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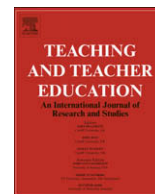
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Mentoring beginning teachers: What we know and what we don't

Andrew J. Hobson^{a,*}, Patricia Ashby^a, Angi Malderez^b, Peter D. Tomlinson^b

^a School of Education, University of Nottingham, Nottingham NG8 1BB, UK

^b School of Education, University of Leeds, Leeds, LS2 9JT, UK

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ABSTRACT

This article reports the findings of a review of the international research literature on mentoring beginning teachers. Research identifies a range of potential benefits and costs associated with mentoring, and suggests that the key to maximising the former and minimising the latter lies in the realization of a number of conditions for successful mentoring, such as the effective selection and preparation of mentors. We also highlight a number of limitations in the current evidence base on beginner teacher mentoring. Some implications, for the practice of teacher educators, for policy-makers and for future research, are considered.

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1. Introduction

Since the 1980s, school-based mentoring has come to play an increasingly prominent role in supporting the initial preparation, induction and early professional development of teachers in many parts of the world. During this time, considerable time, energy and funding/resources have been expended on the development of mentoring programmes and on the process of mentoring beginning teachers. This article examines the value of such developments by reviewing the international evidence base and showing what is currently known – and not known – about mentoring beginning teachers.

We begin by briefly outlining the historical development of mentoring in teacher education and the major factors which have prompted its rise, before discussing issues relating to our review of the research literature. In the main body of the article we discuss the current evidence on mentoring beginning teachers, notably on the potential benefits and costs of mentoring, and those factors which tend to maximise the former and minimise the latter. We then go on to explore some questions on which, to date, the research evidence is inconclusive.

For the purposes of this article, mentoring is defined as the one-to-one support of a novice or less experienced practitioner (mentee) by a more experienced practitioner (mentor), designed primarily to assist the development of the mentee's expertise and

to facilitate their induction into the culture of the profession (in this case, teaching) and into the specific local context (here, the school or college). In the context of beginner teacher mentoring, a mentor's efforts to assist the development of expertise will normally focus on the mentee's ability to facilitate learning. Yet it is important to recognise that, as we will show in this article, mentoring (like teaching) can (and does, in different contexts) have a variety of purposes or goals, can (and does) involve a variety of practices and strategies to achieve these purposes and goals, and can (and does) take place at different stages of a mentee's professional development and over different durations.

We should add that our working definition of mentoring as one-to-one support does not recognise – and the paper does not address – what some writers refer to as 'group mentoring' (e.g. Mitchell, 1999) or what some call 'peer mentoring' (e.g. Cornu, 2005). We take 'beginning' (or 'beginner') teachers to be those who are undertaking programmes of initial teacher preparation (ITP)¹ or are in their first 3 years as qualified teachers.

1.1. The growth of mentoring for beginner teachers

Since the 1980s many countries have seen a massive increase in the number of formal programmes of school-based mentoring for beginning teachers. In our own (English) context, for example, in the early 1990s the national government mandated that student

* Corresponding author. Tel.: +44 115 9514417; fax: +44 115 8466188.

E-mail addresses: andrew.hobson@nottingham.ac.uk (A.J. Hobson), ashby@peartreecott.fsnet.co.uk (P. Ashby), a.malderez@education.leeds.ac.uk (A. Malderez), peter.tomlinson12@btinternet.com (P.D. Tomlinson).

¹ By initial teacher preparation (ITP) we refer to what is also known as initial teacher education (ITE), initial teacher training (ITT) and pre-service training. We have explained our preference for the use of this term elsewhere (Hobson et al., 2008).

teachers should henceforth spend at least two-thirds of their postgraduate initial teacher preparation (ITP) courses in schools, where practising teachers should play a major role in supporting their attainment of government-specified teaching competences (now 'Standards') (Department for Education, 1992, 1993). The initiative was subsequently extended to encompass mentoring support as part of a broader programme of induction for newly qualified teachers (NQTs) (Department for Education and Skills, 2003; *Teaching and Higher Education Act, 1998*).

The modern rise of mentoring as a means of supporting the initial and early professional learning of beginning teachers can be traced to a number of developments. In England, it was introduced as a central feature of early university-school partnership ITP programmes, such as the Oxford University Internship Scheme, a (then) radical attempt to overcome the theory–practice dualism found to be endemic to traditional, higher education institution (HEI)- or college-based programmes (McIntyre, 1997). Comparable higher education-based initiatives were being developed in North America (Feiman Nemser, 1990) and other parts of Europe around (Medgyes & Malderez, 1996) the same time.

In addition, educational policy-makers in the USA, the UK and elsewhere, have both encouraged and in some cases (as we have seen) required the introduction of mentoring arrangements, for a variety of reasons. One such reason related to the desire to increase the supply of teachers, at times of need, through the introduction of alternative certification programmes including employment-based routes into teaching (Feiman Nemser, 1990). A second and related reason was to encourage the retention of newly and recently qualified teachers in the profession, notably through attempting to mitigate the well-documented phenomenon of 'reality shock' experienced by many beginning teachers (Gaede, 1978; Veenman, 1984). Another reason still is that some policy-makers saw the introduction of mentoring arrangements as a means of rewarding and retaining the capable teachers who might take up the mentoring role (Little, 1990).

