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Multi-component Professional Development for Early Interventionists*

Abstract

An evaluation was conducted of the Partnering for Success: Foundational Institute offered through the Early Intervention Training Program at the University of Illinois, the state-funded professional development provider for Part C. The evaluation examined facilitators and barriers to changes in participants' practices in working with families in the early intervention system. Data were also gathered on the efficacy of the training components used during the 4-day, multi-component linked series. Participants reported that teaming and collaboration were effective facilitators for change, and administrative issues served as barriers to change. Participants also reported that group discussions and videos were the most effective components that assisted in changing practices.

Keywords: early intervention, Part C, professional development, family, teaming

Introduction

Multi-component Professional Development for Early Interventionists

In 2015, 357,715 infants and toddlers and their families were served under Part C in the United States (U.S. Department of Education, 2018). Part C of the Individuals with Disabilities Education Act (IDEA) provides services for infants and toddlers with developmental delays and disabilities and their families (Individuals with Disabilities Education Act, 20 U.S.C., 2004). All 50 states and territories have designed a system for identifying and serving children and families eligible for Part C services. At a minimum, for every eligible child and family, early intervention (EI) services include service coordination, assessment, intervention, and transition planning.

The Office of Special Education Programs (OSEP) of the US Department of Education formed a workgroup to identify the necessary components for quality EI services. This workgroup developed three seminal documents addressing the mission, principles, and practices for early interventionists (Workgroup on Principles and Practices in Natural Environments, 2008a; Workgroup on Principles and Practices in Natural Environments, 2008b; Workgroup on Principles and Practices in Natural Environments, 2008c). The seven principles described in the *Agreed Upon Mission and Key Principles* document focus on the use of evidence-based practices, such as the importance of the family in support of their child, the role of the early interventionist as a support to the family, and the use of routines and experiences in familiar contexts. Practices that support the seven key principles described in the *Agreed Upon Practices for Providing Early Intervention* document include evaluating and assessing the functional needs and strengths of the child, identifying criteria for progress, participating with the family in routines to promote new skills and behaviors, and preparing families for transition out of Part C. The *Seven*

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Key Principles document describes common scenarios that reflect the key principles and practices, as well as scenarios that do not support the key principles.

According to the OSEP Workgroup (2008a), '(EI) principles are the foundations necessary to support the system of family-centered services and supports' (p. 1). Ultimately, the goal of EI is 'to understand what the family envisions for their child as part of their family and community, and help them achieve that vision' (Keilty, 2010, p. 8). These EI principles focus on implementing family-centered practices wherein early interventionists become partners, consultants, and problem solvers with the family rather than experts who impart knowledge on the family (Espe-Sherwindt, 2008). Although the principles should be at the core of the work of every early interventionist, there is no single way to address the key principles in professional development (PD). Currently, there is no systematic or required training on the key EI principles, nor is there a standard curriculum for EI in personnel preparation programs.

Early interventionists represent various professional backgrounds including early childhood special education and infant mental health, as well as specific therapeutic knowledge (i.e., physical therapy or speech-language pathology). Best practices indicate that early interventionists are expected to have the specific knowledge of their respective discipline as well as content knowledge of key topics in EI, including infant and toddler development, family-centered practices, cross-disciplinary models of service delivery, service coordination, development of individualized family service plans (IFSP), and natural environments (Bruder & Dunst, 2005; Keilty, 2010). According to researchers, early interventionists need to have a solid foundation on these EI topics to help them best serve infants and toddlers with disabilities and their families. This knowledge should be updated continually based on advances in the field (Miller & Stayton, 2000) as early interventionists may benefit from new information regarding human development, specific disabilities, adult learning, coaching, and intervention strategies.

