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Teacher interns, metacognition and identity formation

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Abstract

There is a dominant paradigm of teacher education within the teaching profession; that only through the experience of undertaking professional practice can a student become a teacher. This approach, the ‘apprenticeship of observation’ model (Borg, 2004 using the term coined by Lortie, 1975) describes the way in which teacher education students are encouraged to model their teaching practice and strategies on the experienced teachers they encounter during their teacher education programs. This approach however tends to minimise other dispositional factors occurring before, during and after teacher education programs, such as an intern’s capacity to internalise and modify behaviour when encountering new situations. Importantly, the impact of metacognitive development on an intern’s professional identity formation may be overlooked by observers. There is little explicit attention given to the mentor teacher’s conception of a metacognitive basis for this reaction, rather the explanation is experiential and instructional in nature. Additionally, while some research has occurred into the way in which social support networks support positive identity formation, this theme is yet to be fully explored. In order to illuminate both the professional identity and metacognitive development of interns, an RHD project will use both qualitative and quantitative methods to provide a framework for measuring these factors and evaluate their relative importance for success within an internship.

When considering the interaction between learned experience and metacognitive development, current teachers and teacher educators are not generally in agreement as to the relative importance of these factors. Teachers approach their work from an instructional/procedural position, and teacher educators often emphasise the importance of other factors that impact on teaching practice, such as pedagogy, psychology and an understanding of social groupings as impacting on a teacher’s success within a classroom environment. Importantly, teachers may view these emphases with suspicion as it can be interpreted that their role within the classroom is of little benefit to their students, which in turn may diminish their professional worth and status. By stressing the experiential component of teacher education, teachers are therefore able to maintain a gatekeeper attitude to prevent unwelcome newcomers to their ranks who may be inclined to view professionalism differently.

An alternative approach to this is to consider the influence of mentor teachers on the metacognitive development of interns, that is, the automaticity of reactions to events through rehearsal and effective strategy choice. It can also be posited that metacognitive development is a necessary precursor to professional identity formation and socialisation into the teaching profession. By analysing interns’ interaction with teachers, it may be possible to discern the way in which teachers, implicitly or explicitly, require an intern to model their teaching practice on that which is observed. As such, an examination of the relationship between the factors which influence socialisation of interns and the way in which they describe their development may demonstrate higher order metacognitive awareness in interns. In order to evaluate this development, qualitative responses derived from participating interns’ responses to asynchronous online discussion boards will be triangulated with third party evaluations of the interns’ progress via their final internship report. Additionally, quantitative analysis of participating interns’ final report may provide an opportunity to develop a hypothesis as to whether interns who use a social support network are more or less

likely to experience success in their internship, and how they interpret such success prior to receiving their reports. The assessment criteria within these reports may provide a useful third party perception of the intern's socialisation and cognitive development which may prove useful in developing a framework for understanding the nature of teacher identity through the internship.

Introduction

This paper describes a proposed research project to be conducted by a Research Higher Degree student at the University of Newcastle over 3 semesters from semester 2, 2009 to semester 2, 2010. It will study the metacognitive development of approximately 300 teacher education students as they undertake their final professional experience in early childhood, primary and secondary settings over a 10 week period, known as internship. The project will involve the analysis of a combination of quantitative demographic data obtained through the survey instruments and qualitative responses obtained through the use of the students' home institution's discussion board. All students will be assigned a pseudonym with which to supply their reflections about the progress of their internship. A final set of data to be obtained is their concluding internship report which is prepared by their colleague teacher – the teacher with whom they have taught most closely during their internship and endorsed by a supervisor appointed by their home institution. This report will be examined qualitatively to determine whether or not the student has been able to develop skills across multiple domains and has sufficient metacognitive self-awareness to honestly evaluate their own experiences while completing the internship process. Domains such as classroom practice, interactions with other teachers and the development of teacher professional identity will be the major focus of this analysis. In essence, the project is an attempt to examine the interaction between an intern's growing self-awareness as a professional teacher and the cognitive development that occurs during this intense period of observation – both of the self and others as teachers.