The growth of formalized programmes of school-based mentoring for beginning teachers was also encouraged by the substantial increase (from the 1980s) in theorizing about and research into the nature and development of teaching capability (Munby, Russell, & Martin, 2001; Tsui, 2003), as well as by research into mentoring itself – the focus of this paper (Wang & Odell, 2002). The idea of mentoring beginning teachers is supported by a wide range of influential perspectives on professional knowledge and its acquisition, including the cognitive psychology of skill (Anderson, 2006; Leinhardt, Young, & Merriman, 1995; Tomlinson, 1998), neo-Vygotskian and socio-cultural theories (Edwards & Collison, 1996; Rogoff, 1995; Tharp & Gallimore, 1988; Wertsch, 1991), reflective practice (Dewey, 1933; Schön, 1983, 1987; Zeichner, 1994), situated cognition and learning (Brown, Collins, & Duguid, 1989; Greeno, Collins, & Resnick, 1996; Lave & Wenger, 1991), craft knowledge (Grimmett & MacKinnon, 1992; Leinhardt, 1990), personal practical knowledge (Doyle, 1990; Elbaz, 1983) and practical reasoning (Fenstermacher, 1986, 1994).

Finally, sceptics in contexts such as England and Wales have attributed the increased emphasis on mentoring, as part of a broader movement towards employment-based ITP, to a desire on the part of national governments to separate ITP from the critical tradition of universities – effectively, to de-intellectualise the initial preparation ('training') of teachers, and/or deprofessionalise the teaching profession (Wilkin, 1999).

1.2. A review of the evidence base on beginner teacher mentoring

Before 1990, there had been few comprehensive studies of the nature and consequences of mentoring support for beginning teachers (Little, 1990). In some respects the evidence base remains

limited to this day, partly because of the inevitable difficulties of disentangling the effects of mentoring from other kinds of assistance normally available to those being mentored. Nevertheless, the intervening years have witnessed an explosion in the number of research studies and publications dealing with various aspects of mentoring, from which many common and valuable findings have begun to emerge. In this article we attempt to take stock, to examine what empirical research findings do and do not tell us about the provision of mentoring support for beginning teachers. We also highlight some of the main implications for policy and practice in teacher education, and identify areas in which we feel future research is most needed.

While some previous reviews of literature on mentoring have included studies across a broad range of fields, both in educational contexts (e.g. mentoring pre-service and in-service teachers and leaders) and non-educational contexts (e.g. business mentoring), we felt it appropriate, given the specific (though variable) needs and concerns of new and recent entrants to the teaching profession, to focus our review on studies concerned with the mentoring of 'beginning' or early career phase teachers, notably those who (i) are following programmes of initial teacher preparation; (ii) are in their first year of teaching and/or following a programme of new teacher induction; or (iii) are in their second or third years in the profession, post-qualification. Indeed we considered whether even this might be too broad a grouping of mentor research, but felt that it was appropriate and justifiable for a number of reasons. For example, the introduction in recent years of new routes into teaching, such as the Graduate and Registered Teacher Programme (GRTP) in England, has blurred the distinction between 'pre-service' and 'induction' or 'in-service' training and support. Secondly, the introduction in England and elsewhere, of initiatives such as the Career Entry and Development Programme (CEDP) and a common set of developmental Standards, against which beginning teachers' developing expertise must be measured, has established greater continuity between initial teacher preparation and the induction period. Thirdly, as we will show, a number of common research findings have emerged from separate research studies into the mentoring of 'pre-service', probationary and recently qualified teachers.

Our review of the evidence base on beginner teacher mentoring shares some features of both 'systematic' and 'narrative' reviews of literature (Gough & Elbourne, 2002; Oakley, 2003; Slavin, 1986, 2002) though it cannot be neatly characterised as belonging to either type. For example, in common with the notion of systematic review, we started out with a relatively clear objective, namely that of undertaking a critical review of empirical research on beginner teacher mentoring. Secondly, also in accordance with principles of systematic review, we aim to be transparent about the processes that led to the production of this article. On the other hand, however, and more in line with a traditional, narrative review, we did not set out with explicit or rigid inclusion and exclusion criteria – we were primarily interested in empirical studies, whether 'qualitative', 'quantitative' or mixed methods studies (Hammersley, 1996; Tashakkori & Teddlie, 1998), yet we did not rule out other literature reviews, if only for their potential value in leading us to more empirical studies. We were also clearly interested in research findings relating to the nature, effectiveness, advantages and limitations of mentoring support for beginning teachers, yet, in common with narrative reviews, we were open to the 'discovery' of other themes and did not have a clear idea in advance of conclusions we might reach, or the exact nature of the review we were likely to write (Bryman, 2008: 92–93). Our experience perhaps suggests that the distinction between systematic and narrative review presents something of a caricature and is less useful than it once was as a means of characterizing reviews of research, notably as more researchers incorporate some of the procedures associated

with systematic review into their 'narrative' reviews (Bryman, 2008: 94).

In seeking out relevant material we conducted both manual searches of the major relevant journals with which we were familiar, and searches of electronic databases, including the Educational Resources Information Centre (ERIC) and the British Education Index (BEI). In total, we examined approximately 980 titles and, where accessible, abstracts of journal articles, books, book chapters, conference papers and theses. Of these, we retrieved approximately 170 relevant texts, which were those which appeared to present (or, occasionally, review) empirical research findings on beginner teacher mentoring. The studies reported in this article comprise those which, in our view, present the most convincing research evidence, notably where we felt the authors had provided both a transparent account of their research design and sound empirical support for particular findings presented. They include studies which deal with beginner teacher mentoring in relation to a single or a small number of subject areas, and studies which examine mentoring across a range of subject specialisms. Some studies examine the mentoring of beginner teachers in the primary phase of education, some secondary phase mentoring, while others deal with mentoring across both phases. The 'findings' presented in this article are drawn from empirical research and evaluation studies conducted in a range of contexts internationally. However, for reasons of style, and economy of space, we provide only a selection of relevant references in relation to each substantive point.

