



“I’m finally getting that help that I needed”: Early career teacher induction and professional learning

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Abstract

This paper reports findings from a study of early career teachers (ECTs) in Western Australia. The aim of this study was to investigate the professional learning activities of ECTs and the perceived impact of these on their professional development. Data were gathered via two online surveys and interviews. Findings reveal that ECTs participated in a range of formal and informal professional learning activities which were accessed through the Department of Education and their schools. The activities that had the greatest perceived impact on professional development were engaging in informal dialogue with colleagues and participation in an in-class coaching programme. Results lend support to the criticism of the unhelpful dichotomy between formal and informal learning in the provision of professional learning activities for teachers, and ECTs especially. They also highlight the critical role played by relationships and school contexts in ensuring the future generation of teachers are equipped to provide high-quality teaching and will remain resilient and committed to the profession beyond the early career years.

Keywords Early career teachers · Induction · Professional learning · Coaching

Introduction

Attracting, developing and retaining early career teachers (ECTs) has been an area of considerable interest to policy makers and schools for more than three decades. One of the major and sustained efforts has been to balance the disparity between theory and practice in teacher education programmes so that new teachers can

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be better prepared to cope with the ‘reality shock’ (Veenman 1984) in the physically, intellectually and emotionally demanding realities of classroom teaching. Further efforts have focused on supporting ECTs professional resilience (Beltman et al. 2018; Gu 2014; Mansfield et al. 2016) and the personal and contextual factors that enable teachers to thrive in their work. Research has consistently shown that most teachers enter teaching with a strong sense of vocation (Hansen 1995; Organisation for Economic Cooperation and Development (OECD) 2005), and that the quality of professional support is vital in sustaining their passion and commitment to continue to make a difference to the learning and achievement of their students over the course of their professional lives (Day and Gu 2010; Gu and Day 2013; Kardos and Johnson 2007).

Compared with their more experienced colleagues, ECTs’ challenges primarily stem from two distinct but interrelated needs: to develop a sense of professional self in their interaction with their colleagues, pupils and parents; and to develop a sense of belonging during their socialisation into the school community and the profession (Day and Gu 2010). These realities of teaching highlight the complex pedagogical, social and emotional needs of ECTs. Although ECTs’ learning and development is by no means an under-researched area, the complexity of their worlds and the continued retention crisis faced by many education systems continue to raise questions about how induction support can best serve their needs to become confident and effective practitioners and learn to manage and thrive despite the significant challenges inherent in their work.

A key aim of teacher induction processes is to provide support and professional learning experiences that will help ECTs to successfully transition to the profession, and importantly, prepare them for fulfilling teaching careers. Research has shown that successful induction experiences promote ECTs’ competence (Kelley 2016), resilience (Le Cornu 2013), effectiveness and job satisfaction (Schliecher 2016) and retention rates (Ronfeldt and McQueen 2017). Ingersoll and Strong (2011) argue that effective induction also positively influences teachers’ classroom instruction and student achievement. However, irrespective of the school sectors’ continued commitment to invest in induction programmes in Australia (HayGroup 2014), Kidd et al.’s (2015) recent study highlighted worrying evidence suggesting that there are considerable variations in access and quality of provision of induction support for new teachers.

This paper reports findings from a study of ECTs employed in government schools in Western Australia. Drawing upon the results of two teacher surveys and interviews with a sub-sample of the survey participants, the study investigated ECTs’ access to formal and informal learning experiences and the perceived impact of these experiences on their professional development. Included in the professional learning experiences was a formal induction programme developed and facilitated by the Education Department. Following a literature review, the paper focusses on exploring the forms of professional learning activities the ECTs engaged with, and the extent to which, and how, different activities were perceived to impact on ECTs’ professional development.

Early career teachers' professional learning

Developing and supporting ECTs to become highly committed, passionate and efficacious professionals holds the key to teacher retention (Day and Gu 2007, 2010; Johnson 2004), and by extension, the learning outcomes of children in schools. In essence, professional development activities offer experiences *of and for* learning which aim to bring about teacher change through developing their skills, knowledge, expertise and other characteristics which are central to the role (Hoekstra et al. 2007; OECD 2014). However, research shows that ECTs' levels of participation in professional learning and development activities can vary considerably and that irrespective of the investment in resources, many induction programmes and activities have not provided new teachers with the support and feedback they require (Ingersoll and Strong 2011; OECD 2014).

Scholars have used different approaches to analyse the nature and forms of professional learning activities and processes. Among these, the dichotomies between formal and informal learning experiences have attracted increased attention in recent years. Richter et al. (2011) define professional development as "uptake of *formal and informal learning opportunities* that deepen and extend teachers' professional competence, including knowledge, beliefs, motivation and self-regulatory skills" (2011, p. 116–117). They refer to formal learning opportunities as structured learning environments which are underpinned by the assumption that teachers update their knowledge and skills by means of workshops and courses. They feature a specified curriculum and represent the traditional, often mandated, training model of professional development. In contrast, in informal learning opportunities the learning process, as well as learning goals and strategies, tends to be independently organised and determined by teachers themselves (Richter et al. 2011).