Early interventionists attend personnel preparation programs that have wide variability, in coursework and field experiences, as well as philosophy (Chen & Mickelson, 2015). This variability means that not everyone who enters the profession has the necessary foundational knowledge or a focus on the key principles in EI (Barton, Moore, & Squires, 2012; Caesar, 2013; Campbell, Chiarello, Wilcox, & Milbourne, 2009). Early interventionists may enter the field without experience implementing family-centered services. Researchers also suggest that some early interventionists will only engage in practices that they believe are effective, despite research showing alternative practices as more effective or the early interventionist's current practices as not effective (Campbell & Sawyer, 2009). Therefore, PD focusing on key topics guided by the EI principles, is essential in order for early interventionists to provide the best possible service to families, who in turn can support their infant or toddler in achieving desired outcomes and milestones. Additionally, the format of the PD must be a good fit for the practitioner (Barton, Kinder, Casey, & Artman, 2011; Krick Oborn & Johnson, 2015). The components of the PD may include job-embedded coaching, video recording, distance mentoring, email feedback, or in-person discussions at varying frequencies (Artman-Meeker, Fettig, Barton, Penney, & Zeng, 2015).

While state comprehensive system of personnel development (CSPD) programs across the United States offer some form of training on EI principles, there are no publications to date that describe a systematic evaluation of these PD activities. In this article, we describe findings from a study in which we examined the impact of PD on the knowledge and practices of early interventionists in one state.

Early Intervention Training Program at the University of Illinois

The Early Intervention Training Program at the University of Illinois (EITP) is the state funded professional development provider, or CSPD, for EI in Illinois. The goal of EITP is to provide continuing education opportunities for early interventionists. These opportunities include systems-based and pediatric-focused trainings using a variety of training formats. Each year, EITP seeks to support the approximately 4500 credentialed early interventionists in Illinois (Illinois Early Intervention Training Program, 2013; Provider Connections, n.d.).

In 2010, EITP began offering a linked series of institutes that were previously

conducted as single-day workshops. These institutes were created to offer PD to a group of providers that remained constant over four sessions, across 8-10 weeks in order to form learning communities. While the content and format have shifted slightly over the years, the basic information and purpose remains constant across each of the institutes. The *Partnering for Success: Foundational Institute* (hereafter referred to as 'Institute') is one such linked series and focuses on the EI key principles (Workgroup on Principles and Practices in Natural Environments, 2008a) and recommended practices (Workgroup on Principles and Practices in Natural Environments, 2008c). The goal of the Institute is to provide early interventionists with information to help them become familiar with the goal of EI as stated by Keilty (2010) and to utilize family-centered practices.

The *Partnering for Success: Foundational Institute* was chosen as the subject for this study as it contains essential information for early interventionists to provide high-quality services to families of infants and toddlers with disabilities. This Institute's structure allows for novices, as well as experienced providers, opportunities to examine their philosophies and knowledge and reflect on key EI principles and practices. The purpose of the Institute is to provide early interventionists with a firm foundation upon which additional knowledge, such as assessment practices, specific home visiting strategies, and information about working with families from diverse backgrounds, can be built.

The purpose of this study was to examine the extent to which the *Partnering for Success: Foundational Institute* impacted the daily practice of those who attended. The study focused on examining early interventionists' experiences in the Institute and perceived changes in their practice after participating in the Institute by addressing the following research questions:

1) What do participants report are the facilitators and barriers to changing their practices after participating in EITP's *Partnering for Success – Foundational Institute*?
2) Which components of the *Partnering for Success – Foundational Institute* do participants report as the most effective in changing their practices?

Methods

This was a mixed methods study, using multiple data sources including surveys, focus group, and artifacts. A pragmatic sequential design was utilized, in that quantitative and qualitative data were collected, analyzed separately, then additional data collected and analyzed (Mertens & McLaughlin, 2011). This mixed methods design was chosen as it allows for a deeper and broader understanding than what could be generated from one method alone (Greene, 2007). The study was reviewed and approved by the Institutional Review Board in the authors' home university.

Reflexive Statement
Brantlinger, Jimenez, Klingner, Pugach, and Richardson (2005) recommend that researchers should be 'explicit about personal positions, perspectives, and value orientations' (p. 198) in order to ensure credibility within qualitative research. We believe that families participating in EI are entitled to receive high-quality services and support and that the best way to impact children's development is through family-focused support. We are also strong believers in life-long learning and therefore have a bias towards continuing education and PD. Our ongoing research and work in the field reflect the values we hold related to PD and EI.