2. What we know about mentoring beginning teachers

Even in the best-researched areas of mentoring beginning teachers, there are limitations with the evidence base, most often relating to the fact that the research is based predominantly on mentees' and mentors' perceptions and accounts; we revisit this theme later. Despite the limitations of individual studies, however, and given the existence of a number of common and recurring research findings amongst studies employing a variety of methodologies and in a range of contexts, we feel that we can state with a degree of confidence that research has enhanced our understanding of the mentoring process in a number of specific ways, which we present here in three main sections. First, we outline what research tells us about the potential benefits of mentoring support for beginning teachers. Secondly, we summarise research evidence regarding the potential limitations and costs of mentoring, and the existence of poor or inadequate practice. Thirdly, we discuss research findings on the conditions under which mentoring has been found to be most successful.

2.1. Potential benefits of mentoring beginning teachers

In this section we report on what empirical research tells us about potential benefits of mentoring for mentees, mentors, and schools and educational systems.

2.1.1. Benefits for mentees

Some studies have suggested that mentoring is an important and effective, perhaps the most effective, form of supporting the professional development of beginning teachers (e.g. Carter & Francis, 2001; Franke & Dahlgren, 1996; Marable & Raimondi, 2007; Su, 1992). McIntyre and Hagger (1996) document a wide range of benefits of mentoring for beginning teachers, including reduced feelings of isolation, increased confidence and self-esteem, professional growth, and improved self-reflection and problem-solving capacities. The benefits of mentoring which perhaps most commonly feature amongst research findings relate to the provision of emotional and psychological support, which has been

shown to be helpful in boosting the confidence of beginner teachers, enabling them to put difficult experiences into perspective, and increasing their morale and job satisfaction (Bullough, 2005; Johnson, Berg, & Donaldson, 2005; Lindgren, 2005; Marable & Raimondi, 2007). This also has implications for retention, which we discuss below.

Research also points to the impact of mentoring on the developing capabilities of beginning teachers, most notably their behaviour and classroom management skills and ability to manage their time and workloads (e.g. Lindgren, 2005; Malderez, Hobson, Tracey, & Kerr, 2007; Moor et al., 2005). More generally, mentors have been found to play an important role in the socialisation of novice teachers, helping them to adapt to the norms, standards and expectations associated with teaching in general and with specific schools (Bullough & Draper, 2004; Edwards, 1998; Feiman Nemser & Parker, 1992; Wang & Odell, 2002).

Yet in spite of the research findings summarised above, evidence for the direct impact of mentoring on beginning teachers' development, especially their teaching skill, is somewhat limited. This results partly from the difficulties of researching this area and of differentiating between the simultaneous effects of different potential contributors to beginner teachers' development (e.g. different aspects of ITP, induction or early professional development programmes), and partly from the restricted ways in which mentoring has sometimes been employed.

2.1.2. Benefits for mentors

A wealth of evidence, based predominantly upon the accounts of mentors themselves, suggests that mentoring beginning teachers may have a positive impact on the professional and personal development of mentors (e.g. Hagger & McIntyre, 2006; Yeomans & Sampson, 1994). In a study of mentors' perceptions of their involvement in a school–university ITP partnership programme in Hong Kong, for instance, Lopez-Real and Kwan (2005) report that 70% of mentors claimed to have benefited professionally from mentoring.

Many different aspects of the mentoring experience have been shown to impact on the learning of mentors themselves. Perhaps the largest body of research evidence in this area relates to mentors' learning through self-reflection or critical reflection on their own practice (e.g. Abell, Dillon, Hopkins, McInerney, & O'Brien, 1995; Lopez-Real & Kwan, 2005; Simpson, Hastings, & Hill, 2007). Mentors have also been found to have learned from their beginning teacher mentees, from participation in mentor training courses, from university tutors (notably those involved in university–school partnership ITP programmes), and more generally, from opportunities to talk to others about teaching and learning in general or about their mentees' or their own teaching in particular (Hagger & McIntyre, 2006; Lopez-Real & Kwan, 2005).

In terms of the outcomes of mentors' involvement in mentoring, several studies (e.g. Abell et al., 1995; Simpson et al., 2007) cite mentors' references to gaining 'new ideas' and 'new perspectives'. More specifically, mentors have reported learning new and improved teaching styles and strategies, enhancing their knowledge and use of ICT (Davies, Brady, Rodger, & Wall, 1999; Lopez-Real & Kwan, 2005), improving their communication skills (Moor et al., 2005), becoming more self-reflective (Davies et al., 1999); and becoming more knowledgeable about beginner teachers' and others' professional development needs (Lopez-Real & Kwan, 2005; Moor et al., 2005). Some studies have referred to mentors feeling reassured when their ideas are 'validated' by university tutors (Lopez-Real & Kwan, 2005; Simpson et al., 2007), feeling less isolated as teachers and enjoying the increased collaboration associated with mentoring (Hagger & McIntyre, 2006; Simpson et al., 2007), and reporting increased confidence in their own teaching and improved relationships with pupils and colleagues, including

being 'more collegial', 'more demanding with colleagues' and 'more tolerant with pupils' (Bodoczky & Malderez, 1997; Davies et al., 1999).