Theoretical framework

A major component of the theoretical basis for this project is the concept of metacognitive development. This process, generally understood as the cycle of planning, monitoring and evaluating of actions undertaken as part of overcoming challenges, can be readily applied to the experiences of interns, as they are taking part in a formal process of outsider evaluation of their readiness to enter the teaching profession. Therefore, the multiplicity of tasks they are expected to be able to perform during this period can be understood as forming the components of the final practical hurdle to be overcome – the successful completion of a period of time in which they are expected to perform all the tasks of a teacher in the classroom. In fulfilling and occupying this space and identity, they are also expected to be able to perform the technical and procedural functions of the teacher, that is, planning and delivering appropriate content, managing classroom behaviour, evaluating and assessing student work, liaising and negotiating with colleagues, and becoming involved with the wider school community. Each of these discrete tasks requires the intern to integrate knowledge and experiences from their studies within the home institution, previous professional development experiences in other settings, and can also involve the application of less measurable personality traits. Schraw (1998) proposes that as expertise develops in particular learning domains, metacognitive awareness becomes more general and transferable across other domains. It can be seen therefore, that for interns, identification of these teaching skills can often be described by others, particularly mentor teachers, as being 'a natural in the classroom' or 'a born teacher'. Therefore, by asking students to provide observations concerning their internship as they are in the process of completing it, a dissection of the interaction between technical skills and more intangible personality related aspect of teacher identity formation may be observed. This in turn may show that those intangible aspects are in fact learned schemas of behaviour which have become somewhat automated through previous practicum experience and observations of other teachers over the course of their studies.

In effect, the desirable traits of ‘teacher’ are the intern’s modelling of more experienced teachers’ practice and thus interns are mirroring normative practice (Tabachnick, Zeichner, Densmore, Adler and Egan, 1982). The intern therefore has appropriated behaviours and practices of other teachers to form the basis of strategies that will assist them with the less automatic metacognitive tasks of planning their actions within the internship setting and monitoring the success or failure of those actions relative to the intended result and the expectations of their mentoring teacher. Finally, the intern will evaluate whether or not success or failure can be attributed to their own understanding of their strengths and weaknesses, experience within the setting, or, more critically for issues of failure, whether or not it can be attributed to their relative lack of formal teaching experience. It is surmised from other research studies that the perceived inexperience of interns may be detrimental to the intern’s self-confidence and resilience in the crucial early years of teaching.

The specific areas of interest to this project are those which are aligned to dispositional factors relating to the development of professional identity and metacognitive awareness of self as teacher. Participants will be asked to not just reflect on what they thought about a particular situation, but also what they felt about it and how they might adjust their teaching practice to improve or change the situation. While reflection is rightly considered to be of significance in the education and training of effective teachers (Hatton & Smith, 1995), it may not provide a sufficient number of strategic choices for interns as they evaluate their past actions for future use. Therefore, it is proposed that by using the tools of metacognitive awareness and an increased emphasis on the emotional responses to situations, interns may be better placed to develop dispositions that support their growing professional identity.

As the responses to the discussion board are analysed, it is anticipated that the metacognitive processes of interns will be isolated from other aspects of their teaching practice, such as content knowledge. This will enable the development of a measurement tool for evaluating the thinking processes and responses to situational contexts of interns. In the long term, it is hoped that by providing a mechanism for social support during internship, and a location which allows participants to monitor and evaluate their actions, interns will enter the teaching profession with a heightened level of self-awareness of their strengths and weaknesses to enable them to better deal with challenging situations.