Eraut (2004) and Kyndt et al. (2016) took a more holistic view in their endeavour to define the nature of learning in the workplace. Rather than focussing on dichotomies of indicators, both emphasise that professional learning experiences should be viewed as a *continuum* ranging from formal to informal. At the formal end of the "continuum of formality" (Eraut 2004, pp. 250), learning activities tend to be "structured in terms of time, space, goals and support" and organised intentionally to develop the knowledge and competencies of teachers (Kyndt et al. 2016, p. 1113). Activities towards the informal end tend to be "characterised by a low degree of planning and organising in terms of learning context, learning support, learning time, and learning objectives" (Kyndt et al. 2014, p. 2393). Because engagement in such activities is often a normal part of working life, the outcomes of informal learning can be highly contextualised and personalised, although not always readily articulated (Eraut 2004).

Although the research literature is not conclusive about which forms of professional learning are more effective than others, there is growing evidence suggesting that formalised workshops and courses often fail to meet the diverse learning and development needs of individual teachers—especially in terms of bringing about deep change in their skills, knowledge and/or behaviour (e.g. Day and Gu

2007; OECD 2005). The “implicit, unintended, opportunistic and unstructured” nature of informal learning (Eraut 2004, p. 250), however, can also make it difficult—both methodologically and conceptually—for researchers to establish the extent to which, and how, informal learning experiences in workplace contexts give rise to increased confidence, resilience, efficacy and commitment in individuals. In addition, Hoekstra and Korthagen’s (2011) research findings show that the depth of increased awareness reported by teachers in informal learning contexts may not be sufficient to entail the profound changes needed when they are required to adopt new ways of teaching.

Factors that influence the quality and effects of formal and informal learning activities vary—dependent on individual characteristics, the quality of provision of learning activity and the social, cultural and organisational contexts in which the learning engagement takes place (Eraut 2004; Richter et al. 2011). We are in agreement with Smith and Ingersoll’s (2004) and Avalos’s (2011) observation that the provision of professional development is most effective when it includes a range of complementary and comprehensive programmes which facilitate *co-learning* through *informal* teacher talk and exchange of practice, and also, co-learning through *formal* experiences such as mentoring and peer coaching, common planning time and regularly scheduled collaboration with teachers within and outside schools. For ECTs especially, the importance of mentoring and reciprocal peer coaching in induction programmes is closely associated with their improved pedagogical skills and greater retention rates (de Jong and Campoli 2018; OECD 2016).

Teacher induction in Australia

In Australia, teacher induction has received significant attention from National bodies (e.g. Australian Institute for Teaching and School Leadership (AITSL) 2016), sectors and schools. Although induction processes differ across states, sectors and schools, there is consensus that induction programmes should support development of professional identity, learning regarding professional practices (instruction, classroom management, assessment) and wellbeing and resilience (Buchanan et al. 2013; AITSL 2016).

The AITSL (2014) conducted a review of induction practices in Australia, finding that there was a high degree of variability in induction policies, regulatory requirements, practices and responsibilities depending on jurisdiction. Variability in the relationship between induction processes and professional learning was also identified with some professional learning experiences limited to “the operational aspects of a teacher’s role” and others providing a “comprehensive approach that includes classroom management, assessment, curriculum and pedagogy, relationships development and reflection on practice” (p. 5). The Australian Guidelines for Teacher Induction (AITSL 2016) state that induction programmes should focus on four key areas: Professional Practices, Professional Identity, Wellbeing and Orientation (formal requirements, for example, policies, procedures and legislation). In addition, multiple strategies are advocated including practice-focused mentoring (involving one or more expert colleagues) and targeted professional learning.

Although there are guidelines for mentoring as one of a suite of strategies to support teacher induction (AITSL 2016), and successful mentoring frameworks established (see for example, Hudson and Hudson 2016), in reality there are often substantial differences in the nature of mentoring practices in schools often due to contextual factors such as school location, size and resources as well as relationships between staff. Another approach that has been implemented to support teacher professional learning is coaching (Desimone and Pak 2017). Coaching differs from mentoring in that the process is generally more structured, content and task-focused and has a defined end point. Coaching, "refers to the nature of the processes and the type of communication used to help another person realise his or her personal or professional goals", whereas mentoring "refers to relationships where more experienced individuals share their skills and knowledge with other, less experienced practitioners" (ACER 2016, p. 12)

In the Western Australian context of this study, graduate teachers employed by the Department of Education participate in a formal induction at their school, receive financial assistance to support personal and professional costs of beginning in the profession and are entitled to a time allowance each week to support professional learning. In their first two years of appointment, graduate teachers are also required to complete a formal Graduate Teacher Induction Program (GTIP), developed and facilitated by the Department of Education. The GTIP aims to build graduate teacher capacity and skills, enhance graduate teacher professional practice, assist graduate teachers to gain a deeper understanding of the Australian Professional Standards for Teachers (AITSL 2011) and assist graduate teachers to transfer learning from the programme to their teaching practice. The GTIP contains four two-day modules: (1) Professional standards for effective classroom practice; (2) Facilitating student learning; (3) Assessment and reporting student learning outcomes and (4) Quality teaching—Professional achievement and aspirations.

In addition to this programme, ECTs may choose to participate in an 'In-Class Coaching Program' facilitated by an experienced and specifically trained teacher coach employed by the Department of Education. Coaching provides individualised, targeted and confidential support external to the ECT's school with specific activities including school visits, lesson observation and debriefs and phone-coaching sessions to support professional learning goals. Participants may 'opt in' to the coaching after completion of the first GTIP Module and must commit to the coaching programme for a period of approximately 6 months. At the time of this study, the coaching programme was unique in the Australian context.