Research has also shown that many mentors derive satisfaction and pride from undertaking the mentor role, especially through seeing their mentees succeed and progress and noticing evidence of their own impact on mentees' development and their teaching (Beck & Kosnick, 2000; Hagger & McIntyre, 2006). It has also been found that mentoring can lead to a consolidation of mentors' teacher identity and professional status and an increase their self-worth, resulting from the responsibility involved and a correspondingly enhanced recognition in the professional community (Bodoczky & Malderez, 1997; Wright & Bottery, 1997), while some mentors have talked about a 'revitalisation of their enthusiasm for teaching' (Moor et al., 2005), becoming 're-energised' or 're-engaged' with the profession (Hobson et al., 2007) and being more committed to teaching (Bodoczky & Malderez, 1997).

Finally, some studies have suggested that involvement in mentoring has aided individual teachers' career planning and career progression by, for example, helping them to identify their strengths and priorities (Tauer, 1998), facilitating an extension of their responsibility for supporting the professional development of other colleagues, or using their experience as mentors to pursue professional qualifications (Moor et al., 2005).

2.1.3. *Benefits of mentoring for schools and educational systems*

It might be expected that some reported benefits of mentoring documented in the previous two sub-sections, such as more confident and capable beginning teachers and more committed and enthusiastic mentors, would be likely to produce knock-on gains for these teachers' pupils and schools, notably in terms of enhanced pupil learning (Moor et al., 2005). The evidence on this particular outcome is however limited, partly, we feel, because of the complexity of researching it. There is a growing body of evidence, though, largely from the USA, which tells us that (at least under certain conditions, which we discuss below) mentoring programmes for beginning teachers promote increased retention and stability: teachers who are mentored have been found to be less likely to leave teaching and less likely to move schools within the profession (Ingersoll & Kralik, 2004; Johnson et al., 2005; Smith & Ingersoll, 2004). It is also possible that both schools and educational systems may benefit from the enhanced retention of those teacher-mentors who become more confident and committed as a result of their participation in mentoring, which is one of the aims of some mentoring schemes, though again there is limited direct evidence of this to date.

In their report of the evaluation of the Pilot Professional Development Programme for Teachers Early in their Careers in England, Moor et al. (2005) suggested a number of additional benefits to schools in general, of their involvement in this kind of mentoring programme. For example, it was found that, through mentoring relationships and the raised profile of beginning teachers and of early professional development activities within the school, staff came to know each other better, which led to their increased collaboration and enjoyment. In addition, and related to this, some mentors involved in the programme reported that more experienced teachers had also begun to come to them for individual help and advice on specific areas and/or their own professional needs, suggesting that the programme had fostered a more developed culture of professional development and support within participating schools.

Finally on this theme, it is sometimes argued that mentoring is a cost-effective method of training and developing staff, since mentors are able to carry out their role in conjunction with their normal teaching job and there is no cost incurred for external training providers or premises (Murray & Owen, 1991). To date,

however, there exists little empirical evidence to support (or refute) this claim in the context of mentoring for beginner teachers.

2.2. *Potential limitations and costs of mentoring beginning teachers*

Some authors have complained that most of the literature on mentoring in education presents an 'overwhelmingly favourable' account, which fails to adequately investigate or address any potentially negative effects (Colley, 2002; Ingersoll & Kralik, 2004; Sundli, 2007). However, literature going back at least to the early 1990s (e.g. Jacobi, 1991) has contained various warnings about what has been termed the 'dark side of mentoring' (Long, 1997), and in recent years several studies have reported a number of specific disadvantages and drawbacks of mentoring, together with examples of what are regarded as poor mentoring practices.

2.2.1. *Disadvantages for mentors*

Some studies have suggested that the various benefits of mentoring to mentors (as outlined in Section 2.1.2 above) are not always realised in practice, and that the outcomes experienced by mentors are highly variable. For example, in her study of 10 mentors of (mostly) neophyte or novice teachers in North-East USA, Tauer (1998) found little evidence that the mentors had grown professionally from the experience, with few of them attributing any development in their thinking or practice to the mentoring relationship. Some studies go further and suggest that mentoring can also be disadvantageous or even harmful to mentors. Three main problems are documented.

First, many studies (e.g. Lee & Feng, 2007; Robinson & Robinson, 1999; Simpson et al., 2007) have reported that mentors have experienced increased and sometimes unmanageable workloads, as a result of their involvement in mentoring in addition to their normal teaching roles. This can contribute to difficulties in accommodating all their mentees' needs (Maynard, 2000), can impact on mentors' work-life balance and may cause them stress. Secondly, research has found that mentors sometimes experience feelings of insecurity, nervousness, threat and even inadequacy at the prospect of their lessons being observed by mentees or by their mentees presenting new ideas (Bullough, 2005; Hart & Murphy, 1990; Orland, 2001). Thirdly, some studies have suggested that mentors have felt isolated in the role (Bullough, 2005; Graham, 1997).

2.2.2. *Disadvantages for beginning teachers and educational systems: limitations of mentoring in use*

In the last 15 years or so a vast amount of research, across many countries employing mentoring as a means of supporting the professional learning and development of beginning teachers, has uncovered the existence of variation in the nature and quality of mentoring support provided and documented evidence of poor mentoring practice, which have negative consequences for the learning of mentees, and (thus) for the schools and educational systems into which they are being inducted. There appear to be three main failings.