Induction and socialisation of interns

There has been a significant amount of research on the importance of the way early career teachers are inducted into their chosen profession (Gore, Williams, & Ladwig, 2006; Manuel, 2003). Much of this research focuses on the problems of retaining beginning teachers through the critical first few years of teaching, and recognises that the discourse between experienced teachers and beginning teachers can have an effect on the beginning teacher’s decision to remain within the profession (Angelle, 2002; Bartlett, 2004; Carter & Francis, 2001; Cho & Kwon, 2004; Darling-Hammond, 1990; Ewing & Manuel, 2005; Galton, MacBeath, Steward, Page, & Edwards, 2004; Gore et al., 2006 citing Ingersoll, 2001; Kwan & Lopez-Real, 2005; Ramsey, 2000). Perceptions about the difficulty in retaining effective beginning teachers have also been borne out by the international experience (Angelle, 2002; Cho & Kwon, 2004; Darling-Hammond, 1990; Galton et al., 2004) where attrition rates for beginning teachers are similar to those found in New South Wales of up to 50% (Manuel, 2003).

Research has been conducted on the use of pedagogy (Gore et al., 2006) and mentoring (Angelle, 2002; Carter & Francis, 2001; Kwan & Lopez-Real, 2005) as methods of ameliorating the many concerns beginning teachers have during their first few years of teaching. While there has been research undertaken on the on the process of socialising teachers (Cochran-Smith & Lytle, 1993;

Zeichner & Gore, 1990), there has been little direct research on the socialisation of interns (student teachers in their final practicum as part of a four year double degree, an end-on Diploma of Education or Bachelor of Education conversion program). An exception is Tabachnick, Popkewitz and Zeichner (1979), however this study relates to the political and social emphasis on the practicum in teacher education programs. A further exception is Su (1992) however this study places students and teacher educators in a position of conflict over the relevance and appropriateness of course content for a teacher education program. These student teachers occupy a liminal space between being a university student and a teacher (Lipka & Brinthaupt, 1999). They are generally encouraged by their colleague teachers (the school teacher who is working most closely to them) to behave like ‘real’ teachers (Pintrich, 1990). This encouragement is supported by their university lecturers together with the added requirement of integrating their university studies into their teaching practice – their pedagogy. It has been reported that for some interns, attempting to practice teaching strategies such as those described by university lecturers is met with disdain and disapproval by the colleague teacher ((Schempp, Sparkes, & Templin, 1999; Tom & Valli, 1990; Wunner, 1993). Therefore, the tension between theory and practice for teacher interns places interns in a problematic situation which is currently unresolved.

Psychological factors influencing socialisation of interns

There is growing interest in the interaction between cognitive and social factors in teacher development. While there are a number of differing theoretical approaches, several outlined by Pintrich (1996) are worth investigating for their usefulness in determining the relative importance of these factors for intern socialisation. In particular, Pintrich discusses Perry (1970, 1984) whose study characterised transition stages through which college students pass during the course of their program. This could have relevance to interns who traverse significant cognitive and social points in a relatively short time frame. Adaptation of Perry’s model could provide a method of gauging interns’ transitions at critical points before, during and after the internship.

While Perry’s model is concerned with the transformative nature of tertiary study on metacognitive processes, and by necessity was undertaken over a longer period of time than a 10 week period, it can be hypothesised that elements of his model may be used to reveal some of the intensity which characterises the internship for many students. Pintrich (1996) also discusses the work of Markus and Wurf (1987) which comprises a framework that combines cognitive processing models and recognition that experiential triggers affect metacognitive and reflective behaviour in the future. This has relevance to internship as it provides a rationale for examining the way in which reflection can allow for metacognitive changes in action.

Gold (1996) provides an overview of some of the early research into the interaction between socialisation theories and cognitive development. In particular, Gold discusses three important research studies (yet to be examined in detail) by Chapman. In the first (1983), Chapman concluded that “environmental determinants” impact significantly on the socialisation process as much as the cognitive, giving equal weight to both spheres of influence. This has important implications for interns, as the cognitive development they have undergone prior to embarking on their internship, whereby they have acquired knowledge of content, pedagogy and other related areas, will be mediated by the environment in which they undertake their internship – the school and its teachers. Socialisation therefore, using Chapman’s conclusions, is as much a product of the period of time spent prior to entering the school as it is a product of the catalyst of the experience of teaching in a formal setting.

As described by Gold, Chapman’s 1984 and 1986 studies appear at first to be contradictory. In the first, Chapman identified the privileged role of the expert in producing a socialisation effect.

