



Child Interest Activity Plan (CIAP): An Implementation Guide for the Use of Natural Learning Environment Practices in Early Intervention

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This CASEtool includes a description of the *Child Interest Activity Plan (CIAP)*, a guide to help early childhood intervention practitioners align with two types of family-centered practices: natural learning environment practices and a capacity-building caregiver coaching interaction style. The *CIAP* includes a set of *Roadmaps for Reflection* designed to help providers conduct early intervention visits that focus on promoting caregivers' confidence and competence while using interest-based routines as the context for supporting child learning outcomes. The *CIAP* includes a range of responsive strategies caregivers can use to invite, engage, and teach children during their family routines. The *CIAP* can be used as an implementation driver of family-centered practices across disciplines and is a promising guide to help bridge the research-to-practice gap in early intervention.

INTRODUCTION

Many early childhood intervention practitioners struggle with implementing evidence-based strategies to increase caregiver confidence and competence while using typical daily activities and routines to promote their child's learning. For more than a decade, the field of early childhood intervention has promoted increasing child participation in naturally occurring family activities as the context for early intervention (EI) paired with caregiver coaching as a capacity-building interaction style. Despite what is known about the link between fidelity to evidence-based practices and strong positive outcomes for children and families, practitioners and programs continue to fall short of full implementation of evidence-based practices (Spence et al., 2018). EI practitioners and programs need resources that bridge the knowledge utilization gap. The *Child Interest Activity Plan (CIAP)* is a promising tool to support practitioner alignment with evidence-based practices.

CAPACITY-BUILDING, FAMILY-CENTERED FOCUS OF THE CIAP

In EI, family-centered practices are operationalized by natural learning environment practices (Davis, 2014; Dunst et al., 2001; Dunst et al., 2006; McWilliam, 2010; Spagnola & Fiese, 2007) and a coaching interaction style (Rush & Shelden, 2020). The two sets of practices together are an efficient way of implementing family-centered practices that have grounded the work of EI for more than 40 years (Bailey et al., 1992; Bruder, 2000; Mas et al., 2019).

Natural Learning Environment Practices

Natural learning environment practices (NLEP) include the use of everyday activities and routines, child

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interests, and parent/caregiver responsiveness to the child (Dunst et al., 2001; Dunst et al., 2006). The focus of NLEP is to use naturally occurring child learning opportunities (i.e., family activities and routines; Spagnola & Fiese, 2007) and responsive caregiving practices (e.g., following the child's lead, joining in the activity with a child, giving the child choices, elaborating on the child's communication; Davis, 2014; Landry et al., 2008) as instructional strategies for supporting child learning (Dunst, 2017). Child interests are emphasized because children are more likely to focus on a person or activity longer if they are motivated and engaged, which in turn provides more practice and expanded learning opportunities. Caregiver responsiveness is targeted to ensure that caregivers know and understand what they are doing or can do to support their child's learning within and across their typical daily activities (Davis, 2014; Mahoney & Nam, 2011). In EI, NLEP is often paired with the use of coaching to build the caregiver's capacity to continue to use and refine responsive caregiving interactions during development-enhancing family activities and routines between EI visits.

Caregiver Coaching

Coaching is an evidence-based adult learning strategy used for interacting with parents and other care providers to build upon existing abilities and develop new knowledge and skills to meet their priorities (i.e., capacity-building) (Rush & Shelden, 2020). Coaching provides a framework for scaffolding caregiver confidence and competence during intervention visits to maximize caregiver capabilities between visits. Given the research on the influence of parents and caregivers on their children's development (Barton & Fettig, 2013; Dunst et al., 2008; Powell & Dunlap, 2010), and the focus of EI on enhancing parents' capacity to promote children's development and learning, coaching plays a critical role in the transfer of new knowledge and skills from practitioner to caregivers.

The National Research Council (2001) has established that parent-implemented interventions are an essential component of quality EI programs. When practitioners coach families to use family activities and routines to promote child participation and learning, parents and caregivers become confident and competent at using responsive caregiving strategies to positively influence child learning throughout the child's day. In short, effective use of parent-implemented interventions lead to positive child outcomes (Acar & Akamoğlu, 2014; Barton & Fettig, 2013; Tully et al., 2017).