The study

The Supporting Early Career Teachers Project (SECTP), upon which the paper is based, was designed to investigate the professional learning experiences of ECTs in Western Australia and the perceived impact of these experiences on their professional development. Given that the coaching model is unique in the Australian context, a further aim was to understand the extent to which this experience supported ECTs' professional learning. The study was guided by three research questions:

1. What types of professional learning do ECTs experience?
2. How do ECTs perceive the impact of professional learning on their development?
3. To what extent does in-class coaching impact on ECTs' professional learning?

Methodology

The study used a mixed methods approach, gathering data through baseline and follow-up surveys and twelve telephone interviews with ECTs who were involved in a graduate teacher induction programme organised and facilitated by the Education Department of Western Australia. In essence, mixed methods design is an integrated methodology representing a “third wave” for researchers to move “beyond technical questions about mixing or combining methods” and beyond combinations of quantitative and qualitative research techniques for pragmatic purposes (Johnson and Onwuegbuzie 2004, p.17). Over the last decade research concerning teachers' work, lives and effectiveness has consistently showed that the primary concern of designing a mixed methods study should be the “theoretical foundation” (as outlined by Creswell and Clark 2011, p.10) which informs and shapes the “conceptual and methodological synergy” (Day et al. 2008, p.334) throughout the research process. Our experience suggests that although *methodological* integration is an essential precondition for achieving synergy, *conceptual* integration is a necessary part of methodological integration—which does not mark the end of the research ‘for those results have the potential to create “spaces” for new hypotheses that centre on different sets of associations, which may result in richer, synergistic understandings’ (Day et al. 2008, p. 341). In this research by means of conducting deductive (baseline survey)—inductive (interviews)—deductive (follow-up) research (i.e. explanatory sequential design as defined by Creswell and Clark 2011), we also intended to move from conceptual and methodological *integration*—in which the qualitative and quantitative were, by the dictionary definition of the term, “mixed and combined to form a whole”—to *synergy*, in which their interaction produced further hypotheses that led to new, unanticipated conceptualizations, which in turn created findings “greater than the sum of their separate effects” (Compact Oxford English Dictionary, 2005, online version).

Surveys

The project began with an email invitation (pre-survey) to all 800 ECTs who were participating in the GTIP induction programme at the time of the study. In total, 309 teachers completed the pre-survey, and of these, 300 agreed to participate in the study, representing 38% of the ECT population in the programme. A baseline survey (“Survey 1”) and a follow-up survey (“Survey 2”) were then sent to those who responded positively to the pre-survey in May (4th month of the school year) and November 2017 (10th month of the school year), respectively. The decision to invite all ECTs on the induction programme to participate in the study considered the likelihood of low survey response rates and participant attrition over time. The

surveys were administered 6 months apart so as to capture initial professional learning opportunities, as well as those that transpired as the year progressed.

In order to achieve an acceptable survey response rate, the questionnaires were administered both online and on paper. During the survey periods, following the initial invitation, three reminders were sent by email. Where possible, we asked facilitators of the induction programmes to hand out paper questionnaires (in sealed envelopes) when they had face-to-face gatherings. However, of the 300 who agreed to participate, 225 teachers responded to Survey 1, representing a response rate of 28% of the total ECT population in the programme, but 75% of those who responded positively in the pre-survey. A total of 69 teachers responded to Survey 2 representing 9% of the original research population and 23% of the 300 who initially agreed to support the survey research. Thirty-four completed both surveys. The lower than expected survey response rate reflects similar challenges that many school-based survey studies have experienced elsewhere (e.g. Sammons et al. 2011; Earley et al. 2012).

The baseline and follow-up surveys contained the same core sets of questions regarding teachers' motivation, commitment and participation in and perceived impact of formal and informal learning opportunities on their professional development. The design of these questions considered the scales and measures in the existing research literature. Given the focus of this paper, we will elaborate those regarding teachers' professional learning and development in more detail.

Questions on teachers' *professional learning* were largely drawn from the OECD's TALIS survey in 2013. The survey asked participants to indicate their participation in a range of professional learning experiences, including compulsory professional learning (e.g. GTIP), and other school directed (e.g. in-school mentoring) and self-directed (e.g. professional reading) activities. For the activities in which they participated, teachers were asked to indicate the perceived impact of each activity on their professional development. Responses were given on a four-point Likert scale: no impact (1), a small impact (2), a moderate impact (3), a large impact (4).

Participants

The majority of the teachers who responded to Survey 1 were female (77%). A total of 59% were employed on a full-time basis and for 53% of the respondents, teaching was their first career. Most participants had completed either a four-year Bachelor level qualification in Education (45%) or a one-year Graduate Diploma of Education (47%). A small percentage (7%) had completed a 2-year Master of Teaching. They had up to three years of experience in teaching (year 1 = 70%, year 2 = 22%, year 3 = 8%). The phase of their schools ranged from early years to upper secondary. These respondents worked in a range of locations: metropolitan, regional and remote schools in Western Australia.

Interviews

All respondents who provided their contact details in Survey 1 were also invited to participate in the qualitative strand of the study which involved a semi-structured

telephone interview at the end of the school year, after the second survey. The nine interview questions were informed by the literature and the research questions for the study. Participants were asked about their professional learning experiences, specifically mentoring and coaching (e.g. How has your in-school mentor helped you develop your teaching this year? Have you accessed the in-class coaching? If so, what impact do you think that has had on your teaching?). Participants were also asked about critical supports and key challenges, and career intentions for the following year. All interviews were conducted via telephone at a time convenient for the interviewees. Each interview took from between 25 and 45 min. All interviews were audio-recorded and transcribed for analysis.