Chapman indicated that this authority does emerge more prominently than other socialising factors identified in the 1983 study, but did conclude that, as with any other environmental factor, the positive or negative effect of the expert was enhanced by the underlying dispositions and cognitive reasoning ability of the subject. Therefore, the metacognitive development of the subject perhaps provides for recognisable patterns of behaviour that can be acted on. In this way, if the subject is aware of his or her previous reactions to similar situations with authority figures, he or she may have a wider ‘toolbox’ of strategies to deal with the new situation. This may support positive socialisation and metacognitive development for interns, particularly if they are provided with metacognitive tools from which to refer.

An extension of the second study (published in 1986) established that authority figures may also play a significant role in developing resilience in subjects, which has considerable implications for the way in which interns may or may not model teacher behaviour as demonstrated by the experienced teacher with whom they are paired. In terms of experienced teachers’ ‘craft knowledge’ (discussed in more detail starting on page 7), this may provide another point of interaction between the metacognitive processes occurring during the internship, and the effect these have on intern socialisation.

Gold (1996) suggests that psychological support is critical for new teachers, and while it is often described as ‘emotional’ support, this can be reimagined as the development of metacognitive strategies to enable interns to develop professional attitudes and dispositions. Significantly, the educational institution to which the intern belongs is nominated as the most appropriate place in which such support should occur. As a starting point for this strand of research, Tabachnick et al (1982) assert that the socialisation process where interns are encouraged to conform to the structure and organisation of schools reinforces normative practice in interns, perhaps reflecting an intern’s desire to teach in a school which most reflects their current assumptions concerning the purpose of teaching as a profession. It may be hypothesised that for interns, there is a significant power imbalance inherent in the way in which they are evaluated by their mentor in order to determine whether or not the intern can successfully complete the internship and thus gain their formal qualification. This imbalanced power relationship may result in an even greater pressure on interns to model their mentor’s teaching practice than in beginning teachers who have already gained their qualification. A further outcome could be that interns are placed in the invidious position of developing dispositions that may be at odds with their original metacognitive professionalism due to the demands of their mentor teacher. The use of a peer support network may therefore assist interns in developing metacognitive and socialisation strategies that will identify discrepancies and allow them to more fully integrate their professional and personal dispositions during the internship process.

Development of a peer-support online network

As other research has established (Gold, 1996 citing Chapman, 1984 and 1986), beginning teachers benefit from assistance and mentoring in their first years of the profession. It can be hypothesised that interns, while traversing the liminal space between being a teacher education student and becoming a fully qualified teacher may also benefit from mentoring. Some research has established that a supportive authority figure in the intern’s life however the difficulties identified by Chapman (cited in Gold, 1996) where the authority figure may become a negative influence on the intern opens the possibility of a peer-support network providing an alternative structure for feedback and opportunities for reflection on the part of the intern.

Gold (1996) provides a suitable starting point for the development of such a system, describing the potential benefits of an existing system which exists in US teacher education institutions, albeit used for beginning teachers rather than interns. The network describes benefits such as frequency

of contact between peers which reduces the rigidity of formal mentor/mentee relationships as currently occur when support often occurs in face-to-face, structured meetings. The reduction in alienation which is experienced has the potential to benefit students who are experiencing difficulties in their internship context, where the availability of contact with peers in similar situations may allow for increased metacognitive strategy development, leading to more positive socialisation experiences.

These conclusions are supported by more recent research conducted by Brescia and Miller (2006), who found that a significant number of subjects responded positively to the fact they could “blow off steam” in a supportive and non-judgemental environment. This is an important distinction to make, as some interns may assume that their entries in an online support network, particularly one which is co-ordinated through their educational institution, may be marked or assessed in order to determine their suitability for entry into their chosen profession. Further, in a study undertaken by Creme (2005), the conclusion was drawn that while some students are comfortable with the idea that their personal responses to events may be used as the basis of assessment, others had diametrically opposing views. In the light of such research, an online network where students respond to each other’s messages without input from a member of academic staff should provide the basis for the collection of rich data.