Overview of Institute
The Institute included four, 5-hour sessions, separated by 15-17 days each over a seven week period for an overall time commitment of 20 face-to-face hours. Participants also committed to approximately 5 hours for reading assignments, writing reflections, responding to online discussions, and video recording. The Institute was structured in a cohort model, with teaming opportunities built in through small group work throughout the four face-to-face sessions. Reflective and individual feedback were embedded throughout the Institute. Adult learning strategies, such as pair and share, small group discussion, round robin, group presentation, and practical application, were implemented throughout the Institute.

In sessions 1 and 2 of the Institute, the facilitators introduced the key principles and best practices in EI using the *Agreed Upon Mission and Key Principles* (Workgroup on Principles and Practices in Natural Envi-

ronments, 2008a) and *Seven Key Principles* documents (Workgroup on Principles and Practices in Natural Environments, 2008c). During session 2, the facilitators included information regarding perspective-taking and best practices. The primary content discussed during session 3 revolved around evaluation and assessment as it related to EI principles. Session 4 included discussion on meaningful intervention and parent-professional partnerships. In all four sessions, practices that support or do not support the principles were illustrated using large and small group discussion, practical scenarios, and video examples. A process for reflective video feedback also was introduced and modeled. Participants who completed all required elements of the Institute received a certificate for 25 EI contact hours at the end of session 4. A copy of the Institute agenda, curriculum, including PowerPoint™ slides and handout packets, is available through EITP and the first author.

Participants
Participants were a subset of EI providers in Illinois who self-selected into the Institute. Participants were recruited through the EITP website, intake agencies in close proximity to the training site, and state professional organizations (i.e., Illinois Speech-Language-Hearing Association). Twenty-one participants initially signed up for the Institute, with eighteen participants (85.7%) attending all four sessions of the Institute and completing the requirements for the study. As per our inclusion criteria, all participants held an active EI credential from Illinois and carried an active caseload, either as a service coordinator or direct service provider. Direct service providers paid the typical registration fee to EITP; per EITP's contract with the state lead agency, service coordinators do not pay this fee. Participants' roles included a) developmental therapist, b) service coordinator, c) speech therapy assistant, d) certified occupational therapy assistant, and e) speech language pathologist. At the beginning of the Institute, participants' range of experience in their profession was 1 month to 40 years ($\bar{x}$ = 10 years, median = 8 years) and experience working in EI ranged from 1 month to 18 years ($\bar{x}$ = 7 years, median =

7.5 years). See Table 1 for additional demographic information.

Focus group participants
All participants in the Institute were encouraged to participate in a focus group and were provided the opportunity to sign up during the final session of the Institute. Prior to the scheduled date of the focus group, each participant received personal and group invitations via emails regarding the focus group. Nine of the 18 participants indicated interest in participating in the focus group and ultimately five individuals participated. Focus group participants included four developmental therapists and one speech therapy assistant.

Participant incentives
All participants who completed each of the required assignments and additional study components (i.e., pre-Institute survey, video, reflections, homework, and post-Institute survey) received a certificate for Illinois EI credit hours and an Amazon® gift card to thank them for their time and feedback. Focus group participants received additional Illinois EI credit hours and a second Amazon® gift card. A Starbucks® gift card was provided to focus group participants who completed a member check.

Setting and Materials
The Institute was conducted for four days across 10 weeks (minimum of 2 weeks in between each session). Sessions were held in a classroom at a college that was accessible to participants from several major interstate highways in a well-populated area of Illinois. Participants were assigned seating in groups of 4-5 at round tables. The same groupings were maintained throughout the Institute in order to increase teaming opportunities. The content was presented via PowerPoint™. Audio and video technologies were used to show video clips during the training. Participants were provided with a handout packet that included the corresponding materials for the day. Video cameras were loaned to the participants in order for them to record one therapy session with a family as part of their homework. Some participants chose to use their own video recording device (e.g., smart phones) to complete this homework assignment.