Twelve teachers (11 Female, 1 Male) were interviewed. Seven were working in primary schools, four in secondary schools and one participant in an Educational Support unit. At the end of the year, five were staying in the same school the following year; three were moving to another school; three were unsure of their future employment, but wanting to stay in teaching and one was unsure about staying in the profession. Only two participants had a school-based mentor, but all were participating in the in-class coaching programme.

Data analysis

The survey analysis was largely descriptive, focussing on exploring the extent to which the responses were similar or different between various groupings of teachers. We used descriptive statistics, including frequency distributions and measures of central tendency and dispersion, to explore detailed accounts of the profiles and demographics of the participants and their motivation to become a teacher and how committed they felt about teaching. The analysis also examined participating teachers' participation in professional learning activities within and outside school and their perceptions of the impact of each activity on their development. The number of responses for each item was transformed into percentages against the total number of respondents in order to identify an overview of the data trends. In addition, we also explored change in participating teachers' perceptions and experience by comparing the results between Surveys 1 and 2. Because of the lower than expected survey response rates, caution was exercised when analysing and interpreting the data—especially with Survey 2 data—ensuring that we did not over-claim the findings of this research. Particular focus was thus placed on analyses which would enable us to identify *major* differences and similarities that were reported by the *majority* of respondents in both surveys.

The results of the analysis of surveys informed the construction of the interview questions, and importantly, the ongoing analysis of the interview data so that we were able to identify narrative accounts of participating teachers' experiences and perceptions that helped to explain the observations identified in the surveys. This approach to data analysis is broadly in line with the procedures described by Creswell and Clark (2011) in their work on exploratory sequential mixed methods research.

The interview data were analysed in accordance with the processes suggested by Miles, Huberman and Saldaña (2014). The data were first organised according to the interview questions and first cycle inductive coding conducted to identify key ideas. A matrix was developed to summarise demographic information and represent key ideas according to each participant. Next, using the research questions as a guide, the first cycle codes were organised according to three broad categories: types of professional learning experiences, perceptions of impact of professional learning and impact of in-class coaching. Second cycle coding involved identifying themes emerging from the first cycle codes in each category, for example, impact of in-class coaching: building confidence, positive support, reducing stress, providing reassurance. Findings from the qualitative analysis were used to supplement and contextualise the quantitative survey findings, and in particular, give greater depth into the extent to which, and how, different professional learning experiences (especially coaching) had made a difference to participating ECTs' professional development.

Results

The results from both surveys are presented and relevant data from the interviews are used to provide further insights to some of the findings.

What types of professional learning do ECTs experience?

Required formalised professional learning

The required professional learning for ECTs in the induction programme was the four GTIP Modules which were to be undertaken over a 2-year period. At the time of Survey 1, almost every respondent ($n=218$, 99%) had completed the GTIP Module 1 (i.e. Professional standards for effective classroom practice) and about one-third ($n=68$, 32%) had participated in Module 2 (i.e. Facilitating student learning). Eight second-year teachers and one first-year teacher ($n=9$, 7%) had completed Module 3 (i.e. Assessment and reporting student learning outcomes). As to be expected given the 6-month timeframe between surveys, the percentage of participants engaged with the modules increased at the time of Survey 2 with 100% ($n=67$) of participants having completed Module 1, 91% ($n=61$) completed Module 2, 27% ($n=18$) completed module 3 and 13% ($n=9$) completed Module 4 (i.e. Quality teaching: Professional achievement and aspirations). As we will elaborate later in this paper, not all modules were rated by participating teachers as valuable learning experiences for them.

Other professional learning activities

Participants also reported having engaged in school-based professional learning activities outside the GTIP, since gaining qualifications as a teacher. Professional learning activities included a combination of opportunities purposefully organised

and facilitated by schools that were closer to the formal end of the “continuum of formality” (Eraut 2004, pp. 250), and experiences and events which took place in the workplace environments that came closer to the informal end of the continuum.

Towards the formal end of the learning continuum

- Courses/workshops (e.g. on subject matter or methods and/or other education-related topics)
- Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational problems)
- In-school mentoring
- In-class coaching programme
- Observation visits to other schools
- Having teaching observed by colleagues
- Observation of colleagues teaching

Towards the informal end of continuum

- Engaging in informal dialogue with colleagues on how to improve teaching
- Participation in a network of teachers formed specifically for the professional development of teachers
- Reading professional literature (e.g. journals, evidence-based papers, theses)

As shown in Fig. 1, in both Surveys 1 and 2, the most commonly experienced professional activities included having *informal conversations with colleagues*

