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Early Childhood Intervention Induction: An Example of Experiential Workplace Learning and Peer Coaching

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Within the field of early childhood special education in the United States of America, states and programs are challenged by how to ensure practitioners who work with infants and toddlers and their families (i.e., special educators, speech-language pathologists, physical therapists, and occupational therapists) use evidence-based early childhood intervention (ECI) practices (Bruder, 2016; Bruder & Dunst, 2005; Chang, Early, & Winton, 2005; Snyder, Hemmeter, & McLaughlin, 2011). Since early childhood intervention (ECI) (early childhood special education for infants and toddlers) is such a small subset of what special educators and allied health professionals do, preservice programs spend little time preparing practitioners for *how* to implement their craft in the context of services to infants and toddlers and their families (Bruder, 2016; Bruder & Dunst, 2005; Chang et al., 2005; Dunst, Hamby, Howse, Wilkie, & Annas, 2019; Ray, Bowman, & Robbins, 2006; Snyder et al., 2011), which is significantly different from providing school-based, clinic-based, or rehabilitative services to older children and adults (Bruder, 2016; Hanson & Bruder, 2001; Winton, McCollum, & Catlett, 1997). For example, preservice programs for special educators often focus on licensing educators to work with individuals birth through 21. Since most of these years are spent in classrooms, the bulk of pre-service training prepares educators to deliver classroom-based services (e.g. classroom design, lesson planning, and instructional strategies for interacting directly with children). Since the primary role of early intervention is to promote the capacity of parents and caregivers to facilitate the child's learning during typical family activities and routines that occur in the home and surrounding community (meal time, dressing, bathing, grocery shopping, etc.), school-based educators may not be fully prepared or initially competent at providing services in an ECI context.

Pre-service preparation programs for allied health practitioners also tend to focus instruction on discipline-specific knowledge and expertise needed to work across the lifespan and attend little to the pedagogy of providing services to infants and toddlers in their homes and community settings (Bruder, 2016; Bruder, Mogro-Wilson, Stayton, & Dietrich, 2009). Pedagogy is described as "…the instructional techniques and strategies that allow learning to take place. It refers to the interactive process between practitioner and learner… and includes aspects of the learning environment" (Siraj-Blatchfod, Sylva, Muttock, Gilden, & Bell, 2002, p. 10). Pedagogy within the context of early intervention refers to the cross-discipline skills and practices a practitioner needs in order to facilitate the learning of both the child enrolled in ECI as well as the family members and other caregivers (i.e., family-centered practices, natural learning environment practices, coaching interaction style, teaming practices, etc.). Individual programs and state ECI systems are therefore largely responsible for providing the training and support needed to prepare practitioners to implement pedagogically sound services within an evidence-based framework.

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Professional development within ECI and early childhood special education are too often characterized by workshops, presentations, and webinars (Bruder et al., 2009) despite the well-known ineffectiveness of these types of professional development (Dunst & Trivette, 2009; Dunst, Trivette, & Hamby, 2010; Winton & Collum, 2008). In fact, Bruder and her colleagues report that less than half of statewide early intervention or preschool special education systems in the Unites States disclose having workforce that is adequately trained to serve infants or young children with disabilities. In addition, Bruder reports that competence monitoring is rarely a consideration with typical professional development initiatives. When it comes to effective learning, ECI programs could make better use of workplace learning opportunities to increase practitioners' knowledge, skills, and abilities with regard to becoming current with evidence-based practices. In fact, a well-planned orientation process serves as an implementation driver of evidence-based pedagogical practices (Fixsen, Blasé, Naoom, & Duda, 2015). Given the chronic under preparedness of practitioners entering the ECI field (Broekkamp & van Hout-Wolters, 2007; Vanderlinde & van Braak, 2013), it is particularly important to understand how practitioners can benefit from experiential workplace learning to understand their roles and responsibilities as well as become competent using the cross-disciplinary evidence-based practices that make up ECI work.

The purpose of this paper is to describe a framework for experiential workplace learning (EWL) and demonstrate how it was applied with success to a small early childhood intervention program's professional induction process for four novice practitioners. When paired with peer coaching, EWL was an efficient method for ensuring the uptake and use of evidence-based ECI pedagogical practices by novice practitioners.