First, studies have found that some mentors have failed to provide sufficient support for beginner teachers' emotional and psychological well-being, characterised in many instances by general 'unavailability' (e.g. Hardy, 1999; Oberski, Ford, Higgins, & Fisher, 1999; Smith and Maclay, 2007). Some studies go further. Beck and Kosnick (2000: 207) found that 'associate teachers' involved in 'pre-service education' programmes in Canada "often seemed to be rather 'tough' on the student teachers ... giving them a very heavy workload and generating in them a considerable amount of anxiety"; while Maguire (2001), in a study of secondary phase ITP in England, found that 'a substantial number' of trainees reported feeling bullied by their school-based mentors.

Secondly, research (e.g. Collison & Edwards, 1994; Dunne & Bennett, 1997) has suggested that some beginning teachers have not been sufficiently challenged by their mentors, for example, by not being given sufficient autonomy. Edwards (1998) argued that partly due to the assessment framework of ITP in England and partly due to their concern to protect their 'own' pupils and their learning, primary phase teacher-mentors in her study tended to guide their student teacher-mentees into 'low risk' activities (Malderez et al., 2007); some primary and secondary phase ITP mentors in England had been reluctant to let their trainees take on responsibilities in the classroom; and Beck and Kosnick (2000) concluded that many mentors in their study did not give their mentees sufficient 'freedom to innovate'.

Thirdly, numerous studies have shown that mentors have tended to see their role primarily in terms of the provision of safe sites for trial and error learning (Edwards, 1997; Franke & Dahlgren, 1996) or have tended to focus, in their interactions with mentees, on matters of technical rationality (Wright & Bottery, 1997), and/or on practical issues such as classroom management, craft knowledge and mentees' teaching of subject content (Lee & Feng, 2007; Sundli, 2007). In doing so, they have devoted little or insufficient attention to pedagogical issues, to the promotion of reflective practice incorporating an examination of principles behind the practice, or to issues of social reform and social justice (Feiman Nemser, 2001; Franke & Dahlgren, 1996; Lindgren, 2005). Indeed studies have shown that some teacher-mentors themselves hold a 'transmission perspective' on teaching and learning (Clarke & Jarvis-Selinger, 2005), that some have a limited understanding of concepts such as critical reflection and/or continue to hold dualist notions of theory and practice (Sundli, 2007), and that some (perhaps as a consequence) lack the confidence to incorporate 'theoretical' insights into their work with mentees (Evans & Abbott, 1997).

One of the actual or potential outcomes of these various failings is that, in spite of the explicit aim of some mentoring programmes being to reduce teacher attrition, the lack of social and psychological support experienced by some trainee and early career teachers (when they had been led to expect it) has actually been a contributory factor in their decisions to withdraw from their ITP courses or leave the profession (e.g., Hobson et al., 2006). Another is that the restricted range of approaches employed by some mentors serves to restrict their mentees' learning and development in a variety of ways. We have thus found little evidence, for example, of school-based mentoring achieving what in some contexts at least was one of the main reasons behind its introduction, namely that of reducing theory–practice dualism amongst beginning teachers and helping mentees to recognise the relevance of and make more effective use of 'theoretical' work covered in their ITP programmes (Bullough, 2005; Graham, 2006; Hascher, Cocard, & Moser, 2004). Finally, a number of studies have suggested that some of the restricted (and restrictive) forms of mentoring in use, outlined above, can result in the promotion and reproduction of conventional norms and practices (Feiman Nemser, Parker, & Zeichner, 1993), rendering beginning teachers less likely to develop or consolidate their knowledge (and use) of progressive and learner-centred approaches, and less likely to challenge the inherent conservatism in teaching or to advance social reform and social justice agendas (Clarke & Jarvis-Selinger, 2005; Sundli, 2007; Wang & Odell, 2002).

2.3. The conditions for effective mentoring

While certain 'conditions' may be more likely to facilitate the achievement of some mentoring aims than others, a number of common findings have begun to emerge from the research regarding the factors which impact on the success or otherwise of different kinds of mentoring programmes across a variety of

contexts. These relate to (i) contextual support for mentoring; (ii) mentor selection and pairing; (iii) mentoring strategies; and (iv) mentor preparation.

Some studies have also suggested that successful mentoring is dependent on the 'willingness' to be mentored on the part of the beginner teacher-mentee (Little, 1990; Roehrig, Bohn, Turner, & Pressley, 2008; Valencic Zuljan & Vogrinc, 2007; Veenman, Denessen, Gerrits, & Kenter, 2001), a matter over which policy-makers and teacher educators may appear to have only limited influence. Nevertheless, though research on this particular question is scarce, it seems likely that a mentee's willingness and openness to getting the most out of a mentoring relationship will be influenced to at least some extent by the context within which the mentoring takes place, the suitability and characteristics of the mentor allocated, and the preparation received and strategies employed by that mentor (Martin & Rippon, 2003).

2.3.1. Contextual support for mentoring

Research shows that the success of mentoring programmes and mentoring relationships is influenced by a range of contextual factors. The most consistent finding in this area is that, other things being equal, mentoring is more likely to be effective where teacher-mentors are provided with additional release or non-contact time to help them prepare for and undertake the mentoring role (e.g. Abell et al., 1995; Lee & Feng, 2007; Robinson & Robinson, 1999), while successful mentoring is further facilitated where timetabling allows mentors and mentees to meet together during the school day (e.g. Bullough, 2005). Some studies have also suggested that mentoring is more likely to lead to positive outcomes where mentors receive financial reward and/or some other form of incentive or recognition for their work (Abell et al., 1995; Evans & Abbott, 1997; Simpson et al., 2007); where it takes place in contexts which are relatively free from excessive emphases on externally determined goals and agendas such as prescriptive criteria for teaching practices (Edwards, 1998; Gay & Stephenson, 1998; Yusko & Feiman Nemser, 2008); where mentors are involved in the design and evaluation of, and are committed to, the broader (ITP, induction or early professional development) programmes of which mentoring is a part (Evans & Abbott, 1997); and where such programmes are coherent and not characterised by 'fragmentation' (Goodlad, 1990) between different (e.g. school-based and university-based) contributors (Hascher et al., 2004; Hobson et al., 2008).