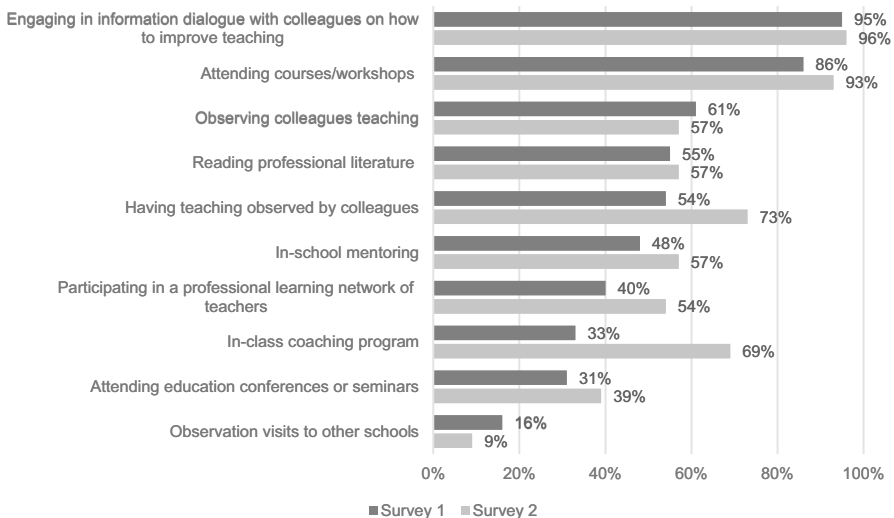


Fig. 1 Participation in other professional learning activities Survey 1 and 2

(Survey 1 = 95%, Survey 2 = 96%), followed by *attending courses/workshops* (Survey 1 = 88%, Survey 2 = 93%), *observing colleagues teaching* (Survey 1 = 61%, Survey 2 = 57%) and *reading professional literature* (Survey 1 = 55%, Survey 2 = 57%). However, it was noted in the interviews that the opportunities to be supported in workplace contexts were not always available to everyone: "I've tried saying to a few other teachers and they're like 'I'm just busy right now,' so I've kind of gone 'okay, don't worry'" (ID8).

There were some differences in percentage of participants experiencing particular professional learning activities in the time between Surveys 1 and 2, specifically, *having teaching observed by colleagues* (from 54 to 73%), *in-school mentoring* (from 48 to 57%) and *participation in a professional learning network* (from 40 to 54%). The largest increase was in the proportion of teachers participating in the *in-class coaching* programme (33% to 69%). These findings are promising, especially since these forms of professional learning have potential to offer support targeted at individual needs and to provide ECTs with feedback.

The finding that less than half of the participants in Survey 1 (48%) and only slightly over half of the Survey 2 participants had access to mentoring support is surprising, given the national emphasis on mentoring as a critical part of the induction process (AITSL 2016). Some insights as to why ECTs did not have mentors were provided in the interviews, and included lack of available and appropriate staff, for example:

I asked [for a mentor] and I was told it's too tricky to arrange. (ID6)

I got asked if I wanted a mentor, but again, there was a lot of changes going on and the only people available were part time people so they said 'you could just come up to the office and speak to the principal and the deputy' ... I didn't really have a direct mentor as such. (ID3)

How do ECTs perceive the impact of professional learning on their development?

Required formalised professional learning

Overall, the vast majority of the participants in both surveys indicated that the GTIP modules had a positive impact on their professional development. Figure 2 shows participants' rankings of impact at Surveys 1 and 2, with professional learning activities ranked in descending order based on the percentage of participants who indicated a *large impact* for the activity. In interpreting these findings, it should be noted that the perceived impact of each module may have been influenced by module content and applicability to ECTs' needs and concerns at that time, for example, Module 3 (Assessment and Reporting) addresses a very common concern for ECTs, and so its perceived impact (acknowledging small numbers) is perhaps not surprising. It is also possible that with time, the perceived impact may diminish as ECTs take on the Module learnings as part of their everyday work.

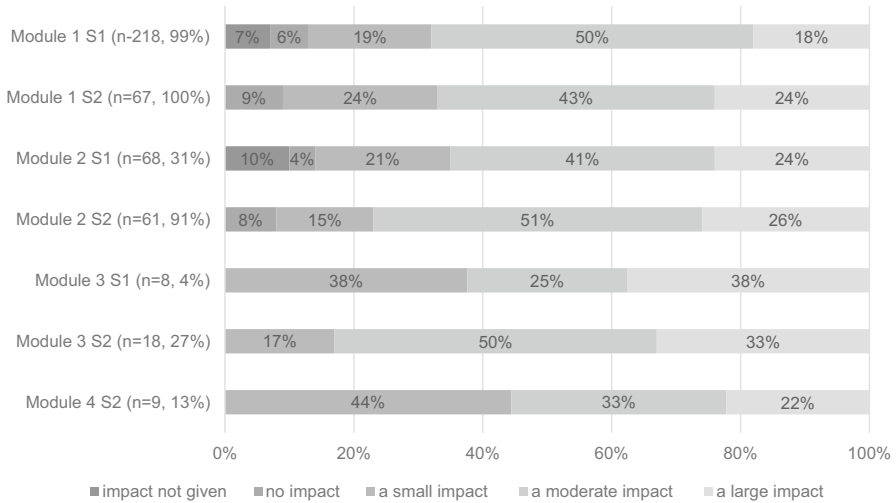


Fig. 2 Perceived impact of GTIP modules Survey 1 and 2

Other professional learning activities

Participants were also asked to indicate the impact of other professional learning activities. Figures 3, 4 show participants’ rankings of impact at Surveys 1 and 2, with professional learning activities ranked in descending order based on the percentage of participants who indicated a large impact for the activity.