Experiential Workplace Learning

Workplace learning is generally characterized as taking place through either formal or informal channels. Formal learning in the workplace happens through organized, curriculum-based training programs or through informal learning activities that contribute to the organizational effectiveness and the learning and development needs of the individuals (Manuti, Pastore, Scardigno, Giancaspro, & Morciano, 2015). Some estimate that 75% (Bancheva & Ivanova, 2015) to 90% (Cerasoli, Alliger, Donsbach, Mathieu, Tannenbaum, & Orvis, 2017) of workplace learning is informal. Sambrook (2005) distinguished between *learning at work* and *learning in work*, where the former refers to formal learning workplaces provide through inservice workshops and online learning, and the latter refers to informal job-based learning experiences. Strong institutional leaders can capitalize on the natural learning opportunities afforded to novice practitioners during the course of their work to create a climate in which practitioners feel a sense of belonging and want to support the organization's mission and goals and the conditions that enable practitioners to attain knowledge, skills, and utilization competence. The experiential workplace learning induction process outlined here describes one way ECI leaders can bridge the research-to-practice gap by developing and implementing an evidence-based professional development approach that provides practitioners with the supports needed to ensure they have the knowledge and skills to fully implement evidence-based pedagogical practices.

Defining Experiential Learning in Early Intervention

The EWL process used to orient novice practitioners was rooted in the work of Kolb (1984, 2015), Dewey (1938), Piaget, (Piaget & Inhelder, 1969), and Vygotsky (1980). Although experiential learning can occur in diverse settings, some contextual (i.e., on the job learning, see Dernova, 2015; Fenwick, 2008; Manuti et al., 2015; McRae, 2015) and some decontextualized (e.g., learning games,

simulations, role play, etc.). This paper describes the experiential learning that occurs in the workplace as a practitioner is performing the work of ECI (home and community visits, related paperwork, team meetings, etc.) and is referred to here as experiential workplace learning (EWL). Bierema and Eraut (2004) note that "…very often learning and working occur at the same time and sometimes, as in problem solving, they are identical." (p. 55). EWL prioritizes learning through the problem-solving that occurs as practitioners are faced with real-life interactions and must use the right practices, at the right time, in the right measure to maximize the impact for children and families.

Although no agreed upon definition exits, EWL is often defined as a method for actively engaging the learner in a contextual learning process (Fenwick, 2000). Boud, Cohen, and Walker (1993) identify principles of experiential learning that are generative and well-suited for workplace learning, and including:

- Learners participate in practical experiences that are carefully selected and supported by reflection.
- Learners engage intellectually, emotionally, socially, and physically in authentic tasks.
- Learners investigate personal assumptions and values.
- Learners learn from successes and setbacks as they naturally occur.

Within this paper, EWL is defined as semi-formal and informal contextualized professional learning that occurs during the experience of performing one's work duties and reflection upon work activities for the purpose of improving work-based outcomes. Key to the proposed definition is that the learner is conducting the work through which learning is occurring and is engaging in reflection of that work and using the reflections to plan for continuous improvement as measured by the outcomes of the work (Boud et al., 1993; Fenwick, 2008; Lundgren et al., 2017; Trede, Sutton, & Bernoth, 2016).

Operationalizing Experiential Workplace Learning in Early Intervention

This paper examines the iterative work of leaders at an ECI program in the Southeast United States, to streamline a practitioner orientation process in an effort to stem the tide of staff turnover, monitor outcomes, and promote practitioner fidelity to cross-disciplinary practices. The small program employed a team of 13 direct service practitioners (two occupational therapists, one physical therapist, three speech-language pathologists, three educators, three nurses, and a nutritionist) and served about 160 families within a five-county area at any given time. Three of the direct service practitioners also performed supervisory and/or administrative functions for the team and therefore maintained a reduced caseload.

On this ECI team, practitioners from varied disciplines work together to support families with young children with disabilities or at risk for developing developmental delays within a geographic region. The team works together and in consultation with each family to determine which team member's professional expertise is needed to support the educational and resource priorities of the child and family. Typically, the team member assigned to a family works in isolation with the family during home visit or with an early childhood teacher if center-based visits are deemed appropriate. Since ECI services are provided outside of a central location (like a clinic or school building), practitioners must be competent at providing a range of services independent of direct supervision and serendipitous peer support that educators and allied health professionals might experience in other contexts. ECI multi-disciplinary team members meet regularly (weekly) to coordinate, collaborate, and

provide information and support to one another. They become familiar with one another's expertise, build one another's capacities to fill gaps in knowledge or skill, and ensure that families are receiving the appropriate services.