In addition, beginner teacher mentoring is more likely to be successful where it takes place within schools which are characterised by collegial and learning cultures (Edwards, 1998; Lee & Feng, 2007); where both mentors and mentees have access to support outside of the mentoring relationship, such as from other teachers in the school or from external networks of peers (Whisnant, Elliott, & Pynchon, 2005); and where mechanisms exist that enable mentees and mentors to initiate the establishment of an alternative pairing, without blame being attached to either party, where they feel that the relationship is not (or is no longer) productive (Association for Supervision and Curriculum Development, 1999).

2.3.2. Mentor selection and pairing

Studies suggest that the success of beginner teacher mentoring is, in part, a function of the ways mentors are selected and paired with mentees. Mentors should be effective practitioners who are able to model good professional practice (Foster, 1999; Roehrig et al., 2008), and it is important that mentees have 'professional respect' for their mentors, which entails that, in the mentees' eyes at least, their mentors possess sufficient knowledge and experience of (for example) teaching and their subject specialism (Abell et al., 1995). Yet being an experienced and effective teacher, and being recognized as such, is a necessary but not sufficient condition for

being an effective mentor – not all good teachers make good mentors, while not all good mentors make good mentors of all beginning teachers (Evertson & Smithey, 2000; Johnson, 2004; Schmidt, 2008; Yusko & Feiman Nemser, 2008). Effective mentors must also be willing and able to ‘make their work public’ and make explicit the factors underlying their classroom practices (Simpson et al., 2007); and they must be supportive, approachable, non-judgemental and trustworthy, have a positive demeanour, and possess good listening skills and the ability to empathize, as well as the willingness and ability to take an interest in beginning teachers’ work and lives (Abell et al., 1995; Rippon & Martin, 2006; Yeomans & Sampson, 1994). Importantly, mentors should also want to do the job and be committed to the work of mentoring (Abell et al., 1995; Lindgren, 2005; Wildman, Magliaro, Niles, & Niles, 1992); the more that the mentoring relationship results from a ‘forced marriage’, the less likely seem its chances for success.

For similar reasons, research has also found that mentoring is more likely to be successful where decisions about mentor–mentee pairings take account of mentees’ strengths and limitations, and where the mentor and mentee get along both personally and professionally (Abell et al., 1995). And mentoring tends to be more effective where mentors teach the same subject specialism as their mentees (Hobson et al., 2007; Johnson, 2004; Smith & Ingersoll, 2004) but less effective where they are the mentees’ head teacher or deputy head teacher. The latter has been explained in terms of senior leaders generally being less able to find sufficient time for mentoring and/or beginning teachers tending to be more inhibited (e.g. less likely to reveal difficulties they may be encountering) where their mentors have a higher status within the school (Hobson et al., 2007; Oberski et al., 1999).

2.3.3. *Mentoring strategies*

A number of studies have found that, like all forms of teaching, mentoring is most effective where it is fit for purpose and addresses, and is responsive to, the needs of the mentee/learner. This means that mentors of beginner teachers should respect their mentees as adult learners, taking account of their individual learning styles, and ensuring that the strategies employed to support their learning are responsive to their concerns and appropriate to their current stage of development (Foster, 1999; Lindgren, 2005; Valencic Zuljan & Vogrinc, 2007). A number of studies suggest that, at an early stage in the mentoring relationship, mentors should seek to help mentees to identify and interrogate critically their conceptions of teaching, of learning to teach and of mentoring (Edwards, 1998; Feiman Nemser, McDiarmid, Melnick, & Parker, 1989; Rajuan, Douwe, & Verloop, 2007), which can otherwise present hidden barriers to their subsequent learning and development (Sugrue, 1996; Korthagen, Kessels, Koster, Lagerwerf, & Wubbels, 2001; Wubbels, 1992). This process should include explicit discussion of the nature and advantages of different forms of reflection (Lindgren, 2005). Mentors should also seek agreement on the individual goals of the mentee and the objectives of the mentoring relationship, and should periodically revisit, review and (where appropriate) revise these objectives and goals (Lindgren, 2005; Stanulis & Weaver, 1998).

Whilst the extent to which mentors are able to address mentees’ individual needs is an important factor in the success or otherwise of mentoring, research has also identified a number of mentoring approaches, strategies and tactics which have been found to be effective across different contexts. First, as suggested in Section 2.1.1, effective mentors provide their mentees with emotional and psychological support, and make them feel welcome, accepted and included (Feiman Nemser, 2001; Hascher et al., 2004; Maynard, 2000; Rippon & Martin, 2006). Secondly, effective mentors make time for their mentees: they have regular meetings with them and are ‘available’ for informal discussion at other times (Adey, 1997;

Harrison, Dymoke, & Pell, 2006; Johnson et al., 2005). Thirdly, effective mentors allow their mentees an appropriate degree of autonomy to make decisions and to develop their own teaching styles (Feiman Nemser, 2001; Foster, 1999; Harrison et al., 2006).