Results of both surveys suggest that *informal dialogue with colleagues* and *in-class coaching* were perceived by most participants as having a considerable impact

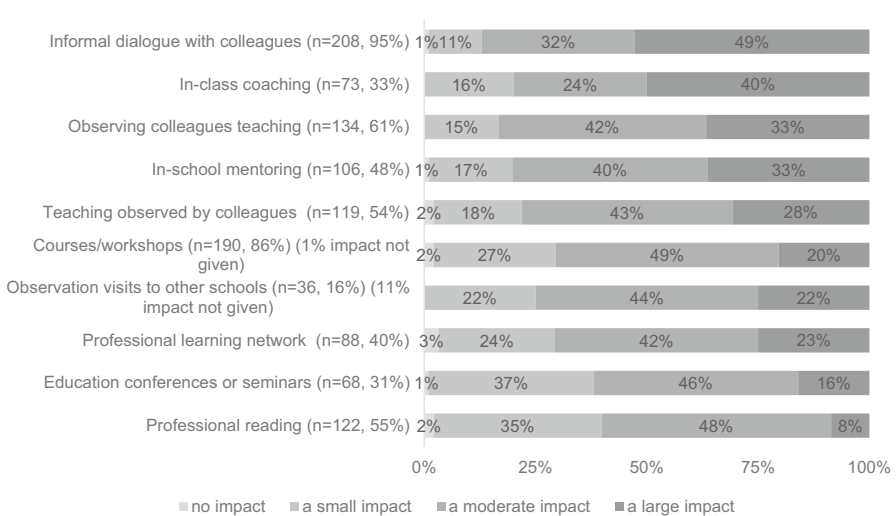


Fig. 3 Impact of other professional learning activities Survey 1

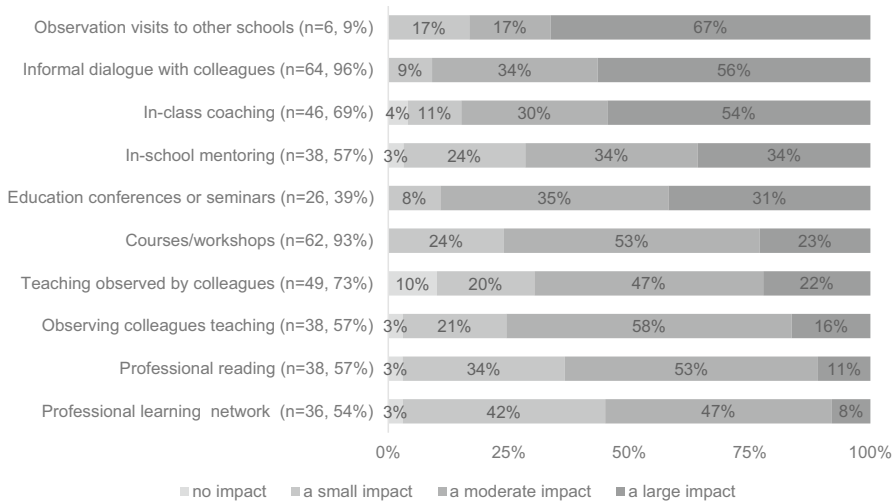


Fig. 4 Impact of other professional learning activities Survey 2

on their professional development. Around half of the participants reported a *large impact* from having informal dialogue with colleagues (49% in Survey 1 and 56% in Survey 2), with approximately a third (34% in Survey 1 and 32% in Survey 2) reporting a *moderate impact*. In the interviews, the importance of the informal conversations was also highlighted.

Even just engaging informally with colleagues and with my friends in the English department and you know, venting/ranting ... asking for advice or just being listened to, being offered advice informally as well, knowing I think sometimes that it's not just you struggling with a certain problem, you know, those kinds of things are very valuable (ID5).

Proportionally slightly more participants in Survey 2 (54%) than in Survey 1 (40%) reported that *in-class coaching* had a *large* (54% vs. 40%) or *moderate* (30% vs. 24%) impact on their professional development. For a third of the participants in both surveys, *in-school mentoring* had a *large* impact on them. The following quote also explains why 71% of participants in Survey 1 (28% large impact, 43% moderate impact) and 69% in Survey 2 (22% large impact, 37% moderate impact) felt that *being observed teaching by colleagues* was a highly impactful learning experience for them:

Oh, I signed myself up and did the CMS [Classroom Management Strategies] course, just instructional strategy and it's great because even though we did lots of it at uni, doing it in such a way that you do straight from the course into the classroom, then plan it and get observed, it really embeds the learning. So it was really fabulous (ID3).

In Survey 1, around a third of the participants who had access to *observing colleagues teaching* (33%) and *education conferences or seminars* (31%) reported a

large impact. For some participants, conferences provided an opportunity for informal conversations: “we did one which was like a conference and we got to pick and choose which courses we went to, that was a whole day thing ... So meeting with some other year level teachers, hearing about what they’re doing, that sort of thing I’ve really enjoyed” (ID2). Approximately one in five (22%) and close to half (44%) of the Survey 1 participants reported that having *observation visits to other schools* had a *large* or *moderate* impact on them, respectively. Although this activity appeared to have been highly rated by the Survey 2 participants (67% large impact), the result must be interpreted with caution as only six teachers had opportunity for this learning activity in the second, follow-up survey.

To what extent does in-class coaching impact on ECTs’ professional learning and intentions to remain in the profession?

As all twelve interview participants opted for an in-class coach, they were able to offer a range of insights as to why this experience was ranked so highly.