Like many programs, developing and maintaining a highly qualified workforce had been somewhat elusive. Program administrators were committed to holding high standards of practice linked by research to outcomes for children and families, and practitioners within the organization felt the pressure to align with research-based practices. That pressure can become overwhelming when the supports needed to promote alignment are not fully present or when it takes too long for practitioners within the organization to become confident and competent with evidence-based practices. Formal observation data from the program revealed that it often took a year or more for practitioners in the orientation phase to reach fidelity and for some practitioners the journey to fidelity took up to three years. Although the program was conscientious about providing regular and individualized professional development in the form of in-service workshops and supervisory coaching, moving the entire 13-member team to fidelity with the limited resources of a small agency was a challenge. Over the years, administrators lost potentially good practitioners to turnover resulting in expended time, energy, and financial resources needed to hire and onboard new personnel.

After nearly two decades of using and reinventing an orientation process for onboarding new practitioners, in 2016 program leaders developed and employed an experiential workplace learning model paired with peer coaching. The program used the new orientation model for a group of four practitioners who joined the agency between 2016 and 2018. Two of the practitioners engaged in orientation at the same time and two were inducted later with a short period of overlap. Only one of the participants had had any prior experience working in ECI, but not with the target pedagogical practices; two of the participants were straight out of their preservice programs. Although four practitioners represent a small sample from which to generalize findings, it represents almost a quarter of the direct service positions at this agency.

Inducting a novice member into this type of team and work environment required intentional planning and a coordinated effort among all team members. Orientation coaches were selected based on their high levels of proficiency within their discipline and with the practices that anchor the work of early intervention. Coaches were paired with novice practitioners based on the alignment of their expertise with the background and anticipated role of the novice practitioner. For example, an early childhood special educator may serve as the orientation coach for another early childhood educator. The novice educator may also spend some time shadowing and reflecting with other team members such as a speech-language pathologist or occupational therapist to reinforce and expand her knowledge of specialized techniques that cross disciplines (e.g., promoting communication, conducting a sensory profile, etc.).

Practitioners were introduced to their peer coaches during their first day at work. Peer coaches had been prepared for their role of orientation coach by attending a two-day training on the use of evidence-based coaching characteristics (as described by Rush & Shelden, 2020) and received follow-up coaching from a certified early intervention fidelity coach for six months as they refined their skills at supporting early childhood colleagues' use of ECI practices. Coaches were introduced to the tenants of EWL prior to the start of the induction process, and the coaches and the novice practitioners were introduced again on the practitioners' first day of work so that both would know what to expect from the process and one another. Coaches were instructed to promote the participation of the practitioners during real ECI visits, meetings, and administrative tasks, and if needed, erring on the side of active participation of the practitioner.

The novice ECI practitioners were in the field observing colleagues on the first day of their employment and most were implementing at least parts of a visit by their second or third day of work. Orientation coaches and novice practitioners decided together what the novice practitioner's role during ECI visits would be and what level of support was needed from the coach. Coaches were instructed to assume the competence of the practitioner unless the practitioner indicated, or the coach observed otherwise. When the practitioner requested help or the coach observed the practitioner needed help, the coach was to provide the smallest amount of scaffolding needed for the practitioner to be successful and for the visit to achieve the intended outcomes. The range of supports provided by the coach included planning prior to the visit, in-action supports (i.e., restraining from intervening, providing non-verbal prompts, providing verbal prompts, asking the practitioner reflective questions or providing feedback during the visit, and jumping in to work shoulder to shoulder with the practitioner) and on-action supports (i.e., reflection after the visit, role playing, literature reviews, seeking out colleagues with specific and diverse expertise to address curiosities that came about as part of the visit).

