



Mind in the Making Learning Modules for Early Childhood Teachers in the Greater Boston Area: Horizons for Homeless Children

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Between May and November 2009, 35 early education and care staff members of Horizons for Homeless Children, a non-profit organization in Boston, participated in Mind in the Making Learning Modules (MITM). Connected Beginnings Training Institute conducted an evaluation of this implementation of MITM. This report provides a summary of the evaluation findings. In order to provide context for the evaluation, the report begins with a brief description of the MITM Learning Modules.

WHAT IS MITM?

The Mind in the Making Learning Modules for Early Childhood Teachers™, developed by the Families and Work Institute in 2004, is a 12-module, 30-hour facilitated learning curriculum and pedagogical method that helps bridge research and practice in early education and care. Using research on child development as well as research about teaching and learning, the modules are designed for teachers of young children in both center- and home-based care. The modules are designed to help teachers learn about seminal research on how young children learn and develop and apply this research to their practice, while emphasizing the importance of relationships in young children's learning and development.

MITM teaches the following principles:

- Teachers who continue to learn about teaching, who see themselves as learners, and who understand the learning process are best able to foster learning in others
- Human connections are essential to learning
- Children are naturally drawn to others and that learning begins when children are able to control their attention, behavior, and emotions enough to focus on other people and experiences
- Social, emotional, and intellectual learning are inextricably linked
- Effective teaching requires becoming increasingly

aware of the role that temperament plays in child and adult behavior and learning

- Children receive powerful messages about themselves from the ways that adults respond and interact with them
- One of the most important building blocks in early learning and school readiness is for children to become able to take the perspective of others
- There are different ways to use language to promote language and literacy skills in children
- Children are motivated by inborn curiosity and an innate drive to solve problems and figure out how the world works
- Memory plays a role in early learning
- Stress can affect children's growth and development and teachers can help children learn to manage stress
- It is important to teach others what they have learned and to be connected to people, organizations, and resources that help them continue to learn about teaching and learning

WHAT WAS THE NATURE OF THE EVALUATION?

The evaluation questions were as follows:

1. To what extent does participating in MITM increase participants' perceived knowledge of and confidence in supporting children's learning and development?
2. To what extent does participating in MITM influence participants' beliefs about how children learn and develop?
3. How do participants experience the MITM training?

Participants were given a battery of survey measures both before and after participating in MITM. Participants were also asked to complete a registration survey before the training providing demographic information (age, gender, race), highest level of education achieved or in

process, highest early education and care certification held, and experience working with children. Pre- and post-surveys assessed participants' perceived knowledge of and beliefs about how children learn and develop, and their confidence in supporting children's learning and development. Participants were also asked to complete a post-training survey regarding their views of the usefulness of and their satisfaction with various features of MITM. Lastly, participants were asked to report what specifically they learned from the training that could be applied to their work.

The evaluation had a pre-post without comparison group design. Therefore, any changes in participants' knowledge, confidence, and beliefs cannot be directly attributed to participation in MITM. Although there may be threats to validity in this design, we believe that in this case they are minimal and it is highly likely that the findings can be attributed to participation in MITM, i.e., there is not another plausible explanation.¹ Furthermore, the evaluation provides a next step toward understanding how early education and care staff perceived MITM. It also provides the basis for developing a larger scale evaluation of the implementation of MITM in Massachusetts.

WHO PARTICIPATED IN THE TRAINING?

Participation in Evaluation and Training Attendance

A total of 35 providers participated in MITM. Ten providers participated in the evaluation before the training (Time 1) only, 6 participated after the training (Time 2) only, 18 providers participated both before and after the training, and 1 provider did not participate at either time point. Of the 35 providers, 9 dropped out of the training and 3 providers "dropped in" (participated in the latter half of the training). The three participants who "dropped in" were newly hired employees of Horizons and were included in the training to encourage team building and collaboration within the classrooms. Eight of the nine participants who dropped out of the training did so because they were no longer employed with Horizons. Reasons for dropping out included accepting a new job, obtaining higher education, and resignation. One participant who dropped out left the training due to a scheduling conflict. Of the 23 participants that neither dropped out nor in to the training, 83% attended 92% or more of the training modules.