THE DEVELOPMENT OF THE *CHILD INTEREST ACTIVITY PLAN*

The *Child Interest Activity Plan (CIAP)* was developed by a cross-disciplinary team of EI professionals, four of whom were EI practitioners with expertise in providing evidence-based natural learning environment practices, and four professional development providers (two of whom were also EI administrators) who have expertise in adult learning practices and implementation science. The initial draft provided practitioners with a framework for helping families identify their child's interests, identifying frequently occurring family routines, and teaching families specific evidence-based strategies for promoting child participation and engagement (Davis, 2014; Dunst et al., 2006; McWilliam, 2010; Spagnola & Fiese, 2007). Over five iterations during a three-year period, the tool was tested by a team of practitioners who provided survey and focus group feedback leading to revisions. The result was a guide that operationalized how to conduct evidence-based EI visits. The guide includes practitioner and family inserts that can be used to document and customize practice activities and plans for specific families.

DESCRIPTION OF THE *CIAP*

The *Child Interest Activity Plan (CIAP)* is an implementation guide to help EI practitioners implement the characteristics of natural learning environment practices and a capacity-building coaching style of interaction when working with caregivers of infants and toddlers. It is not a curriculum or an intervention, but rather a guide to help practitioners operationalize the key features of evidence-based, capacity-building EI practices in natural environments. This tool represents, in part, what implementation science would identify as a key driver to the consistent and competent implementation of evidence-based EI practices (Fixsen et al., 2013).

Purpose of the *CIAP*

The purpose of the *CIAP* is to provide practitioners with clear guidance and steps for applying evidence-based caregiver coaching in the context of natural learning opportunities. The *CIAP* provides practitioners with the scaffolding needed to implement the practices in a way that aligns with capacity-building outcomes for the caregiver. The *CIAP* is grounded in adult learning and implementation science literature, which suggests that using such a tool decreases the cognitive load required by

the user to implement a new procedure and increases the accuracy of the decision-making process required to use new practices. The *CIAP* may help practitioners realize positive outcomes, buy-in to using the practices sooner, and keep refining their practices as they habituate to a new way of conducting EI visits (Alspach, 2017; Clebone et al., 2019; Wandersman et al., 2012).

The Three Parts of the *CIAP*

The *CIAP* features *Roadmaps for Reflection*, which are flow charts that illustrate for practitioners how to operationalize natural learning environment practices using a coaching interaction style (Sexton & Rush, 2021). The use of flowcharts helps simplify complex processes (Grosskinsky et al., 2019; Sexton & Rush, 2021; Sugai, 1997), and are advantageous in allowing the user to understand the flow of the process and how to break the use of practice characteristics into easily implemented parts (Dunlap & Lowenthal, 2016). Roadmaps show the intricate connections between the components of natural learning environment practices and the characteristics of a capacity-building coaching interaction style. Roadmaps also differentiate conversational paths based on information that may be shared by a caregiver. The visual breakdown of complex information into implementation steps facilitates the accessibility of the information (Sexton & Rush, 2021). The *Roadmaps for Reflection* within the *CIAP* break EI visits into three parts: (1) following-up on the previous plan, (2) planning for the focus activity and engaging in the focus activity during the visit; and (3) between-visit planning for the continued use of target strategies across activities and the next-visit plan. The *Roadmaps for Reflection* provide users of the *CIAP* with suggested reflective questions to help caregivers analyze, troubleshoot, and plan for the continued use of effective interaction strategies that successfully engage and teach children during their typical routines. The *Roadmaps for Reflection* offer practitioners guidance for how to position feedback during coaching conversations to maximize caregiver participation and reflection.

CIAP Part I: Following-Up on the Previous Plan

Part I of the *CIAP* helps practitioners systematically follow-up on previously developed family plans from between visits, prior to engaging in the activity that will serve as the focus of the current visit (Rush & Shelden, 2020). The practitioner uses open-ended reflective questions to help the caregiver recall what they had planned to practice between visits and analyze how the strategies and routines have been helpful to the child's learning so

far (i.e., How has your plan been working? What parts of your plan worked well? How did that help your child?). This part of the *CIAP* shows practitioners how to prompt reflection when the plan worked (i.e., What parts of your plan worked well?), didn't work as expected (i.e., What about the plan is not working?), or wasn't implemented (i.e., What are your thoughts about the plan?). The roadmap for *CIAP Part I* also shows providers how to help families use their analysis to revise their strategies (i.e., What will you keep in your plan and what will you do differently next time?) and/or plan for their continued use of the activity or strategies (i.e., What do you think your next steps should be?).