Fourthly, numerous studies have found that one of the most valued aspects of the work undertaken by mentors is lesson observation (both of and by the mentee) with subsequent analysis of the processes involved (e.g. Foster, 1999; Heilbronn, Jones, Bubb, & Totterdell, 2002; Hobson, 2002). Mentors’ observation of the lessons of their mentees tends to be most valued where its objectives are agreed in a pre-observation conference, and where the post-observation conference: (i) is conducted in a sensitive, non-threatening way; (ii) focuses on specific aspects of mentees’ teaching; and (iii) provides an opportunity for genuine and constructive dialogue between mentor and mentee which includes joint exploration of the perceived strengths and weaknesses of the mentee’s teaching, discussion of the likely impacts of observed teaching actions, and the development of ideas which might help the mentee overcome any problems or weaknesses (Jonson, 2002; Martin & Rippon, 2003; Schmidt, 2008). Finally, research shows that effective mentors ensure their mentees are sufficiently challenged (Edwards, 1998; Harrison et al., 2006; Valencic Zuljan & Vogrinc, 2007) and sufficiently educated about and scaffolded into deeper levels of thinking and reflection, notably about teaching and learning (Feiman Nemser, 2001; Franke & Dahlgren, 1996).

2.3.4. *Mentor preparation and support*

Several studies have suggested that mentors are more likely to be able to employ effective mentoring strategies where they have undertaken an appropriate programme of mentor preparation (e.g. Crasborn, Hennisson, Brouwer, Korthagen, & Bergen, 2008; Williams & Prestage, 2002; Valencic Zuljan & Vogrinc, 2007). Bullough (2005) concluded from his study of ‘being and becoming a mentor’, that mentor preparation needs to go beyond ‘training’, traditionally conceived as behavioural inculcation without insight (Tomlinson, 1995), and should include planned strategies to assist individuals in developing their identities as mentors. One method by which this might be achieved, Bullough (2005: 153) suggests, is via their participation in seminars, ‘organized around the practice of mentoring’, together with other teacher-mentors and university-based teacher educators. Such seminars could operate as ‘affinity groups’, helping to overcome mentor isolation, facilitating the development of a shared discourse for mentoring, and enhancing mentors’ skill development through conversations about mentoring practice and pedagogy (cf. Carroll, 2005; Graham, 1997; Orland, 2001). Other studies have emphasised the importance of directing mentors towards appropriate research that will underpin their mentoring activities (Evans & Abbott, 1997), of helping them to understand the value and potential benefits of discussing pedagogical issues with beginning teacher mentees (Lindgren, 2005); and of mentor preparation activities directed at the development of their interpersonal skills (Rippon & Martin, 2006) or their ability to stimulate mentees to reflect on their actions (Crasborn et al., 2008; Dunne & Bennett, 1997).

Nevertheless, while some studies have attributed evidence of poor mentoring practice, at least in part, to poor mentor training (Feiman Nemser & Parker, 1992) and others have suggested that the effective preparation of mentors helps to alleviate some of the potential pitfalls such as those relating to workload (Moor et al., 2005), the evidence base on the actual effects of different kinds of mentor preparation and support is generally rather sparse and underdeveloped.

We now go on to discuss, albeit briefly, some other issues and uncertainties relating to the mentoring of beginning teachers, and to indicate areas in which we consider the research evidence to be (as yet) inconclusive.

3. What we don't know about mentoring beginning teachers

In Section 2 we identified a number of issues concerning which the evidence base is lacking. These relate to:

1. the cost-effectiveness of mentoring compared with other methods of supporting and facilitating the early professional learning of beginner teachers;
2. how far, and by what means, mentees' 'willingness' to be mentored can be increased;
3. the impact of mentoring in the short or longer term on the learning of pupils taught by mentors and mentees;
4. whether participation in beginner teacher mentoring enhances mentor retention in the teaching profession; and
5. the impact of mentors' participation in different kinds of mentor preparation programme on mentor effectiveness and the professional and/or personal development of mentees.

In addition, we wish to draw attention to five other areas in which we believe there is a notable absence of firm research evidence. First, in relation to the pairing of mentors and mentees, there is presently a lack of agreement in the literature on whether mentors and mentees should start out with similar or different pedagogical beliefs: some writers argue that a mentor who understands and approves the beginning teacher's philosophy and style will be better able to assist their development in a more harmonious relationship, while others contend that teachers will learn more from each other if they have different beliefs and styles (Association for Supervision and Curriculum Development, 1999; Jonson, 2002).

Secondly, in relation to the strategies employed by mentors, a number of writers (e.g. Burn, 1997; Roth & Tobin, 2002; Tomlinson, 1995) have argued from a variety of perspectives that collaborative teaching by teacher-mentors and their mentees, including shared planning and reflection, has great potential to facilitate the early professional learning of beginning teachers. Yet with a few exceptions, such as Burn's own small study, research on such a strategy is so far notable by its absence.

Thirdly, whilst, as we saw in Section 2.3.3, there is a wealth of evidence that a number of mentoring strategies and tactics tend to be associated with effective mentoring in general, it is less clear which strategies promote which of the potential outcomes or benefits of mentoring outlined in Section 2.1.