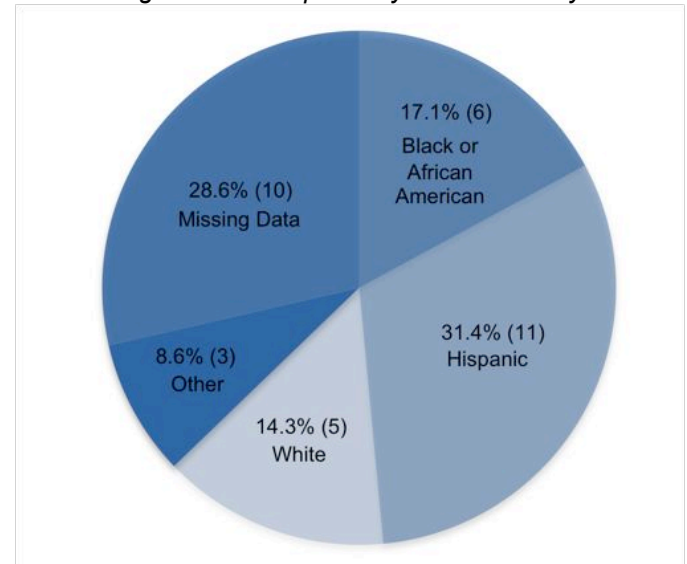
Participant Characteristics

Participants ranged in age from 22 to 65 years old, with an average of 36.9 years ($SD = 9.9$). All but three participants ($N = 32$) were female. Sixteen participants spoke only English fluently, three spoke only Spanish fluently, eight spoke both English and Spanish fluently,

and two participants spoke neither English nor Spanish fluently. Six participants did not provide this information.¹

The breakdown of participants' race/ethnicity is shown in Figure 1. As shown, the largest group of participants (31.4%) was Hispanic. The next largest group was comprised of Black and/or African American participants, who made up approximately one-sixth of the group (17.1%).

Figure 1. Participants by Race/Ethnicity



Age Ranges of Children Served in Direct Care

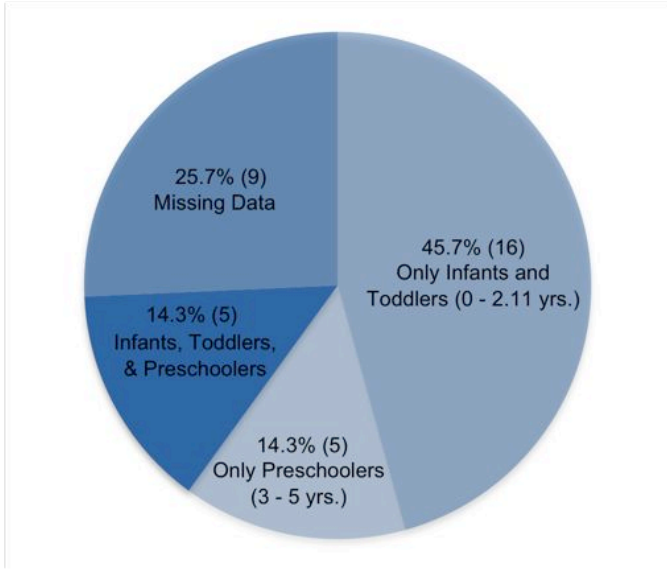


Participants were asked to indicate the age ranges of the children they served in their direct care. Responses were grouped into three categories: infants and toddlers (birth to 2 years, 11 months), preschoolers (3 – 5 years old), and a combination of the two. As shown in Figure 2, the largest group of participants (45.7%) served only infants and toddlers. Equal numbers of participants ($N = 5$,

¹ The issue of missing data as it relates to this evaluation brief will be explained in the following section.

14.3%) served either only preschoolers or a combination of the two groups.