Table 1.
Participant Demographics (n=18)

	SC (n=6)	DT/OT/ST (n=12)
Profession – Total Years Experience		
Under 1	50%	8%
1-5	33%	17%
6-9	17%	17%
10+	0%	58%
Profession – Years in EI		
Under 1	50%	8%
1-5	33%	17%
6-9	17%	17%
10+	0%	58%
Work Environment – EI specific		
Independent	0%	58%
Agency – scheduling & billing	0%	17%
Agency – scheduling, billing, teaming, mentoring	0%	25%
CFC office	100%	0%
Work – non-EI setting		
No	50%	42%
Yes	50%	58%
Work – Hours per week devoted to EI		
1-14	0%	17%
15-29	0%	50%
30+	100%	33%
Number of EI families per month		
1-10	0%	17%
11-20	0%	42%
21-39	17%	42%
40+	66%	0%
No response	17%	0%

Note: SC=service coordinator; DT=developmental therapist; OT=occupational therapist; ST=speech-language pathologist; EI=early intervention; CFC= Child and Family Connections office.

The focus group was held in the same classroom as the Institute. The group sat at a table with a facilitator. A note taker was present, sitting at a separate table. The focus group was held seven weeks after the last day of the Institute. The session was recorded using an audio digital recorder.

Facilitators
The Institute had two facilitators present in order to maximize the learning environment for the participants. The first author was the main facilitator for three of the four days of the Institute. She has facilitated two Institutes previously and has led a variety of trainings for EITP. Due to a family emergency, she was unable to attend session 3 and another experienced facilitator from EITP was present instead. The co-facilitator for all four sessions was the assistant director of EITP who had previously facilitated similar Institutes. The facilitators met prior to each of the sessions to ensure that all components were appropriately addressed.

Two research assistants, both doctoral students, assisted with data collection and analysis. One research assistant served as the focus group facilitator and was present during all four sessions to collect fidelity data. She did not lead any of the Institute sessions, but was familiar with the curriculum and participants. The second research assistant served as the focus group note taker and was not present during the Institute sessions. The facilitators were not present during the focus group. Both research assistants participated in coding and analyzing the data.

Study Procedures
Participants registered for the Institute on the EITP website. Once a participant registered, he/she received an email containing details of the research study and a consent form. When the participant agreed to all of the required components, he/she received an email containing a link to the pre-Institute survey with a request to complete the survey prior to the first session of the Institute. For participants who were unable

to access the survey prior to the first face-to-face session, they were given a paper survey when they arrived at the first session.

During the first session of the Institute, each participant was reminded of the components of the study and how each fits into the Institute. During the first three sessions, each participant was offered a video camera and memory card to use to record one therapy session with a family on their caseload. Participants returned their videos on a memory card or uploaded the video to a secure, password protected website. They also returned signed consents from the family. At the end of each of the first three sessions of the Institute, the facilitators gave homework instructions and participants completed the session evaluation form. At the end of session four, participants completed the session evaluation form and the post-Institute survey. They also received the incentives previously described and an invitation to participate in the focus group. Finally, the 90-minute focus group was held seven weeks after the fourth session of the Institute.

Measures
Data were collected from: (a) a pre-Institute survey, (b) a post-Institute survey, (c) a focus group, (d) one reflection paper regarding the video recording, (e) three homework postings, and (f) four session evaluations. In addition, a fidelity checklist was utilized to ensure that all of the training components occurred as anticipated. The measures used in this study were similar to those used by EITP. The pre-Institute survey was modified from the current survey used for other EITP Institutes not related to this study. The post-Institute survey, focus group protocol, and fidelity checklist were developed specifically for this study.

Survey
The pre-Institute survey was based on a form that participants in previous EITP Institutes have completed. For the purpose of this study, additional questions were included that focused on participants' knowledge or EI principles and daily practices. The post-Institute survey was created for this study. The surveys underwent expert review and were modified based on feedback, primarily for clarity rather than content. The surveys were administered prior to the first session of the Institute and upon completion of Session 4. The pre-Institute survey included demographic questions (i.e., profession, experience, and caseload), as well as questions regarding participants' beliefs and knowledge regarding EI principles, daily practices, and teaming. The post-Institute survey included the same questions as the pre-Institute survey and additional questions regarding facilitators and barriers to implementing change in practice and useful components of the Institute.

Focus group
A semi-structured focus group protocol that included five main questions, with probes, was specifically developed for this study. The questions were, in part, based on data gathered from the post-institute survey. Questions focused on the information presented during the Institute and how participants were able or not able to implement changes in practice. The focus group protocol underwent expert review and was modified based on feedback.