In terms of providing adequate social support to interns, while minimising the potential for tale-telling and off-topic responses which would prevent useful analysis of the qualitative data, the discussion board will be constructed around themes to be discussed each week. A sample of the discussion board is provided below at Figure 1. Many of these themes are closely aligned to the outcomes and indicators assessed by the intern’s mentor teacher and university supervisor in the final internship report, and are therefore useful in triangulating the intern’s self-evaluation of skill development with the third party report. Of particular interest to the researcher are the themes relating to the intern’s perceptions of their involvement in teaching as a profession, and their awareness of their emotional state as they progress through their internship. This is an important aspect of the study as their emotional state can be related to their perception of themselves as teachers, rather than as students. It is hypothesised that over the period of internship interns will become more aware of the way they inhabit the space of the teacher and automate their actions within the classroom, and this will be relayed through discussion board postings.

The discussion board will be available through the home institution’s Blackboard site and will be managed in accordance with the institution’s policies on inappropriate or offensive comments. In addition, the discussion board will be monitored by the researcher who will have the authority to delete inappropriate postings.

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 Total views: 6 Your views: 6

Suggestions for the discussion boards

This list is meant to give you some ideas about the things you could talk about. They are not meant to restrict you but give you ideas. The only restrictions are those for confidentiality (ie, don't mention the school or centre name, post as anonymous and include your pseudonym).

Teacher talk:	What sorts of things do teachers say to you (or each other) about teaching? This is not restricted to your co-operating teacher, it could be someone in your staff room, another staff room or in the playground.
How I feel about teaching this visit:	What's going on in your head when you visit the site? Are you excited, tense, frustrated, joyful? It doesn't have to be particularly good or bad, just your own view. Do you 'feel' like a teacher?
What things happen to make me feel this way?	Is there anything specific you can think of that prompt the feelings you describe above? It doesn't have to be a single event or action.
How's my teaching going?	Reflect (honestly) on how you think your Internship is about progressing. Are you 'making the grade'? This does not form part of your internship report and will not be seen by the co-operating teacher or your university supervisor. It could, however, help you with preparing your self-reflection and progress reports to use in your discussions with your co-operating teacher and university supervisor.
Teaching strategies:	What teaching strategies have I tried out this week (or since the last visit)? Did they work? Why or why not?
Links between theory and practice:	Do you use things like learning styles to help you in the classroom? Are they helping? Why or why not?
Content knowledge:	What content areas are you teaching? Did the university courses provide enough information to develop suitable lessons for your classroom? Why or why not?

Subject: Suggested topics

Reply Quote Modify Set Flag Remove

Figure 1

Interns' access to the 'craft knowledge' of experienced teachers

One of the critical issues to be determined in any examination of teacher education literature is the issue of teacher craft knowledge. Carter (1993) defines craft knowledge as "practical knowledge", based on experience and obtained over sufficient time and space in which to consider successes and mistakes (p. 304). In addition, Carter discusses craft knowledge as encompassing three domains of knowledge of practice 'owned' by the mentor and developed through experience and practice in the system. These are the areas of 'personal practical knowledge' (pp. 300-302), 'classroom knowledge' (pp. 302-305) and 'pedagogical content knowledge' (pp. 305-307). Cooper and McIntyre (1996) expand on these definitions stating that craft knowledge is not specifically based on theory, however it may be informed by theoretical sources (p. 76). This opinion of teachers' craft knowledge has significant implications for interns as their knowledge base is usually based on theoretical knowledge of pedagogy, particularly as they have not generally had extensive classroom experience in which to internalise theoretical and practical experience.

