery of age-appropriate projects.
7. The support of the external critical friend (combined with reflective practice) allowed BTs to strategically plan, even though many did not have permanent employment in their first year.
8. *Reciprocity* appeared to sustain some of the mentoring relationships in a 'quid pro quo' exchange of skills/knowledge in each of the discrete phases (1 or 2); however, evidence of Phase 2 interactions being a pay back for Phase 1 remained inconclusive.

The results of the inquiry indicate that in this time (2011) and place (WA) a sample of beginning art teachers faced several exigencies. They had difficulty attaining employment, variable access to induction, and their self-perceived deficits led to stress and anxiety. However, mentors (both RM and others) apparently made a significant and positive contribution to helping the BTs deal with these issues; also, it seems likely that at least some of the BTs would have succumbed to attrition had it not been for the support of their MTs. Whereas the overall findings of this inquiry are positive, and appear to support the research hypothesis 'that mentoring relationships established *before* course completion are likely to provide valuable support during transition and induction experience', it is important to note the limitations of these findings. The current inquiry was both of a small scale (11 BTs from one university) and limited to WA visual arts teachers. The eight sub-topics nonetheless provide insights that have wider application for teacher recruitment and attrition, especially in Australia. The following recommendations arise from the research:

1. Further research on RM models should be undertaken, extending the range of BTs' disciplines and with larger cohorts.
2. Further research on RM mentor motivations should be undertaken.
3. Professional sharing of RM experiences/programs among higher education providers should occur and collaborative endeavours should be pursued.

I was able to establish that all of the BT participants had worked as teachers in some capacity by the end of their first year (2011). A sobering codicil to this, however, was that half of the BTs had not yet achieved *full-time* ongoing employment and were working in a sporadic (relief) or part-time capacity. As a result, one BT had returned to the UK, and the researcher received a number of requests for references in support of his application to work as a supply teacher in that country. The challenge of 'limited access to full-time employment' following course completion, (and the attendant attrition implications), present as a BT 'equity issue' which is further considered in the reflections that follow.

## Conclusion

New mentoring approaches are crucial to meeting the needs of 21st century BTs and sustaining mentor supply. However, gaining employment may yet emerge as the greatest challenge to BT retention. Graduates who fail to achieve reliable full-time employment (as evidenced in this inquiry) are denied opportunities to practise their craft and consolidate their training. The first year in the teacher life cycle is a period of critical 'psychological' vulnerability; failure to secure employment may have implications for BTs' self-efficacy, self-belief, professional optimism and retention in subsequent years. Past responses to this challenge of work access in the WA setting (in the 1970s and 1980s) have included government-sponsored scholarship programs in which university tuition was waived in return for a two-year period of 'bonded' employment. Bonded BTs were assigned to schools (in

both urban and rural settings) experiencing teacher shortages and, in return, given the opportunity to both work and consolidate their training with assigned mentors. As it happened, this mentoring scheme was not effective; however, it is possible that a return to a 'bonded placements' system (or similar work-assurance program) in conjunction with mentoring innovation (RM and other), may offer a viable solution to the work-access impediments currently faced by new teachers in many parts of Australia. Failure to respond to this challenge is likely to exacerbate the attrition statistics, which have exerted a debilitating influence on the profession over the last three decades. Policy makers and stakeholders alike must now acknowledge and respond to this pressing equity issue.

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