



Love & Learn, Home-Based Curriculum
Research to Support
Positive Effects on Child Progress and Outcomes

In response to the Head Start Performance Standards 1302.32 (a)(1) and 1302.35 (d)(1), Frog Street published *Love & Learn*, a home-based curriculum with the latest scientific early brain development research as the framework for learning activities and adult child interactions. In addition, *Love & Learn*:

- offers developmentally appropriate activities for ages birth to three,
- promotes the family's role as the child's teacher focused on the parent child relationship and family traditions, culture, values and beliefs,
- aligns with the Head Start Early Learning Outcomes Framework: Ages Birth to Five, and
- provides learning experiences based on developmental progressions and how children learn.

Frog Street's vision is to impact the next generation of children by creating developmentally appropriate, intentional curriculum and empower families to provide high-quality learning experiences in the home. *Love & Learn* is a comprehensive, research-based home curriculum that integrates instruction across developmental domains. This cutting-edge home-based curriculum encompasses a growing body of evidence-based practices to encourage: physical development and health; social and emotional development; approaches to learning; language development; and cognitive development. Infants and toddlers are exposed to intentional activities and interactions to provide an optimal learning environment (Schiller, 1999, 2002, 2010).

Love & Learn is consistent with research on how children develop and learn (Sousa, 2008, 2011) and provides rich content and teaching practices. With a focus on

domain-specific, developmentally appropriate content and skills, *Love & Learn* provides broad and varied experiences and activities. A rich curriculum of interactions, *Love & Learn* builds on a child's prior knowledge and experiences. Activities provide a sequence of experiences based on developmental progressions and address all areas of the Head Start Early Learning Outcomes Framework. (Correlation of *Love & Learn* to the Head Start Early Learning Outcomes Framework is available in English and Spanish: <http://www.frogstreet.com/head-start/>).

Program Cornerstones

Love & Learn is built around key cornerstones to provide rich activities that optimize learning and development for children 0-36 months of age. The cornerstones include: Early Brain Development Research, Learning Domains, Conscious Discipline[®], and Intentionality.

- **Responding to Early Brain Development Research**

The first three years of life lay the foundation for lifelong learning. The child's brain is busy wiring the foundation for vision, emotional stability, social interactions, language development, motor development, thinking skills, and much more. By age three, a child's brain has achieved 80% of its wiring foundation. The first findings from the advancement of technology in the neuroscience field were published by the Families and Work Institute in *Rethinking the Brain: New Insights into Early Development*, 1996. This publication examined five major findings and their relevance to the development of young children and those who work with young children.

1. *The brain of a three-year-old is two and a half times more active than an adult's brain.* Babies are born with only a minimal amount of neurological wiring. The neurons are ready to be connected but those connections are dependent on the child's senses to bring information from the child's experiences into the brain. During the first three years of life, a child builds an estimated 1,000 trillion synapses through the experiences encountered.

2. *Brain development is contingent on a complex interplay between genes and the environment.* One of the most dramatic findings from medical research is the significant role the environment plays in the structure and capacity of the brain. Scientists agree that human development is shared by both nature (biology) and nurture (experience) (National Research Council, 2000). Many researchers (Goleman, 2006; Ramey and Ramey, 1999; Sousa, 2011) believe that the environment plays a substantial role in development.
3. *Experiences wire the brain. Repetition strengthens the wiring.* The primary task of the brain during early childhood is to connect brain cells (neurons). Everything we learn is stored in communities of neurons. Experience forges the connections and repetition strengthens them.
4. *Brain development is non-linear.* There are fertile times when the brain is able to wire specific skills at an optimum level. These fertile times are called “windows of opportunity.” The windows are scientific; they are open from birth to puberty. Positive experiences during open (fertile windows result in positive outcomes. Negative experiences during open windows result in negative outcomes.
5. *Early relationships affect wiring.* A young child depends on adults. They are biologically wired to speak, think, feel, interact, and to be mobile. However, they depend on human interaction to learn these skills. According to Daniel Goleman (2006), now prolific they are depends on environmental factors, such as a loving atmosphere (for better) and stress (for worse).