To this end, Wunner (1993) provides useful additional information, particularly in terms of linking socialisation and craft knowledge using research that deals with experiences of early career teachers especially the issue of 'professional disequilibrium' (p. 231) and 'instant professionalisation' (p. 232). This view is supported by Schempp, Sparkes and Templin (1999) although their use of Corcoran's term "transition shock" is more emotive than Wunner's terminology, indicating a deficit value placed on the early career teacher's experiences. These issues are highly relevant to interns as the issues of experiential versus theoretical knowledge is a known area of concern for new teachers - how do they get their 'voice' heard against experienced teachers who have the authority of experience to support their statements (which can go against theoretical views). While Wunner's research was conducted using early career teachers' experiences, it is also relevant to interns as they experience similar situations, albeit during a shorter timeframe than an early career teacher. Significantly for some interns, Wunner's research illuminated discourse of negativity towards

'novice' teachers (ie interns), in particular, that school students should not "pay the penalty for having a new [ie early career/intern] teacher" (Wunner, 1993, pp. 234-235). In addition, perceived pressure on new teachers (and by implication, interns) is made more difficult by structures (referring specifically to the school district under examination in the chapter) (Wunner, 1993, pp. 236-237). However, the issue of school structure can be relevant to an internship context as interns must satisfy a group (mentor and university supervisor) that their performance is satisfactory and of a sufficiently high standard to progress to qualification as a teacher. Further, with respect to the issues of autonomous decision making and 'instant professionalism', Wunner refers to the experiential aspect of teaching and concludes that "this is what the novice [does] not have" (p. 237). It can therefore be seen that access to an experienced teacher's craft knowledge, and the ability to interpret that knowledge through observation and alignment with theoretical knowledge is critical to the success or failure of an intern.

Brown (1994) is useful with regards to the issue of intern observation of experienced teachers, stating that "the more skilful the teaching, the easier everything looks, and the more difficult it is to understand how success is achieved (p. 90)." This research was conducted during a project where teacher education students interviewed experienced teachers. Other relevant research in this area includes Carter and Francis (2001); Kwan and Lopez-Real (2005); Rigano and Ritchie (1999) and Turnbull (2005). The issue of intern observation of experienced teachers is also the subject of more recent studies, particularly Allen and Peach's research where students responded to direct questioning concerning their professional experiences (2007). This recent research supports prior research studies, particularly concerning the issue of access to craft knowledge as interns demonstrate awareness that experienced teachers have a tendency to devalue institutional knowledge in favour of experiential (ie craft) knowledge gained through years of teaching. However, it may also be that this exposure to craft knowledge occurs on a shallow or superficial level, and that without access to the cognitive awareness occurring within the teacher's mind, the intern may only take on conservative models of teaching which reproduce traditional teacher-centred approaches (Borg, 2004).

Conclusion

It can be seen that the issue of professional experience has been problematised and extensively researched, conceding that this background statement barely scratches the surface of available studies. While teacher education programs as a whole have been comprehensively researched and reviewed by government over recent decades, there is a consistent recognition that professional experience within teacher education programs is worthwhile and necessary. Ramsey (2000) considers that professional experience is a vital but problematic aspect of teacher education, as it requires the co-operation of both school and institutional systems to provide effective experiences for interns.

In terms of providing successful professional experiences, it is often stated that the internship is, of itself, the most critical part of the teacher education program. This intense period of time is where the student can demonstrate their commitment to the profession of teaching while under the guidance of an experienced teacher who will evaluate their suitability to receive the qualification. Part of the evaluative process is attention to the socialisation processes of change within intern, that is, the intern is deemed suitable to be a teacher because they are behaving like a teacher. There is little attention however within the internship context to the metacognitive changes which occur as it is the instructional and procedural processes which are evaluated by the experienced teacher. An understanding of the metacognitive changes which occur in interns during this intensive process can therefore be seen to be of great benefit to interns and teacher educators alike. Additionally, the metacognitive processes may be assisted by the development of a suitably designed online support network. This may be of great benefit as interns as they undertake their internship and have access

to peers with whom they can communicate openly while maintaining confidentiality and anonymity.

Finally, it may be theorised that professional experience should also provide those interns with opportunities to engage and evaluate the craft knowledge of the teachers with whom they are placed. Such evaluation and reflection about craft knowledge may have the capacity to enable interns to become develop higher order metacognitive professional awareness.

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