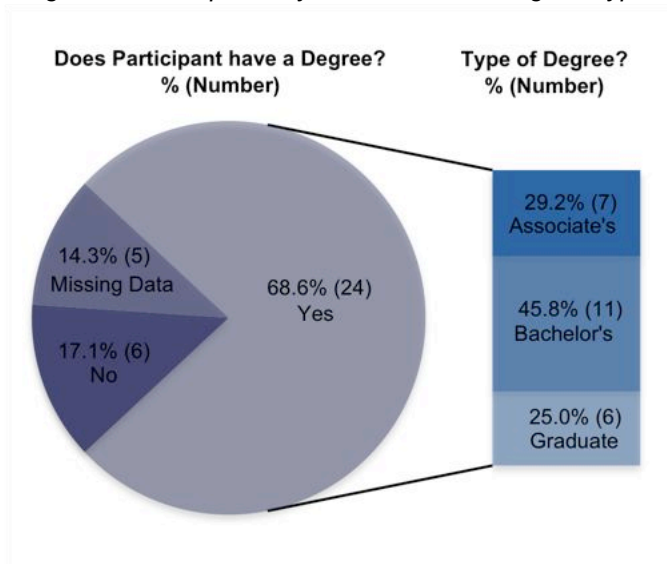
Figure 2. Age Ranges of Children Served in Direct Care



Participants' Educational/Training Background

The breakdown of participants' educational backgrounds is shown in Figure 3. The majority of participants held a college degree (68.6%). Of these participants, the largest group held a degree in Early Childhood Education (45.7%), followed by Psychology (17.1%). Other degree majors included Administration, Liberal Arts, Counseling, Fine Arts, and Human Development. Of those participants that had a college degree, the largest group held a Bachelors degree (45.8%), following by an Associates degree (29.2%).

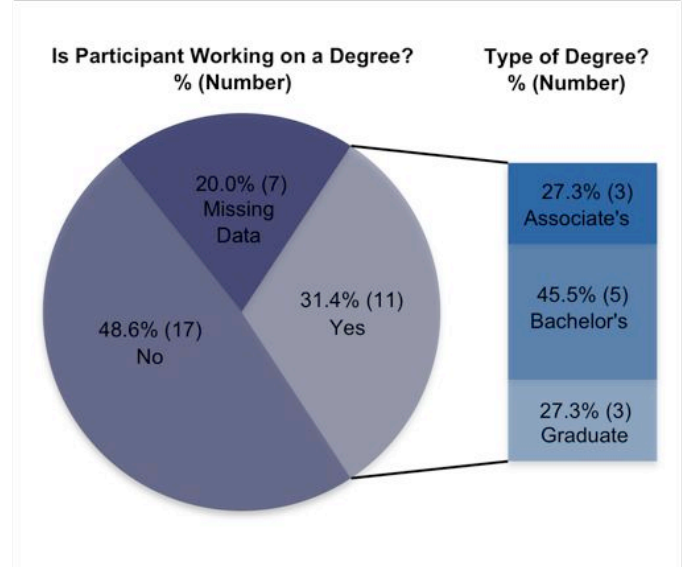
Figure 3. Participants by Education and Degree Type



Participants were also asked to indicate if they were currently working toward a degree. As shown in Figure 4, 11 participants (31.4%) were currently working toward

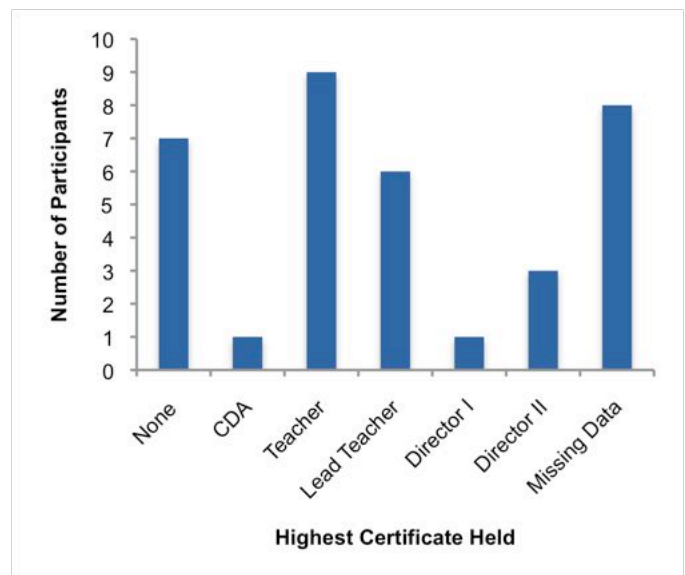
a degree. Of those participants that answered yes, the largest group of participants was working toward a Bachelors degree (45.5%). Degree majors included Early Childhood Education, Psychology, Nursing, Reading Specialist, and Sonography.