Love & Learn focuses on this research in each of the interactions to optimize learning. Did You Know? in each lesson plan and Parent Education pages support building knowledge for the families and the home visitor.

- **Learning Domains**

Language Development – There is no more fertile time in life for developing language than between birth and three. Infants and toddlers needs a language

rich environment filled with sounds and people who talk to them, read to them and sing to them. The ability to learn language is largely an auditory experience but hearing sounds alone will not be enough. Children are very receptive to vocabulary development during the first few years of life. At 18 months, a child who has been around a talkative caregiver will have 185 more vocabulary words than a peer in a less talkative environment. By the time the child in the language-rich environment is two years old, the increase in vocabulary will be 295 words. Since the size of a child's vocabulary is an important predictor of later reading success, *Love & Learn* offers many interactions for the child to comprehend and use increasingly complex and varied vocabulary. Board books, finger plays, songs, and poems offer many opportunities to develop a rich vocabulary. And parents and home visitors are given tips and strategies for incorporating spoken language into daily routines and tasks. Building an awareness of sounds and developing vocabulary are the primary goals of language and communication activities in *Love & Learn*.

Cognitive Development – The first cognitive function that is wired in the brain is the relationship between cause and effect. For the first year of life, a child will diligently strive to understand what causes things to happen. By the middle of the second year of life, the cognitive focus will change from cause and effect to problem solving. A child will be driven by curiosity and aided by creativity. *Love & Learn* enhances cognitive development with developmental stages of activities for the home visitor and family interactions.

Opportunities to explore cause-and-effect relationships, develop curiosity, and practice problem solving skills and express themselves creatively are provided in a developmental progression of activities in *Love & Learn*. In addition, a child begins to understand the relationships between numbers and quantities, notice basic movement patterns as well as patterns in the environment, and build the foundation for scientific inquiry by exploring their world with all their senses. *Love*

& Learn fosters a sense of community while exploring the child's family and the communities in which they live with home visit activities and group socializations.

Social and Emotional Development – In order to develop a positive sense of self, a child comes to understand that they can cause good things to happen on a predictable basis. Babies form a strong emotional and social bond with family members during the first few months of life. The interactions affect the structure and capacity of their brain wiring and will have a lifelong impact on their future development. True sense of self develops between 15 and 18 months. A child is now able to connect thoughts to actions and feelings.

Family members are the core of the infant and toddler's first social and emotional experiences. Their responses are crucial to a child's sense of self and understanding how he or she fits into their world. As early as one month, babies react emotionally to their environment. By four months, babies are able to recognize differences in expressions and begin to laugh. During the first 18 months, a child is aware of other children but not interested in interacting.

During the second year, children will move from onlooker (watching others) to parallel play (playing beside others) to associative play (playing with others but in an organized fashion). These are all big steps toward the final goal of cooperative play where children interact in organized play with their peers. *Love & Learn* provides adult child interactions to develop social and emotional skills with home visits and encourages age appropriate peer interactions for group socializations. A child's development of appropriate social and emotional skills will influence success in school, friendships, and eventually success at work (Bailey, 2015). Frog Street's definition of high-quality, home-based curriculum includes characteristics of the adult-child interactions, such as sensitivity and stimulation (e.g., responsiveness to the child's needs and signals, positive affect, and frequent verbal and social interaction). Adult-child interactions are supported

in *Love & Learn* with both opportunities for dyadic and triadic interactions and strategies for home visits and group socializations (PIWI, Vanderbilt University).

Physical Development – After birth, brain wiring for muscle control is a high priority. The foundation for motor development is wired in the first two years of life. A child needs experiences that support the wiring of both small muscles and large muscles of their bodies. There is a direct correlation between freedom to move during the first two years of life and the agility and dexterity that a child will possess as an adult. Between the ages of two and five a child needs plenty of space to move as this is the greatest opportunity for the child to perfect his or her motor skills.