After each ECI home visit, the coach prompted the novice practitioner to reflect on her observation and/or experience during a 10-20 minute conversation. Rush and Shelden (2020) write, "Reflection is the coachee's review and analysis of what he or she already knows or is doing to determine what modification or new knowledge and/or skills the coachee needs in order to achieve the desired outcome in both the current situation and the future" (p. 65). The practitioner reflections were often prompted by the coach's use of open-ended questions designed to raise the practitioner's *awareness*, promote *analysis*, generate *alternatives*, and prompt *action* plans. During this reflection time, the aim was for novice practitioners to build a mental model for the target research-based practices, connect the observations to past experiences and existing knowledge of how adults and children learn, and visualize how they would implement the practices in similar or varied situations in the future. In addition to prompting reflection, orientation coaches also provided research-based information and feedback to the practitioners in response to the practitioner's observation, reflection, or curiosities. The experiences served as a catalyst for practitioner curiosity which prompted literature searches, collegial conversations, and self-motivated investigations for new knowledge.

Drawing on the longstanding success of the preceptorship model common to nursing induction (Kaviani & Stillwell, 2000; Rogan, 2009; Smedley, 2008; Trede et al., 2016), the EWL process set out to systemize the informal learning opportunities afforded practitioners in the ECI workplace. Preceptorship describes a type of workplace learning that traverses the space between formal and informal learning. Preceptorship is a short-term, one-to-one relationship (Kaviani & Stillwell, 2000) in which seasoned professional nurses facilitate students' formation in professional roles in "complex workplace cultures" (Smedley, 2008; Trede et al., 2016, p. 273). Nursing students or newly registered nurses receive an additional period of support from a seasoned, proficient nurse who serves as a coach during their transition to independent professional, allowing the nurse to develop additional confidence and competence. Preceptorship takes contextualized on-the-job learning opportunities and provides a structured support system (a coach) to promote and ensure learning occurs at a level commensurate with the needs of the nursing program. The efficacy of the preceptorship as a professional development model served as framework for the EWL model used here. Boud and colleagues (1993) argue that the person who might normally be expected by organizations to foster learning in the workplace—the supervisor—may be unable to do so effectively because of structural role constraints. Hughes and associates (2002) suggest that staff can have difficulties in trusting supervisors to facilitate learning because of supervisors' formal role in evaluating staff and the need for individuals to portray themselves as competent and confident. Peer coaches can be seen as an

advantage because of their similar roles, their accessibility, and their perceived relatable experiences. For these reasons we chose to use peer coaches rather than supervisory coaches to support the EWL process.

Overall, the use of EWL within the orientation process capitalized on the intense experiential learning that occurs in job-embedded activities (Kolb, 2015; O'Bannon & McFadden, 2008). Evaluation of other professional development interventions have suggested that effective professional development is intense, sustained, job-embedded, and focused on relevant subject matter (Bruder, 2016; Desimone, 2009, 2011; Dunst & Trivette, 2009; Dunst et al., 2010; Trivette, Dunst, Hamby, & O'Herin, 2009; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). The EWL induction process leveraged these evidence-based professional development interventions early in the new practitioners' tenure to maximize their capabilities over time.

When first getting independent case load assignments, novice practitioners were observed multiple times per week. The transitions during the process were based on the increasing levels of competence and confidence demonstrated by the novice practitioner and were informally negotiated week by week throughout the process. Within a month, peer coaches were shadowing novice practitioners one to three times per week. Within two months, peer coaches were shadowing novice practitioners a few times a month, and within three months, peer coaches were shadowing novice practitioners only once per month. Novice practitioners were able to begin billing for their services once they began serving families on their own caseload.

Table 1.
Timeline for Implementing EWL and Accommodations Provided to Ensure Novice Practitioner Success

Stage	Time and Duration	Novice Practitioner's Role	Coach's Role	Organizational Accommodations
Observing	Began on orientation day 1 (lasted for 1-2 days)	• Observe coach and colleagues (4-6 visits). • Describe the practices. • Compare practices to the evidence-based standard.	• Serve as a model for evidence-based practices. • Reflect with the practitioner prior to and after each visit.	• Peer coach workload was scaled back to 10-14 visit per week to make time for additional coaching conversations.
Practicing	Began on orientation day 3 (lasted 2 weeks to a month)	• Plan EI visits with peer coach. • Implement parts of EI visits from coach's caseload. • Observe colleagues. • Role play with peer coach and practitioners.	• Provide shoulder-to-shoulder support during all visits, intervening when needed. • Debrief with practitioner after each visit. • Scale support to match practitioner confidence and competence.	• Maintain a reduced peer coach caseload of 10-14 visits per week. • Allow for other colleagues to provide support to novice practitioner as needed.