Figure 4. Participants by Working Education and Degree Type



Participants also reported on early childhood certificates held. As shown in Figure 5, of those participants who held certifications, the largest group was certified as Teachers (N = 9, 25.7%). Participants also reported on prior training experiences. Thirteen participants had participated in other trainings and/or workshops in the last year. Topics included mental health, positive discipline, domestic violence, and time management.

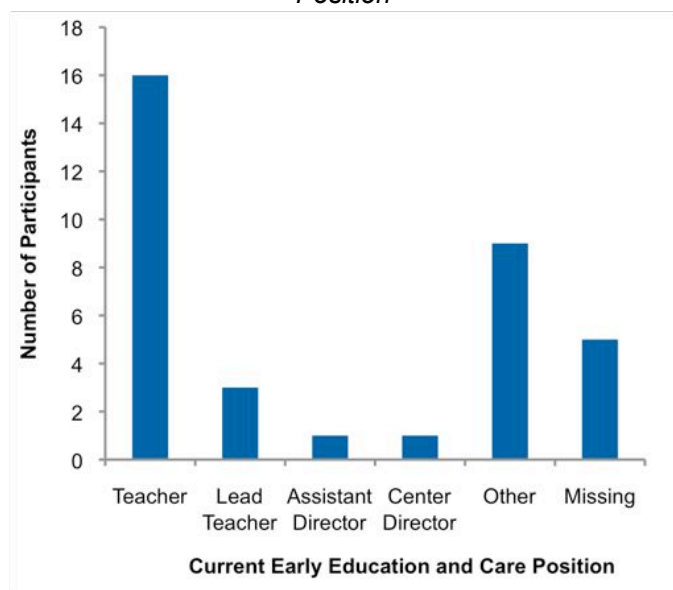
Figure 5. Participants' Highest Early Education Certificate



Participants' Experience in the Field

Participants came to MITM with a variety of professional experiences. Their years of experience in their current early education position ranged from less than a year to 14 years, with an average of 6.4 years ($SD = 4.2$). Participants' overall experience in the early education and care field ranged from 1.5 to 20 years, with an average of 9.8 years ($SD = 4.7$). The breakdown of participants' current early education and care positions is shown in Figure 6. The largest group of participants was comprised of teachers ($N = 16, 45.5\%$), followed by "other" ($N = 9, 25.7\%$). Other positions included van driver, family advocate, floating teacher, substitute teacher, and supervisor teacher.

Figure 6. Participants' Current Early Education and Care Position



A Note on Missing Data

As seen throughout the previous figures, a large number of responses were categorized as "missing". The data were missing due to several reasons: (1) participants did not complete a registration form ($N = 4$), (2) participants skipped the question, or (3) participants indicated that the question was not applicable. The missing data were included in this section of the report in order to provide a more accurate description of participants in this training. The Connected Beginnings Evaluation team plans to address these issues for future MITM evaluations.

WHAT DID THE EVALUATION FINDINGS SHOW?

The evaluation findings summarized here are based on participants' responses to pre- and post-surveys. Seven questions on the survey focused on participants' perceived knowledge about child development and learning, ten focused on their confidence in their abilities

to support children's development and learning, and eight questions focused on participants' beliefs about child development and learning. The post-survey also included several questions pertaining to the participants' views of the usefulness of and their satisfaction with the training. Only providers who completed both the pre- and post-training surveys ($N = 18$) were included in the analysis presented below. Results for each of these areas are described in the next three sections.



Perceived Knowledge of How Children Learn and Develop

Participants were asked to rate their current knowledge about child development and learning (1 = beginner; 2 = intermediate; 3 = advanced; 4 = very advanced; e.g., "Which best describes your current knowledge of social and emotional development in early childhood?"). Scores for all of the knowledge items were averaged to create average perceived knowledge scores for both the pre- and post-surveys. **A comparison of participants' perceived knowledge scores before and after the training showed that, on average, participants' perceived knowledge about child development and learning significantly increased.**

Participants' scores on individual items were also compared before and after the training. As illustrated in Figure 7, areas in which participants' knowledge significantly increased included:

- Social and emotional development in early childhood
- Intellectual development in early childhood
- The role that temperament plays in child and adult behavior and learning
- The role of memory in early learning
- How stress can affect children's growth and development

Figure 7. Participants' Perceived Knowledge Pre- and Post-Survey Means

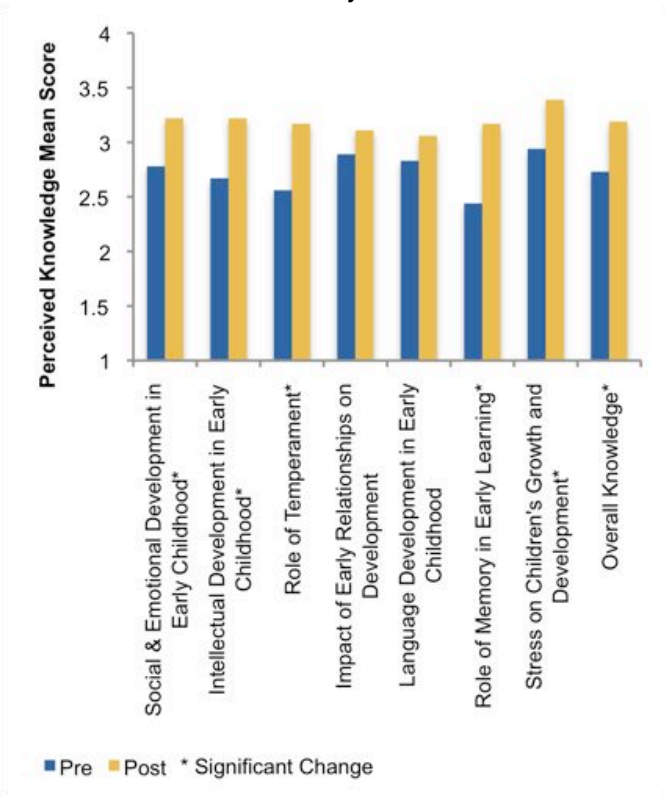
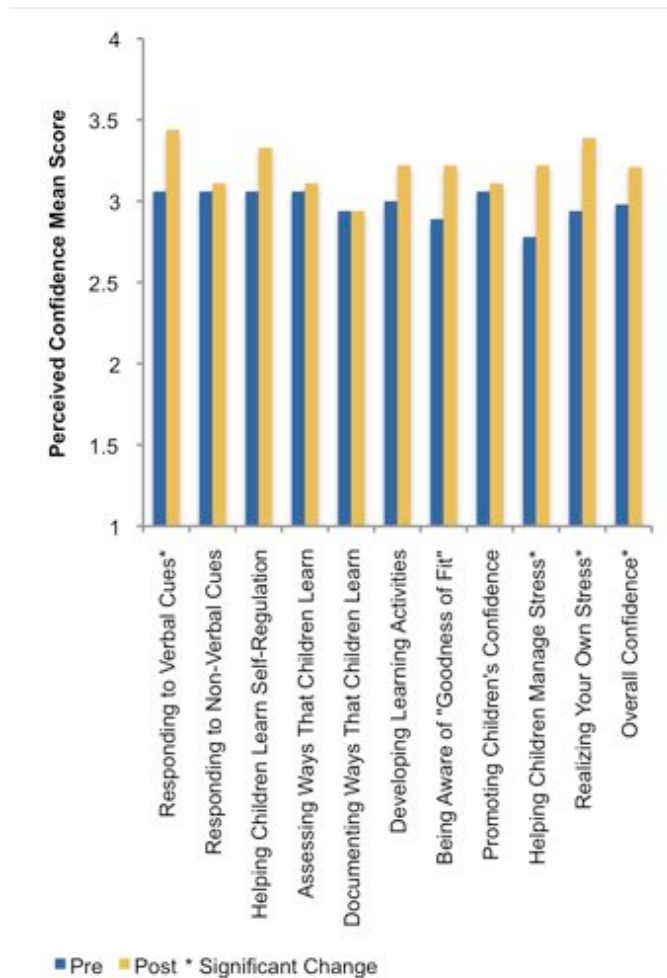