Approaches toward Learning – How a child approaches learning is one of the key dimensions of school readiness according to the National Education Goals Panel (1997). *Love & Learn* suggests approaches toward learning with activities for encouraging adults to help a child adjust their innate inclinations (Rothbart and Bates, 2006; Brophy, 2004) for curiosity, creativity, initiative, persistence and attention. From simple tasks, such as getting things in and out of boxes to exploring cause-and-effect relationships, problem solving opportunities are abundant.

Love & Learn home-based curriculum provides activities to support a developmental scope and sequence based on the latest scientific brain research. The activities and interactions support the “Windows of Opportunity” for wiring in each of the developmental domains.

- **Conscious Discipline®** - Unique to home-based curriculum, Dr. Becky Bailey, author of *Conscious Discipline®*, provides social-emotional strategies to create a foundation of safety and caring. *Conscious Discipline®* is a research-based curriculum support focused on brain compatible strategies for self-regulation.

Self-regulation is the key to school readiness and more powerful than IQ as a predictor of academic achievement (Bailey, 2015). A child learns best in an environment where they feel safe and free from stress (Jensen, 2005, Sousa, 2005). Learning environments and interactions in *Love & Learn* help children feel safe and loved. From this foundation, a child begins learning how to manage emotions and interact appropriately with peers as they progress through developmental stages. Conscious Discipline® strategies are included in the activities throughout the *Love & Learn* home-based curriculum. *Love & Learn* offers strategies for parents and home visitors to take on the role of “emotional coach” to help the child recognize and manage their emotions.

- **Intentionality** – To be intentional is to act purposefully with a goal in mind and a plan for accomplishing it (Epstein, 2007). Activities with specific outcomes or goals for the child are the focus in *Love & Learn*. The Individualized Learning Plan provides an opportunity for the home visitor and parent to identify an activity, the learning goals, and materials to gather. The family member is encouraged to participate in observations, evaluation of the child’s progress and learning activity suggestions for the next home visit and group socializations. Following the child’s development help create a more purposeful environment in the home.

WINDOW	WIRING OPPORTUNITY	GREATEST ENHANCEMENT
Emotional Intelligence Trust Impulse Control	0 - 48 months 0 –14 months 16 –48 months	4 years to puberty
Social Development Attachment Independence Cooperation	0 - 48 months 0 - 12 months 12 - 24 months 24 - 36 months	4 years to puberty
Thinking Skills Cause and Effect Problem-Solving	0 - 48 months 0 –16 months 16 - 48 months	4 years to puberty
Motor Development	0 - 24 months	2 years to puberty
Vision	0 - 24 months	2 years - puberty
Language Early Sounds Vocabulary	0 - 24 months 4 - 8 months 0 - 24 months	2 - 7 years 8 months to puberty 2-5 years
Second Language Vocabulary Formal Instruction	0 – 60 months (sounds) 6-10 years (syntax)	

(Schiller, 2016; Ramey & Ramey, 1999; Rethinking the Brain, 1996)

Organized Developmental Scope and Sequence

The scope of *Love & Learn* includes learning experiences in the areas of Approaches to Learning, Social and Emotional Development, Language and

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Communication, Cognition, and Perceptual, Motor and Physical Development. The breadth and depth of activities ages 0 to 36 months meets not only the Head Start Early Learning Outcomes Framework domains, but also sufficiently engages and sustains a child's interest across multiple learning experiences to address specific developmental goals within each sub-domain.

Concrete experiences with progressively complex interactions are essential for meaningful learning (Caine and Caine, 1991). Age and developmentally appropriate activities support the child's optimal learning level or "zone of proximal development" (Vygotsky, 1978). The zone of proximal development is based on the understanding that learning will not occur at its optimal level if the child is not challenged enough (Tomlinson et al., 2003) or if they are over-challenged and frustrated (Kapusnick and Hauslein, 2001).