Participants described how coaching helped build their confidence. Beverley (ID2) described how the in-class coach “would come in and she would observe and go no ... there are a lot of things here that an experienced teacher could find very hard to manage. So it was that confidence that it’s okay, you are doing okay”. Similarly, Sharon (ID5) described how coaching

supported and encouraged to boost my confidence that, you know, I did have the answers. I think sometimes you have a bit of a bad experience and you can just shut down and think that “I can’t do this, it’s too hard”, whereas most of the time you have access to the information that you need, you just need to really review or implement it in a different way.

Sandie (ID6) described her coaching experience as

Really, really positive. She’s been amazing, she’s come in and videoed me and not given advice, but she makes me think of my own things, she asks the questions that make me think and just super helpful ... she’s always on the end of an email if I need to send her a message and say ‘how about this’ or ‘what do I do here?’ Just super positive.

This extended to helping Sandie reflect on “the good bits about the lesson” because “it’s very easy to focus on what went wrong and how, at times I think nobody’s listening, no matter what I try and how much I’m putting the effort in”.

Imogen (ID9) described how her coach helped her with planning and this in turn reduced stress.

I’m a bit of a stressor as well, so whenever I was stressed about something or about the way I was doing something, she kind of went through it all with me and said ‘look, your planning is ridiculous, you’re wasting so much time. That can be cut out, that can be cut out. Are you doing this because you feel like you have to or is it actually helping you?’ And so we kind of streamlined my planning ...

A clear advantage of coaching was that it provided ECTs with independent, confidential support, and focused on them and their professional development. Amy (ID1) described how in her first meeting with her coach "it was like, oh, hang on a minute, this guy is actually on my side, and he's not telling me to forget about things or whatever, and he's actually helping me work through and make myself a better person and a better teacher ... that was the key moment I thought 'ah, actually this is good. I can do this'."

Coaching also gave participants the reassurance that they were progressing. Frances (ID8) noted it was "helpful to know that I'm on some sort of straight path and I know I'm doing some things right in the classroom, otherwise I would have just been left to figure it out myself". Sharon also spoke of the isolation of being "in a classroom by yourself, people don't see you teach" and that the coaching provided reassurance that "you know, you're doing a really good job".

The non-judgemental aspect of the coaching was also highly regarded. Sharon (ID5) described her coach as

very non-judgmental, it was just a very supportive, encouraging relationship - completely non-judgmental. I don't think she pointed out things that I wasn't already aware of. I was the one picking up on the things that I could have done better and she just, I suppose, guided me towards finding solutions for those things. And you didn't get any judgment, it wasn't your principal coming into watch and so you didn't feel, you know, this need for everything to be perfect.

Similarly, Lisa (ID12) noted the benefit of "having someone to listen to you. It was impartial so you didn't have to worry about the politics of the classroom or of the school".

The coaching experience also encouraged in-depth reflection about teaching practices and how to manage challenges in the classroom. Cathy (ID3) described how

It forces you to take time out to reflect, that's what the in class coaching does, it forces you to take a lesson, reflect on that lesson, take time out to make some changes in the classroom if needed. They don't give you advice, but they just make you - she'll ask a few questions and you have to reflect on those.

The process of questioning to solve issues during the coaching sessions also seemed to help ECTs improve their confidence. Sharon (ID5) described "we were able to discuss lots of practical strategies, she did give me some advice, but mostly she was able to help me to find the answers by asking the right questions".

Coaching also provided ECTs with the opportunity to be observed in the classroom and receive feedback. Frances (ID8) explained "it was really helpful for someone to look at what I've done because I haven't been observed at all, teaching, no one's watched me teach this year...they're like 'you're a really good teacher'. I'm like, how does anyone know that? No one's actually been in my classroom".

The level of support in ECTs' school contexts seems to be a critical factor in how much impact the coaching experience had. For Renae (ID4), there was "not a

huge impact” because “I felt like I was actually getting a lot of support already”. Renae noted, “I think it would make a massive difference if you were in a school where you didn’t have such supportive administration where you didn’t feel like you had advocates, then it would be really important”.

Indeed, that was the case for Amy (ID1) who described her coach as “just fantastic”. Amy was teaching in a small school and had experienced multiple challenges including unsupportive colleagues and school administration as well as students with significant difficulties. Her coaching experience was “like it was just like oh my God, I’m finally getting that help I needed, you know, and that’s—I think it’s like someone you see things in a different light, or get to talk it out with someone who will either agree with you or go ‘well maybe think about it like this and see if you still feel the same’, you know, so ... yeah, I think his help was invaluable to me succeeding through the year”.

Timing of the coaching also had an influence on the impact. Danielle (ID7) found the coaching was not as beneficial as it could have been because of the numerous other issues she was focused on at the time. She noted, “I should have just stepped back and gone ‘you know what? This is for me and for my professional learning, it’s not for other people’s problems’ - I should have been a bit more selfish”.

Discussion and conclusion

This paper reports findings from a study of ECTs in Western Australia. The aim of the study was to investigate ECTs’ professional learning experiences and the perceived impact on their professional development. A further aspect of investigation was the extent to which in-class coaching supported ECTs’ professional learning. The findings point to three research-informed observations.