Video recording assignment and reflection
As a component of the Institute, participants were required to record a session with one family on their caseload. This assignment was introduced during the first session, with instructions to submit a recording by the third session of the Institute. Participants selected 15-20 minutes of a session to (a) demonstrate their understanding and use of EI principles and/or (b) seek feedback on how to enhance their implementation of EI principles during the session. Videos were uploaded onto a secure website and each participant wrote a reflection paper about the recorded session. Only the reflection papers, and not the actual video recording, were analyzed. The Institute facilitators provided each participant with written feedback regarding their video after the final session of the Institute.

Homework
At the conclusion of each of the first three sessions, participants engaged in independent work prior to the next session. For the first session assignment, participants read chapters from *The Early Intervention Guidebook for Families and Professionals* (Keilty, 2010) and prepared a group presentation on one of the chapters. For the second and third session assignments partici-

pants either watched a video, visited a related website, or reflected on a specific element of the previous session. Each assignment required the participants to respond to a set of reflective questions posted on the online course management site.

Session Evaluation

Participants also completed an anonymous evaluation at the end of each session. This evaluation is the same one used in every EITP training. It includes demographic information, Likert scale questions to evaluate the training, and three open-ended questions.

Fidelity Checklist

At all four face-to-face sessions, a graduate research assistant collected fidelity data using a checklist. The checklist was piloted using video of previous institutes. The student researcher trained the research assistant as to how to complete the checklist. The 47-item fidelity checklist form consisted of the content that the facilitators were to cover during the Institute. Throughout the four days of the Institute, 100% of the content items were covered.

Data Analysis

Qualitative analysis procedures were used to analyze the relevant items from the survey and session evaluations. A collaborative analysis approach was used to analyze focus group data with a research team comprised of two doctoral students who are familiar with EI as well as research methods and one doctoral student who provided an outsider's view as she was not familiar with EITP and therefore was able to ask questions and clarify context.

An independent assistant transcribed the focus group audio recording. The transcription and notes were coded to determine themes, with each member of the research team coding themes independently and then meeting as a group to discuss the themes in order to arrive at consensus (Miles, Huberman, & Saldana, 2014). Subthemes were identified in order to provide rich description around the themes (author). Information gathered through the focus group was compared to survey data and analyzed for thematic similarities.

Trustworthiness and credibility

Trustworthiness and credibility of the findings were ensured through the use of trian-gulation, member checks, collaborative work, and thick, detailed descriptions (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). Methodological and data triangulation occurred through the use of multiple data sources, researchers, and methods. Participants in the focus group participated in a member check, with three of the five participants (60%) completing the member check. A document summary from the focus group was sent to each focus group participant to ensure accuracy. The three respondents indicated that the information was accurate and no changes were requested. By utilizing a collaborative analysis process, bias and disconfirming evidence were discussed and interpretation of data was determined by arriving at consensus. Thick, detailed descriptions were pulled from the transcription to use as evidence for each theme.

Results

Institute participants reported changes that they incorporated into their daily practice. However, these changes were variable and individualized, as each participant experienced the Institute differently based on his or her background and experiences. In this section, we describe the Institute components that participants reported as helpful to their learning of EI principles and changing their daily practice and barriers that hindered their ability to change their practice.

Facilitators to Changing Practice and Efficacy of Institute Components

Participants reported that the facilitators to effective practice were directly related to the Institute components. Videos and the opportunities for discussion were the two components of the Institute that participants mentioned most frequently as facilitators to learning about EI principles. Across the data sources, the component noted most by the full group were opportunities for discussion whether they were large group or small group formats, across and within discipline groupings. Teaming, community, and opportunities for collaboration were most valued as one participant reported, 'Hearing ideas of others is always beneficial; each session has given me much to think about' and 'I liked the discussion and dialogue among the participants and presenters.' Another participant mentioned the support from other team members, as well as the

families, as critical in her being able to implement changes in her practice.