Love & Learn values individual differences and offers instruction to meet the needs of all children.

Children with Special Needs: Children with special needs may present specific challenges when it comes to including them in all activities. But regardless of the challenges children face, all children can learn and all children should be invited to participate in activities to the best of their abilities (Willis, 2011). Lesson activities include Special Needs information for individualizing and additional resources.

Second Language Learners: *Love & Learn* provides all activity directions, books, parent letters, and developmental checklists in English and Spanish. Most songs are also provided in both languages. Bilingual or dual language environment must have access to equitable materials in both languages in order to be successful. It is also acknowledged that it is impossible to totally separate language and culture. Therefore, the term bilingual education includes the concept of bicultural education (Ovando & Collier, 1985). Home visitors are encouraged to support child's native language as they offer opportunities to

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develop English (National Center on Quality Teaching and Learning in collaboration with the National Center on Cultural and Linguistic Responsiveness, Summer 2014).

All Learners: *Love & Learn* empowers home visitors and parents to scaffold instruction by providing not just the “how” of each activity but also the “why.” Having this background knowledge enables home visitors and parents to adjust and adapt activities in ways that extend or expand ideas and exploration. A Did You Know? section on the lessons and a Parent Education page reminds them to individualize instruction to best meet the needs of the child.

The sequence of intentional activities in *Love & Learn* includes plans and materials which to extend a child's learning at various levels to support developmental progressions. The activities and interactions in *Love & Learn* are age appropriate categories: 0-12 months, 8 – 18 months, and 18 – 36 months. Individual learning experiences are even more specific by development. Example: 18 – 24 months, 20 – 36 months, or 24 – 36 months. Materials include age appropriate literature and music, lesson planners, parent education letters, and a developmental progression assessment tool. Flexibility to respond to individual needs includes a Did You Know? section for families based on the specific skill or concept and extended activities to investigate after the home visit. A Special Needs section provides information for individualizing instruction and offers additional resources.

Tools to plan for the home visit include a Home Visit Planner for the education staff and parent, a Group Socialization Planner to plan activities with family members, Parent Education pages with helpful information about health, safety, nutrition, and developmental progressions and an Activity Tracker. The intentional scope and sequence of activities and interactions in *Love & Learn* assist the home visitor and parent to plan learning experiences tailored to the child's age and developmental level. The scope and sequence follow research-based teaching practices that support children

as they move the developmental progressions, including those described in the Early Learning Outcomes Framework.

- **Supporting Staff to Effectively Implement Curricula**

Love & Learn home-based curriculum provides a system of training and professional development that supports education staff including home visitors in their efforts to effectively develop knowledge and skills for implementation. Introductory and advanced professional development conducted by experts in the field of early care focuses on implementation, research-based strategies, differentiated instruction and use of resources to effectively guide Home Visitors as they empower parents to provide high-quality learning experiences in the home.

Preparation programs, training, mentoring and coaching, and in-service professional development are all critical direct mechanisms for developing and sustaining the knowledge and competencies of professionals (Transforming the workforce for children birth through age 8, IOM & NRC, 2015). On-going professional development sessions are designed to deepen understandings of research-based strategies and support intentional practices in the home and community. In addition, professional learning is aligned to the Head Start Early Learning Outcomes Framework for domain specific content and skills. Practice-based coaching is also an option based on ongoing feedback to support the child and family. Recent education reforms and standards urge teachers to incorporate a child's prior knowledge, make learning social through collaboration and discussion, and engage the child in meaning making. Ultimately, research tells us that teachers learn much the same way. Learning should be active, not passive. Support during an implementation phase is critical to teachers (Effective Professional Development in an Era of High Stakes Accountability, Gulamhussein, 2013.)

- **Standardized Training Procedures and Curriculum Materials**

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Love & Learn includes initial and ongoing training to support education staff as they learn to implement the curriculum with fidelity. Standardized training procedures provide consistent content across training sessions (in-person, virtual). Training materials are available through a Train the Trainer session and include materials (power point, script, handouts, etc.) needed to deepen knowledge and understanding for Home Visitors and families.