Independent Practicing	Began on orientation day 30 (lasted about a month)	• Begin to receive referral assignments; • Plan EI visits with peer coach. • Implement all or substantial portions of each visit. • Bill for services when applicable.	• Observe/support practitioner on at least half of the practitioner's weekly visits. • Plan and debrief visits with practitioner.	• Maintain a lower peer coach caseload of 8-10 visits per week (own caseload). • Peer coach attends 4-6 visits per week (novice practitioner's caseload).
Synthesizing Practices	Began on orientation day 60 (lasted about a month)	• Provide services to families. independently. • Seek out support from the coach when needed.	• Observe/support practitioner by planning and debriefing several visits per week as needed. • Observe practitioner one time per week.	• Resumes regular caseload responsibilities.
Refining	Beyond orientation day 90	• Provide services to families independently. • Maintain a full caseload.	• Available to practitioner as needed. • Conduct a monthly observation of practitioner.	• Ensure novice practitioner receives monthly observations.

Methodology

Participants were selected based on their status of having been newly hired by the organization. All practitioners hired during the period in which the EWL orientation process was being tested were included. A summary of participant data is included in Table 2.

Table 2.
Summary Demographic Information for EWL Induction Participants

Start Date	Discipline	Level of Ed.	Years of Exp.	Years of Exp. ECI	Race/ Sex	Duration of Formal Orientation
6/20/16	Speech Language Pathologist 1	MA	12	2	White/ Female	80 days

7/20/16	Physical Therapist	DPT	0	0	White/ Female	72 days
12/4/17	Early Childhood Educator	BS	0	0	White/ Female	170 days
7/2/18	Speech Language Pathologist 1	MA	3	0	White/ Female	76 days

Practitioners were interviewed individually about their experiences with participating in the EWL process six months after each of their orientation periods ended. The interviews were semi-structured, and the questions were based on the learning experiences each practitioner recorded in her orientation journal. The questions focused on prompting practitioners to elaborate on the characteristics of the learning opportunities that impacted their confidence and competence as an early intervention practitioner (i.e., Which experiences were significant to your learning? How did that experience impact your learning? How did that experience impact your confidence?). Interview sessions for each participant occurred weekly over the course of four to six weeks with each session lasting about two hours (in total, 8-12 hours of interview data per participant). The interview data were coded using inductive means and several themes regarding the helpfulness of the EWL process emerged. After the individual interviews and initial coding of the data was complete, all participants met with the researcher to discuss the accuracy of the themes and further enhance the trustworthiness of the findings (Creswell & Guetterman, 2019; Denzin & Lincoln, 2011). This research was authorized by the Appalachian State University Institutional Review Board (IRB).

Findings

Outcomes of the Experiential Workplace Learning Process

Experiential workplace learning paired with peer coaching streamlined the professional induction process for new practitioners and decreased the amount of time it took practitioners to reach fidelity to evidence-based practices, maximizing organizational resources. EWL paired with peer coaching was also cost-effective in the long run and was perceived positively by the practitioners who engaged in the process.

Fidelity to evidence-based practices: Practitioner fidelity to pedagogical practices was measured using an unpublished observation tool aligned with the research-based indicators of the target ECI practices (natural learning environment practices, family-centered practices, capacity-building coaching interaction style, and teaming practices), *Fidelity in Practice—Early Intervention (FIP-EI)*. When practitioners independently lead visits where 21 of the 24 indicators were observed on each of three visits and all indicators were observed at least once over the course of all three visits, practitioners were considered to have fidelity to the practices. The practitioners participating in EWL reached fidelity to the ECI practices relatively quickly (about 80 days, with the exception of one), besting previous orientation periods by more than a year as tracked by systematic observations.

Resource retention: The induction process required an investment of time and human capital resources in both training the peer coaches and allowing the peer coaches the time to train and support the work of the novice practitioners (Table 2). The investment was minimal compared to the return gained in

qualified program staff. During the induction period, peer coaches continued to work as early interventionists themselves. During the beginning of the process the novice practitioner accompanied the peer coach on the peer coach's visits, at first observing (Observation stage) then taking on a role (Practicing stage) during the visit. As the novice practitioner gained confidence and competence she began to be assigned as the primary service provider of families and the coach shadowed her as she took on the lead role in providing the intervention (Independent Practicing stage). During this transition, care was taken to ensure that peer coaches were not assigned new referrals since much of their time was spent shadowing and debriefing with the novice practitioners. After about two months, novice practitioners managed their caseloads independently and used their peer coaches to support refinement of their skills or to navigate unusual situations (Synthesizing stage).