First, the research supports the criticism of the unhelpful dichotomy between formal and informal learning in the provision of professional learning activities for teachers, and ECTs especially (e.g. Eraut 2004; Kyndt et al. 2016). In her extensive review on teachers’ professional learning and development, Webster-Wright (2009) argued that professional development programmes must recognise teacher learning as a holistic experience and that providing activities which enable teachers to be engaged in authentic learning is a much more productive approach to support their professional development than categorising different learning experiences. In a similar vein, Timperley et al. (2007) in their best evidence synthesis on teachers’ professional development also stressed the importance of engaging teachers in a variety of activities to promote their professional learning. In line with these observations, we found in this research that learning environments which enabled ECTs to consolidate their competence and confidence through engagement with a combination of well-coordinated formal and informal activities tended to be perceived as especially beneficial. For most participating teachers, what mattered most were school-based informal dialogue with colleagues and personalised, targeted support in the form of in-class coaching. Although formally structured induction programmes and courses were perceived to be a valued learning opportunity, formal and informal learning activities that

supported them emotionally and intellectually in the context of their work were perceived to have the greatest impact on their professional development. This finding lends strong support to Opfer's (2016) analysis of the 2013 TALIS data which also shows that school-embedded professional development is often perceived by teachers as having a positive, significant impact on their learning and development rather than non-school-embedded professional development activities. However, the worrying message is that the focus of provision in many countries and for many teachers continues to have been placed upon attendance at formally organised external courses, workshops and education conferences and also, teacher support networks (OECD 2005, 2016). Further, induction programmes and mentoring have been viewed as important contextual resources to support teacher resilience (Mansfield et al. 2016).

Related to the first is the second observation which stresses the importance of *relationships* and *context* in fostering the impact of early careers teachers' learning experience on their professional development. Neuroscientists' discovery of the social brain reveals that "we are wired to connect" (Goleman 2007, p. 4) and provides a biological basis for understanding the importance of good-quality relationships in supporting and promoting teachers' learning and effectiveness in their daily work and lives. It is perhaps then no surprise that Desimone (2009) reported in his systematic review of the literature that collective participation should be considered a core feature of professional development. A toxic cultural system in schools which denies the importance of connection for growth is detrimental in two interrelated ways: on the one hand, it devalues our need of others and impedes our ability to turn to them for support in distress; on the other hand, it challenges our capacity to form supportive relationships for learning that are mutually beneficial to all those involved (Gu 2014; Jordan 2010, 2012). In this research, learning activities (e.g. informal dialogues with colleagues, coaching, mentoring and classroom observations) that were highly ranked by participating teachers were those whose effectiveness and impact essentially builds on trusting relationships between those involved.

These learning activities—with no exception—were also embedded in the *contexts* in which ECTs were gaining experience and in which their learning had occurred. Sternberg et al. (2000) analysis of knowledge acquisition pathways suggests that knowledge acquired in context of use—although may not be readily articulated—has already been contextualised by the 'learner', whilst taught knowledge from external courses and workshops is based only on other people's experiences and thus being decontextualized (see also Eraut 2004). The implication of Sternberg et al.'s observation for this research is that feedback and critical support from colleagues in the context of use is likely to be perceived as learning opportunities that enable ECTs to translate taught knowledge and book knowledge into personalised, accessible and contextually meaningful understanding about teaching and learning, and ultimately, enhance their confidence and promote their further development in teaching.

Timperley's (2008, p. 6) synthesis of the research on teacher professional learning and development confirms that teachers' "moment-by-moment decisions about lesson content and process" are shaped by multiple factors, including the context in which the teacher practices:

Professional learning is strongly shaped by the context in which the teacher practises. This is usually the classroom, which, in turn, is strongly influenced by the wider school culture and the community and society in which the school is situated. Teachers' daily experiences in their practice context shape their understandings, and their understandings shape their experiences. (2008, p. 6)

The third observation emphasises the perceived importance of in-class coaching and mentoring to the learning and development of ECTs. Coaching and mentoring offer a different, yet individually focused professional learning opportunity, with potentially significant impact for those teachers who may be at risk and who may be working in schools where there is limited support. Although mentoring of early career teachers has been the focus of much research, a worrying observation of this study was that many teachers did not have access to a mentor (see also Kidd et al. 2015). As noted by participants, mentoring opportunities were constrained by school resourcing and time. Yet, coaching provided focused external support, which many found powerful. Coaching provided an 'outsider' perspective which challenged ECTs' preconceived understanding of teaching and learning, offered critical feedback to guide and help teachers to refine their skills and practice, and through these, expand their competence and capabilities. Exploring in more depth how this particular coaching model works to support early career teacher development is an important topic for future research.

The findings from this study have implications for school leaders, education sectors and policy makers. Whilst there is a tendency, and indeed responsibility, for sectors and departments to provide generic induction programmes, it should be highlighted that resourcing should also be directed at personalised, targeted programmes, such as the in-class coaching programme. Furthermore, school leaders should take an active role in ensuring that ECTs have access to appropriate mentoring and that there is a collaborative and supportive culture among staff that makes it easier for ECTs to access support at a time of particular need. Supportive *relationships* and school *contexts* are critical to ensure the future generation of teachers are equipped to provide high-quality teaching and will remain committed and resilient beyond the early career years (Day and Gu 2014; Gu and Day 2007, 2013; Mansfield et al. 2014, 2016).

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Caroline Mansfield's research primarily centres on pre-service and early career teachers with particular attention to the personal and contextual resources that enable teachers to maintain engagement, commitment and motivation, and thrive throughout their career. Current research is exploring innovative approaches to promoting resilience in teacher education.

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