CIAP Part II: Engaging in the Focus Routine

Part II of the *CIAP* includes a *Roadmap for Reflection* that guides the practitioner to support the family in two ways, 1) plan for how to use interest-based learning to best engage the child in the planned routine and 2) promote the caregiver's use of and reflection on responsive strategies to support the child to use existing and developing competencies in a real-life context. The *CIAP* helps practitioners align to NLEP when working with families across the range of routines and activities prioritized by families as the contexts for learning and within the scope of the child's interests. Everyday activities and routines are used as the sources of early learning because they provide frequent opportunities for the child to use existing abilities and develop new skills across developmental domains.

The roadmaps for *CIAP Part II* serve as a guide for practitioners to support caregivers in determining the basis for visits and planning for focus activities by offering questions such as, "What do you want your child to learn during this activity?" "What is your child interested in doing?" and "How will you help your child learn during this activity?" The *CIAP* includes prompts to help practitioners teach caregivers to use responsive strategies designed to invite, engage, and teach their child during the focus activity or routine and to customize those strategies to fit the family's culture, values, and preferences.

Practitioners can use the *CIAP* inserts to make notes during the visit or leave the caregiver with a resource to refer to. For example, the *Responsive Teaching Record* is used to track the responsive caregiving strategies that were introduced to and mastered by the caregiver. The *CIAP* inserts include a booklet of *Invite, Engage, and Teach* strategies. This booklet is for practitioners to use with families during EI visits to introduce various responsive strategies. The *Invite, Engage, and Teach* strategies offered in the booklet support caregivers with reading the

child's cues, inviting the child into an activity, sustaining the child's engagement in the activity, and teaching the child to use new or existing behaviors to participate successfully (Davis, 2014). *Invite* strategies help caregivers tune in to their child's cues and set the stage for learning. *Invite* strategies are used to let the child know it is time to join in (e.g., watching where the child is looking, using a calm voice, offering a hand to the child). *Engage* strategies are ways caregivers can keep the child participating in an activity or routine (e.g., positioning the child to interact with materials or people, helping the child with difficult or frustrating parts of the activity, encouraging the child to keep going). *Teach* strategies are ways caregivers help the child practice existing skills or learn new skills to participate more successfully within an activity (e.g., showing the child a new way to use a familiar material, increasing how often the activity happens, varying the level of scaffolding provided to the child).

CIAP Part III: Developing a New Plan

Part III of the *CIAP* prompts practitioners to support the caregiver's planning to promote child interest-based learning during caregiver-identified everyday routines between visits. The *CIAP Part III Roadmap for Reflection* provides a framework for practitioners to use a coaching interaction style to develop a new two-part joint plan. The first part of the joint plan supports the caregiver to identify a routine or activity they want to focus on and the responsive strategies the caregiver plans to use to *Invite*, *Engage*, and *Teach* the child during that activity between visits (i.e., Based on what we did today, what activity/routine would you and your child like to focus on between now and our next visit? What do you want your child to learn during this routine? What is your child interested in doing during the routine? What responsive strategies will you use?). The second part of the joint plan helps caregivers and practitioners determine what the caregiver wants to focus on during the next EI visit with their provider (i.e., What activity or routine would you and your child like to focus on during the next visit? When does that typically happen for your family? What do we need to think about to be prepared for the next visit?). Knowing what routine the focus of the next visit will be helps ensure the caregiver and practitioner schedule the visit for the time of day the routine naturally occurs.

Inserts that support *CIAP Part III* include the *Practitioner Plan* and *Reflection* insert that can be used to document the between-visit plan and the next-visit plan with the family. This insert can be kept by the family as a reminder of what they intend to do to support their child's

participation throughout the week. The *Selecting Everyday Activities* insert can be used to track activities and routines the caregiver has used as the context for intervention and can prompt caregivers to think about routines or activities that may serve as contexts for interest-based child learning in the future.

CONCLUSION

Despite more than a decade of research supporting specific EI cross-disciplinary practices (i.e., family-centered practices, natural learning environment practices, and coaching caregivers), many individuals working with families struggle with efficiently and effectively implementing those practices. State EI systems and programs are often responsible for teaching their workforce EI specific practices. Under the best of circumstances, high-quality training transfers knowledge to participants, but rarely results in utilization without additional support and/or follow-up (Dunst et al., 2015; Dunst & Trivette, 2009; Dunst & Trivette, 2012; Fixsen et al., 2013). The *CIAP* provides the structure and support many practitioners need to translate knowledge into practice. With the help of this implementation tool, practitioners can prepare to systematically implement natural learning environment practices and a capacity-building coaching interaction style in alignment with the research. Alignment is important since fidelity to evidence-based practices leads to positive outcomes for families and children.

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