Positive Experience for Participants: Practitioners overwhelmingly agreed that on-demand access to a coach who worked alongside them was helpful. Second, participants agreed that the learning opportunities that were highly experiential were more valuable to their learning. Third, practitioners discussed the helpfulness of opportunities that increased the breadth and depth of their knowledge and skills as well as the activities that allowed them to demonstrate their existing competencies with high degrees of confidence.

On-demand coaching: The infrastructure of the organization allowed novice practitioners ongoing and as-needed access to their assigned coaches, as well as to their colleagues who often served as "temporary coaches" stepping in to help novice practitioners navigate an interaction or situation when needed or requested by the coach (e.g., assigned coach was unavailable or lacked a specific expertise requested by the practitioner). Overwhelmingly, the novice practitioners found the on-demand availability of their coaches helpful. All four practitioners mentioned helpfulness of unplanned conversations with their coaches and used phrases like, "thank goodness my coach was there." Practitioners shared positive feedback about the varying levels of intensity of support that was provided during the coaching interactions. The coaching was individualized and responsive to the needs of the practitioner in the moment. One practitioner noted, "we spent more time on [teaching parents responsive strategies] because at this point I didn't have any confidence that I could do this well." Novice practitioners also talked about "letting down their guard" and "letting their coach in," which may have been a function of the on-demand coaching. The frequent contact with their coaches may have allowed the practitioners to drop their guard and become vulnerable to the process.

Experiential opportunities: Practitioners also responded positively to the experiential learning opportunities they were afforded. When asked about the significant experiences that marked their orientation process, practitioners overwhelmingly selected opportunities that were highly experiential and/or resulted in deep levels of reflection. Highly experiential activities included those where the practitioner was taking the lead in performing her role as an ECI practitioner either with or without the direct support of the coach.

The learning experiences were also frequently paired with multiple opportunities to reflect, both with a coach or colleague. Participants noted that debriefing with a colleague "was a good way to help me make sense of what I was seeing and doing." One participant commented, "My coach got me to think about the situation in a new way and I always had some sort of 'ah-ha moment' when talking with her." The opportunities to reflect not only helped the practitioners assimilate new ideas and understandings, but also prepared them with a concrete plan for their next experience.

Practicing new and existing competencies: Novice practitioners also distinguished between the helpfulness of experiential activities that prompted new learning and experiential activities that allowed them to use their existing knowledge and skills. Both were described as significant to their professional learning and their adoption of a professional identity. While new learning provided opportunities for practitioners to stretch their comfort zone and expand their knowledge and skills, doing so was stressful and tiring. Opportunities to practice existing competencies allowed novice practitioners to confidently identify as part of the team, not as a learner. As one participant eloquently shared, "Providing my expertise to a colleague felt good. I felt like a valued equal. It was refreshing to take a break from learning mode and know that I am a resource to my coworkers."

Discussion

When innovations and practices are implemented as developers intended, practices are said to be implemented with fidelity and innovation outcomes associated with the practices are likely to be achieved (Fixsen et al., 2015). The EWL induction process provided the implementation infrastructure (Metz & Bartley, 2012) necessary to support the fidelity of four ECI practitioners. Experiential workplace learning paired with peer coaching appears to have been an enabler of effective implementation by novice practitioners (Fixsen et al., 2015). Experiential learning provided ample opportunities practitioners needed to practice and refine their skills and abilities and the peer coaching provided practitioners with the scaffolding needed to successfully advance their thinking, planning, and implementation of the practices.