Participants also spoke about the value of video, as well as the opportunities for discussion around the videos. Participants specifically noted that recording a session with a family, watching and providing peer feedback, as well as videos that were incorporated into the sessions were very helpful. One participant mentioned, 'The videos help me to visualize and to see it and to … incorporate that in a teaching strategy to help parents to be able to identify how they are able to work with their children.' Additionally, participants noted that the videos assisted with learning specific strategies, such as coaching. Several participants mentioned that they would start incorporating video into their home visiting sessions in order 'to improve sessions and to keep non-attending parents in the loop' as well as 'to share and reflect with parents.' One participant suggested including more video clips of sessions:

"I think the process of videotaping was very helpful. It was great to see colleagues in their practice, since we as therapists typically work alone and do not have that opportunity. In addition, to have the perspective of multiple disciplines, and experiences was invaluable."

While some of the feedback revolved around ideas that participants would like to use in the future to change their practice, several participants shared ideas regarding changes they had already incorporated, including taking the family's emotional needs into consideration, leaving the toy bag in the car more often, including the caregiver in sessions, and videotaping some sessions. Other participants shared specific information about how they interact with families, 'I have tried to talk more with my parents, not just focus on the child during sessions' and 'I have more active participation with some parents who preferred to sit and observe.'

Barriers to Changing Practices
While a variety of barriers to implementing EI principles into daily practice were mentioned, three emerged from across multiple data sources. First, participants described the current habits of the providers and the resulting expectations of the families as a barrier. As one provider stated, 'it's easy to fly on autopilot.' Participants acknowledged that changing practice would require intentional attention to what they are currently

doing and may not be a quick or easy change in mindset or practice. One participant shared,

We just do so routinely that we forget what we are doing. It becomes a part of our daily grind that we don't really see why are we doing this…They (parents) are not wanting someone to come in to teach them how to teach their child during meal time…they may have a totally different perspective on that and there is only so much we can do to change that.

Second, participants noted that restrictions individual providers placed on their own schedules and availability was a barrier to changing their practices. The [Illinois] EI system includes providers who work part-time or in multiple settings, which can limit the time that the provider is available to support families. One focus group participant noted,

It would be awesome to go see them [EI families] at different times or in different things like a park district class or something, something different, but I feel like I am constrained by my schedule and my own family and, so, it definitely is a great idea in theory, but I think it is just hard to put it in into real life practice.

Third, participants shared that a lack of understanding of EI services by the public, including legislators and administrators who make decisions regarding the EI system, as a major barrier. Issues related to systems were summarized by one focus group participant,

These principles we are learning about are a moot point if the whole system crashes down…In order to best meet these principles that we are working towards, the system itself has to stay strong and have a good foundation because you are going to lose your quality and your quantity of services when people keep walking away…The number one priority is strengthening the foundation of the system so we can do our jobs.

Discussion

Findings from this study are situated in the specific circumstances of this Institute, conducted in one state with one group of early interventionists. Important information gleaned through this evaluation should be considered when designing and conducting PD for early interventionists.

Participants indicated that opportunities for teaming, collaboration, and video recording were the most effective components that facilitated their ability to change

their practice. The finding that guided discussions and watching videos as facilitators to changing practice is similar to results found by Ludlow (2002) who reported that discussions along with guided practice with feedback were useful components of an online course when applying new ideas into practice.

It is important to consider how success was defined for participants. Through the data gathered during this evaluation study, it became apparent that success looked different for each participant. However, it is also important to consider the baseline or starting point of each participant in a study such as this, both philosophically and in practice. This starting point can be used to gauge participants' development as early interventionists. Such data might also provide insight into why some interventions are a better match for some participants.

Institute Components and Format
Using a combination of training components, including teaching, coaching, application, and feedback has been shown to increase participants' knowledge (Sheridan, Edwards, Marvin, & Knoche, 2009). When considering the Institute as a whole, several elements stood out as contributing to participants' success: the format, opportunities for teaming, use of video, and group discussions. These findings are similar to Ludlow (2002) and Marturana and Woods (2012) who reported that participants found practical application, case study, and interaction among participants and with the facilitator as the most useful components in PD.

In this study, we examined one type of PD offering spread across several weeks. Previous research has indicated that ongoing, sustained relationships are most impactful (Dunst, Trivette, & Deal, 2011). The format of this Institute allowed for ongoing conversations and time for application and reflection. This was found to be helpful, both with regards to teaming and opportunities for reflection, as one Institute participant mentioned,

> We are learning about something and then we are going away for a few weeks and then we are coming back together with the same people so you get to develop a little bit of a relationship to kind of know them and what they do. You have time in between to practice and come back to reflect on it... I think the reflective piece over the course of time helps kind of ingrain it into

> you a little bit better than just one day and you are gone.