Fourthly, we feel that, despite a wide range of literature on the question of whether the assessment and support functions of mentoring should be separated, the evidence base remains inconclusive. A number of studies have suggested that, where both functions are carried out by the same person, it is more difficult to establish the kind of relationship, based on mutual trust, in which risk-free learning can occur (Abell et al., 1995; Heilbronn et al., 2002; Williams & Prestage, 2002). Other studies, however, have argued that with good mentors, and where a sound relationship with the mentee is established at the outset, there need be no conflict between the role of the mentor as supporter and assessor (Adey, 1997; Foster, 1999), while Yusko and Feiman Nemser (2008: 2) state that 'it is not only possible to combine assistance and assessment, but it is impossible to separate them and still take new teachers seriously as learners'. We believe that this is an important question worthy of further exploration.

Finally, almost all research into beginner teacher mentoring (and cited in this article) focuses on formal mentoring programmes. In the light of some research evidence highlighting benefits arising from more informal arrangements (Tracey et al., 2008), research might fruitfully explore the relative merits and demerits of formal and informal mentoring.

4. Discussion

4.1. Limitations

Before we conclude we wish to remind the reader of the limitations both of the evidence base in general and of this particular review of literature. First, while there has been an explosion of research into beginner teacher mentoring in the last two decades, certain problems with the evidence base remain, which make us hesitant to claim that any particular conclusions concerning the mentoring of beginner teachers have been established. The main issue here is that most studies rely solely on the accounts of mentees or mentors (and occasionally both), normally elicited via interviews and/or surveys, while Smith and Ingersoll (2004) observe that few studies compare outcome data from participants and non-participants in the mentoring programmes being examined, and Ingersoll and Kralik (2004: 6) bemoan the fact that most studies "do not or are not able to control for other factors that also could impact the outcome under investigation", such as school-level influences on beginner teachers' job commitment and retention.

Although we would argue that the lived experiences of mentees and mentors are pivotal to understanding the processes at work, that mentors' accounts are (thus) perhaps the single most important source of evidence relating to the practice of beginner teacher mentoring, and that the weight of evidence in support of many of the common findings presented above is considerable, we also recognise that participants' accounts can lack validity or credibility for various reasons. For example, the concept of social desirability suggests that research participants have a tendency, in their interactions with researchers, to seek to present themselves in a favourable light (see Dingwall, 1997). Furthermore, given that the privacy of a one-to-one relationship is an essential feature of mentoring, most researchers in this area have shied away from attempts to bring together and attempt to balance the views of both sets of participants in particular mentor-mentee relationships.

For these and/or other reasons, some writers have called for the greater use of alternative or additional methods of data generation to strengthen the current evidence base. For example, Roehrig et al. (2008) suggest that greater use might be made, in this context, of observational research, while Smith and Ingersoll (2004) call for large scale randomized or quasi-randomized experimental studies (including 'no-treatment groups'), which might give us greater confidence in existing research findings and might provide answers to some presently unanswered questions, such as which aspects of mentoring programmes contribute most to which potential outcomes or benefits.

Regarding our own review of the evidence base, we accept that, because of (i) the vast amount of research evidence available, (ii) limited resources, including limitations of the databases available to us, and (iii) our own prior knowledge and biases, the review of research that we have presented is (in common with other papers of this kind) unlikely to constitute an exhaustive and totally impartial account of the research on mentoring beginning teachers. For example, it relies solely on studies written in English. That said, we have undertaken a critical review of a significant body of research and we believe that this review provides a valuable contribution to the literature, and potentially to the knowledge and work of policy-makers, teacher educators and researchers considering further studies in this area.

4.2. Conclusions and implications

It is clear from the synthesis of research evidence presented here that beginner teacher mentoring has great potential to produce a range of benefits for mentees, mentors and schools; yet it

is also clear not only that this potential is often unrealised, but that on occasion, mentoring may even have the potential to do harm. It is our belief that the disadvantages and limitations of mentoring as discussed above are not the inevitable consequences of its use as a means of supporting the professional learning and development of beginning teachers, but rather proceed from a failure (at policy, institutional and/or individual levels) to ensure that what we refer to as the 'conditions for effective mentoring' are met.

It is perhaps unsurprising that research has found instances of poor mentoring practice when studies have also found that mentors are often given insufficient (or no) additional time in which to carry out their roles (Hobson et al., 2007); and although given the lack of conclusive evidence on the matter (Smith & Ingersoll, 2004) we can only hypothesise, we strongly suspect that at least some examples of poor practice and other negative side effects of mentoring can be attributed, in part at least, to problems of mentor selection and preparation.

Research has found that mentor preparation programmes are extremely variable in nature and quality (e.g. Abell et al., 1995), often focusing more on administrative aspects of the role than on developing mentors' ability to support and facilitate mentees' professional learning; often they are not compulsory, and are poorly attended (Feiman Nemser & Parker, 1992; Hobson et al., 2006). Some of the mentors of first year teachers in our own research reported that they had not been trained for the role (Hobson et al., 2006), and it is possible that those teacher-mentors who are most in need of training and preparation may be the least likely to attend available courses. In the light of all this, we feel that the preparation of mentors should be treated as a priority area for those policy-makers, researchers and teacher educators who are concerned about or interested in the support and professional development of beginning teachers. Furthermore, research might fruitfully compare the effectiveness of mentoring programmes in systems which have adopted Standards for beginner teacher mentors and those which have not (Graham, 2006), with a view to establishing whether this practice might usefully become more widespread.

Finally, while we would not suggest that all of the contextual features found to promote effective mentoring are always achievable in practice, the weight of research evidence in their favour does lead us to advocate further efforts to explore and describe them more fully. Pending our better understanding of their nature, their adoption in general terms is an ideal to which policy-makers and teacher educators, including mentors themselves and their school leaders, might profitably aspire.

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