Providing a peer coach for a novice practitioner for two to four months while the practitioner mastered utilization of evidence-based practices was resource-intensive. However, when compared to the cost of providing in-service training, conferences, high turn-over, and diluted outcomes for children and families, the cost may be worth the benefit. For example, Campbell and Sawyer (2007) describe a professional development study in which 147 providers were trained on the use of participatory help-giving practices and the use of natural materials and the collaborative role of the caregiver and the provider during the home visit (very similar to the orientation content described in this study). After measuring participant home visiting practices, the researchers found that 43% of the practitioners were still using traditional, non-evidence-based practices, even after having completed the training. Taking an intense, sustained, job embedded, and focused approach to induction is likely to have stronger outcomes for practitioners (Bruder, 2016; Desimone, 2009, 2011; Dunst & Trivette, 2009; Yoon et al., 2007) and translate to better outcomes for children and families (Cook, Cook, & Landrum, 2013; Fixsen et al., 2015; Metz & Bartley, 2012). It is possible that the individualized nature of experiential learning at work makes the difference in training outcomes. More so than traditional training sessions, experiential learning is "positively correlated with flexibility, employability, adaptability of learning in context, rapid transfer to practice, and resolution of work-related problems through regular review of work practices and performance" (Manuti et al., 2015, p. 5). EWL has also been shown to increase tenure by providing strong personnel development (Engestrom, 2001; Knouse, Tanner, & Harries, 1999; Murakami, Murry, Sims, & Chedzey, 2009). University students who engaged in workplace learning were found to be more able to articulate their knowledge and perform better than those who learned using different approaches (Crawford & Wang, 2016; Mendez & Rona, 2010; O'Donovan, 2018). Although time consuming over the short-term, this study corroborates existing findings that experiential learning at work is associated with acceleration of implementation, potentially saving time and financial resources by readying an ECI team more quickly and retaining them for longer.

The efficacy of the professional development characteristics that define EWL is underscored by the comments participants chose to highlight regarding their induction experiences. Practitioners in this study unanimously and independently noted the helpfulness of on-demand access to their coaches. Since their coaches were employees of the same organization with whom they came in contact on a daily basis, they were available for (and accessed during) both planned and serendipitous interactions. Other studies have also noted the significance of on-demand coach availability "in-house" peer coaches can provide (Knoche, Kuhn, & Eum, 2013; Tschantz & Vail, 2016; Zan & Donegan-Ritter, 2013). Unlike programs that hire consultant coaches, during the EWL induction process, peer coaches worked side-by-side and shoulder-to-shoulder with practitioners each day. The close working relationship allowed for a strong capacity-building 'help-giving' relationship and ensured that time spent floundering was minimized. Since coaches worked with novice practitioners on a daily basis, they were knowledgeable of practitioners' strengths and struggles and were positioned to be responsive with appropriate doses of information, reflective questions, and encouragement, and could recommend additional experiential opportunities to meet the practitioner's immediate needs. These characteristics have also been associated with successful coaching (see Rush & Shelden, 2020).

Positive perceptions of the experiential component of the EWL induction process also aligns with professional development literature that supports the efficacy of intense, sustained, job-embedded and relevant learning experiences (Bruder, 2016; Desimone, 2009, 2011; Dunst & Trivette, 2009; Dunst et al., 2010; Trivette et al., 2009; Yoon et al., 2007). Specifically, teacher education literature asserts that experiential learning must be real (Girvan, Conneely, & Tangney, 2016) and cannot be artificially constructed or controlled and expected to have the same impact (Roberts, 2012). The EWL induction process was predicated on real work experiences serving as professional learning opportunities. Participants spent the entire induction process engaged in real work experiences rather than didactic learning or role plays that characterize much of the work-based professional development experienced by ECI professionals (Bruder et al., 2009). The real-world learning experiences ensured that practitioners' knowledge and utilization was closely aligned, perhaps resulting in higher levels of satisfaction and positive perceptions of their own capabilities and learning.

The peer coaching paired with the experiential learning provided ample opportunities for practitioners to reflect and receive feedback on their learning opportunities and refine their practices. Literature on the use of reflection as part of practice indicates that it is a key tool for professional development (Minott, 2010). Reflection on action has been shown to expand knowledge and skill (Clarke & Hollingsworth, 2002; Graham, 2000; Desimone, 2011; Driscoll & Teh, 2001; Paget, 2001) and helps the learner take pause to link new experiences with existing ideas (Moon, 2002). In addition, Moon has found that reflection enables the learner to take ownership of the learning and become invested in the process. Pairing experiential learning with reflection also provides opportunities for practitioners to realize and accept previously held ideas and practices may be problematic (Girvan et al., 2016). It acknowledges the knowledge and experience the practitioners bring and helps practitioners co-construct a new understanding of and vision for practices aligned with optimal outcomes. This type of practitioner driven learning may lead to increased investment in the learning process and promote a pattern of continuous life-long learning (Boyle, While, & Boyle, 2004; Lunetta, 2012). These finding from the literature are consistent with the reports from all four novice practitioners who noted that the impact of the 'aha' moments catalyzed by the conversations they had with their coaches.