While participants pointed to videos as an important learning tool, some preferred using video in a different way. Service coordinators preferred watching videos during the sessions, while direct service providers preferred video recording sessions with families. This partially reflects their roles in the EI system. While service coordinators had the opportunity to record an intake or IFSP meeting, they may have felt their videos were less relevant for their practice. On the other hand, even though initially direct service providers were not excited to record a session, they found the videos valuable after they had the opportunity to reflect on them.

Early Intervention Principles in the Real World
Much of the discussion during the Institute as well as within the focus group centered around the practical nature of implementing recommended practices into daily practice. System level and personal limitations were mentioned as barriers to implementation. Participants were not necessarily describing these as excuses, but rather as reasons to explain the difficulty in providing services that match recommended practices. Similarly, Salisbury and colleagues found that early interventionists attempting to implement change in their practice experienced barriers based on several factors, including family expectations and the impact of urban culture (2010).

Within the Institute sessions, discussions included problem-solving scenarios and participants were excited to brainstorm resolutions for addressing these issues. They appreciated the time provided to talk through current dilemmas and hear from others about how to approach a situation. An Institute that provides ongoing support over time allows for comfort and trust building, and time for sharing. This was highlighted in the post-Institute survey where participants rated the group discussions as the most impactful component of this PD format. Collaborative consultation, including administrative support, training, and team discussions were found to be critical in the success of early interventionists utilizing newly learned strategies (Cambray-Engstrom & Salisbury, 2010). This combination of strategies, based on early interventionists learning preferences, should be

considered when designing PD and mentoring to effect change in practice.

Limitations

This evaluation was conducted for one Institute, with one group of providers, in one area of one state. These and other limitations must be considered when interpreting the findings. First, although the desire was for 30 early interventionists to participate in the study, only 18 participants completed the Institute. While this number is not atypical for EITP Institutes, it does limit the generalizability of the data. Nevertheless, the qualitative data that were collected were rich and provided information that highlighted the participants' experiences. Utilizing mixed methods allowed for quality data analysis procedures to be followed, given the small number of participants in the study.

Second, the focus group lacked the diversity of roles represented by those who participated in the Institute. In particular, service coordinators did not participate in the focus group, despite multiple invitations. Attempts to gather insights from the lead service coordinator regarding the service coordinators' experience in the Institute were unsuccessful. Data on service coordinators were collected via their session evaluations, reflective video journals, and surveys, so information regarding their perspective contributed to the findings.

Third, it is unknown if participants had attended previous EITP trainings or had previous exposure to the EI principles. While information regarding their practices was available via their responses to the pre-survey, it is difficult to ascertain how they came to have these perspectives. For participants who were hearing this information for the first time, they may need time to reflect within their current framework before attempting to implement changes in their practice. Participants who have had exposure to this information previously may have already begun the internal thought process and thus more open to initiating changes in their practice. Additional research is needed to study PD for early interventionists.

Future Directions for Research and Practice

Through this study, the idea of teaming, collaboration, reflection, and the need for ongoing support was brought up in multiple ways. This is similar to findings in other studies with early interventionists in that multiple strategies and feedback are necessary identify and support practice change (Salisbury, Cambray-Engstrom, & Woods, 2012; Peterson et al., 2018). While data were gathered on individual components of the Institute, further research need to be done on which components are the most effective for changing practices. Future research can examine the most effective ways to support early interventionists in their work, as it relates to the key EI principles.

Future PD offerings should incorporate opportunities for teaming and collaboration. It is important for facilitators to provide time and space for participants to reflect on how the information presented during PD opportunities fits into the world in which they work. Using digital platforms with which participants are already familiar (i.e., closed Facebook group) may increase the opportunities for teaming in between sessions, as well as ongoing communication after the formal PD has concluded. Additionally, further examination into the usefulness of videos should be explored as a tool used within PD. Since both direct service providers and service coordinators found videos to be useful, albeit in different ways, this could be considered an important tool for learning and application.

Acknowledgements

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