Love & Learn provides a Fidelity Tool to monitor curriculum implementation and an Activity Tracker and Developmental Checklist to collect and use data as part of a continuous improvement process. Training evaluation tools are used to guide on-going content and coaching sessions, when appropriate.

Frog Street Press provides professional learning opportunities consistent with the following National Staff Development Council standards.

- Staff development that improves the learning of all children.
- Requires resources to support adult learning and collaboration.
- Uses disaggregated child data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.
- Uses learning strategies appropriate to the intended goal.
- Applies knowledge about human learning and change.
- Provides educators with the knowledge and skills to collaborate.
- Prepares educators to apply research to decision making.
- Prepares educators to understand and appreciate all children, create safe, orderly and supportive learning environments, and hold high expectations for achievement.
- Deepens educators' content knowledge and provides them with research-based instructional strategies to assist Home Visitors, families and children in meeting standards.

(National Staff Development Council (2001). NSDC Standards for Staff Development, Revised) <http://www.nsd.org/standards/index.cfm>

- **Curriculum Alignment with the Head Start Early Learning Outcomes Framework**

Love & Learn is a comprehensive home-based curriculum and is aligned to the Head Start Early Learning Outcomes and individual state early learning and developmental domains designed to promote a child's development and learning in areas research shows are important for children's success in school (Bailey, 2015; National Early Literacy Panel Report, 2010, 2012). (See *Love & Learn* Correlation to Head Start Early Learning Outcomes in English and Spanish: <http://www.frogstreet.com/head-start/>.)

- **Home-Based Curriculum Checklist**

Love & Learn home-based curriculum consistently meets the requirements and research base recommended by the National Center on Early Childhood Development and Learning. Published in 2017, *Love & Learn* is currently being reviewed for listing in the Program Information Report (PIR) data report on curriculum.

Love & Learn meets the checklist criteria (National Center on Early Childhood Development and Learning, October 2017):

- ✓ Is designed to be used in a home-based or home visiting program.
- ✓ Focuses on how home visitor's support the parents' role as their child's teacher.
- ✓ Provides content to support the home visitor's ability to engage, connect, and establish relationships with families.
- ✓ Provides experiences rich in content and are culturally and linguistically responsive to the family.

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- ✓ Promotes parenting knowledge, attitudes, and practices that research has shown to be effective in supporting a child's learning and development.
- ✓ Focuses on practices that support parents in the ability to foster and guide their child's learning during everyday interactions and routines.
- ✓ Supports parents on how to use the home as the learning environment by using everyday activities and routines as opportunities for healthy growth and development.
- ✓ Focuses on how home visitors support the parent-child relationship.
- ✓ Provides strategies for home visitors to engage parents in observing and assessing their child's development and progress toward reaching learning goals.
- ✓ Allows for individualization based on children and parents' strengths, interests, learning style and need.

Summary

Frog Street continued the vision to impact the next generation of children by creating a developmentally appropriate, intentional curriculum, *Love & Learn*. This home-based curriculum was designed to empower families to provide high-quality learning experiences in the home. As a comprehensive, research-based home curriculum, *Love & Learn* integrates instruction across developmental domains: physical development and health; social and emotional development; approaches to learning; language development; and cognitive development. Intentional activities and interactions provide an optimal learning environment (Schiller, 1999, 2002, 2010) for home-based programs.

Love & Learn is consistent with research on how children develop and learn (Sousa, 2008, 2011) and provides rich content and teaching practices. With a focus on domain-specific, developmentally appropriate content and skills, *Love & Learn* provides broad and varied experiences and activities. Activities provide a sequence of

experiences based on developmental progressions and address all domains and subdomains of the Head Start Early Learning Outcomes Framework. This cutting-edge research-based curriculum meets and exceeds the requirements for a home-based curriculum (Head Start Program Performance Standard 1302.35).

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