Although this study paired practitioners with same-discipline peers as coaches, the practices that were the target of learning for all practitioners were the same. It may be interesting to learn the extent to which a discipline match is necessary for the uptake of these particular practices to occur

efficiently. Practitioners likely could have learned family-centered practices, for example, from a peer of any discipline since all practitioners are expected to treat families with dignity and respect and promote the use of family strengths to address family-identified priorities. Likewise, all practitioners are expected to be skilled at helping families identify interest-based family routines that afford parents opportunities to engage (i.e., reading the child's cues, offering interesting materials, giving the child a role) and teach (e.g., scaffolding the child abilities, providing wait time to allow interaction, narrating what the child is doing) their children and children the opportunity to learn. Our suspicion was that if these early intervention cross-disciplinary practices were new to the novice practitioners, they may question the appropriateness for a practitioner with their discipline to engage in them. It may take longer for learning to occur if, for example, an occupational therapist incorrectly differentiates the practices that are cross-discipline and discipline-specific. This is likely evolving with the increased attention over the last decade invested in defining and promoting cross-discipline practices with the multi-disciplinary profession of early childhood intervention (Bruder & Dunst, 2005; Division for Early Childhood, 2014; The Council for Exceptional Children & The Division for Early Childhood; 2020; Workgroup on Principles and Practices in Natural Environments, 2008). In preparation for this manuscript, no studies were identified that discuss the need for peer coaches to occupy the same discipline as the coachee or that studies the effects of differing disciplines on peer coaching. The question of need for same-discipline peer coaches is an empirical one and may be an interesting follow-up study. The results of such a study could help small programs without multiple practitioners of the same discipline be able to accomplish high levels of knowledge transfer through a peer coaching model of experiential workplace learning.

Implications and Future Directions

The new EWL-based orientation model was found to be an efficient and effective method of orienting these four novice practitioners to evidence-based practices. This study provides a robust consideration of the potential benefits of this approach for four participants. The lessons learned could be relevant and perhaps instructional for larger programs or states with the resources to provide an infrastructure for peer coaching. Research supports the use of experiential learning and peer coaching as successful professional development methods (Dunst et al., 2019; Ingersoll & Strong, 2011; Smedley, 2008; Trede et al., 2016), but the potential of these evidence-based professional development practices has not fully been realized in the field of ECI, especially when it comes to practitioner induction to evidence-based pedagogical early childhood intervention practices.

Evaluation of experiential workplace learning designs are needed to fully investigate the potential and realized implication of the model. Other fields and disciplines can inform ECI professional development on the power and potential of experiential workplace learning specifically. In addition, larger scale studies are needed to explicate the key conditions and associated benefits of workplace learning within the context of EI. Although it is beyond the scope of this study, literature suggests that there also may have been a benefit to coaches participating in the peer coaching process. Additional studies can contribute to expanding our knowledge of the characteristics and consequences of EWL for the coaches who participate.

The experiences of the novice practitioners participating in an experiential learning professional induction process can be instructional for programs struggling with the most effective and efficient way to leverage valuable resources to improve practitioner performance. States and programs are responsible for establishing the conditions that are essential for the successful implementation of evidence-based ECI practices and the conditions can sometimes be costly (Cook et al., 2013; Fixsen et al., 2015; Metz & Bartley, 2012). Within ECI programs (as well as most other

industries) the efficient and systematic onboarding of new practitioners is paramount. Although EWL is time consuming, for this program the systematic EWL process provided a substantial savings of time and organizational resources.

Conclusion

Experiential workplace learning paired with peer coaching is an effective and feasible model for providing ECI induction. Unlike other forms of systematic and ongoing professional development, the EWL model described here accelerates the learning process and provides systematic assurance through observations and interactions with qualified peer coaches that novice practitioners are using, and families are receiving, evidence-based practices. The induction model used here demonstrates how EWL can be operationalized within the context of an early intervention program with sufficient systems and supports. EWL assures that learning occurs in context, making it more likely that the learning will be generalized to other real settings and situations, and allows practitioners to learn from the varied and real-life situations that frequent the field of early intervention. Using EWL moves beyond learning about the practices and affords the opportunity to learn to be a practitioner.

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