Figure 8. Participants' Perceived Confidence Pre- and Post-Survey Means



Perceived Confidence in Abilities to Support Children's Learning and Development

Participants were asked to rate their confidence in their abilities to intervene to support children's learning and development (1 = not confident; 2 = somewhat confident; 3 = confident; 4 = very confident; e.g., "Which best describes your current confidence in being able to respond to children's verbal cues?"). As with the knowledge items, scores for all of the confidence items were averaged to create an average perceived confidence score. Participants' scores were compared before and after the training to measure changes in perceived confidence. **Findings suggest that, on average, participants' perceived confidence in their abilities to support children's learning and development significantly increased.**

Participants' scores on individual confidence items were also compared before and after the training. As seen in Figure 8, areas in which perceived confidence significantly increased included:

- Responding to children's verbal cues
- Helping children learn and manage stress
- Realizing your own cues of stress and finding ways to prevent stress from growing in yourself

Beliefs about How Children Learn and Develop

Participants were asked before and after the training to agree or disagree with several statements reflecting MITM principles and beliefs about how children learn and develop (e.g., "How strongly do you agree or disagree one of the most important jobs is to help children learn to manage their feelings, behaviors, and stress?"). Based on their responses to these statements, **participants' beliefs about child development and learning showed a marginally significant increase from before to after the training.**

Usefulness of and Satisfaction with the Training

Results from the post-survey indicated that participants found most of the components of the training to be very useful and were very satisfied with the training. On average, participants found all of the components of the training to be "useful." Additionally, training components found to be "very useful" by the majority of participants included interactive activities (94.4%), journal pages (56.3%), videos (94.4%), and homework activities (55.6%). Furthermore, the majority of participants were

“very satisfied” with the organization of the training (83.3%), the content of the training (66.7%), and with the training overall (53.8%).

Knowledge Learned in Training

The post-survey asked participants to respond to the following question: “What are two things that you learned from the seminar that you can apply to your work?”

Nineteen participants responded to this question. Responses were categorized by five primary themes across the entire sample. The most frequently mentioned theme was related to the *management and identification of stress in children*; eight participants mentioned this theme. A summary of themes and examples are provided in the following table.

Table 1. Participants’ Responses to the Question: “What are Two Things that You Learned from the MITM Training that You Can Apply to Your Work?”

Theme	Example
Management and identification of stress in children (N = 8)	“How to approach and strategize how to handle stress in young children’s lives.”
Communicating and/or building relationships with parents, children, and coworkers (N = 7)	“Being connected and reconnecting with child.” “Relationship with parents, peers, and children”
New ways of teaching and guiding children’s learning (N = 7)	“Vocabulary ideas for preschoolers.”
How children learn and/or develop (N = 4)	“A better understanding of how children learn best.”
Children’s temperament (N = 3)	“How to relate to children with different temperaments.”

WHAT DO THE EVALUATION FINDINGS TELL US?

These evaluation findings suggest that participants became more knowledgeable about and confident in their abilities to support children’s development and learning after participating in the MITM training. Participants’ beliefs about child development and learning appear to have become more aligned with MITM principles after the training. While we do not know the extent to which participants will incorporate the new knowledge gained in MITM into their early education and care practice, an observational study of new MITM participants in the upcoming fiscal year should tell us more about the ways in which participants’ increased knowledge and confidence translates into their work.

Lastly, the findings from this evaluation imply that MITM seems to be successful in training a variety of early

education and care staff. The unique make up of the staff who participated from Horizons – ranging from van driver to center director – suggests that MITM could be used as a team-building activity for all staff members. Therefore, interested early education and care center- and home-based providers should consider implementing this training for their entire staff.

Endnote

¹ No plausible alternative explanation according to Cook and Cambell (Cook, T.D. and Cambell, D.T. Quasi-Experimentation: Design and Analysis Issues for Field Settings. Houghton Mifflin, Boston, 1979) means that the presumed cause of changes in the outcome measure must be the only reasonable explanation for changes in the outcome measure.

CONNECTED BEGINNINGS TRAINING INSTITUTE is an infant and early childhood mental health training institute that promotes awareness of the central importance of relationships in the lives of infants and young children. Our work extends the capacity of infant and early childhood practitioners and programs to understand and apply current knowledge of the effects of relationships on very young children’s social and emotional well being, evolving brain architecture, and capacity to learn.

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