

## 1. Descriptive Information

<p><b>Intersections and Impact of Implementation Drivers for Coaching &amp; PD Efforts</b></p> <p>Coaching has emerged as one of the most commonly cited approaches to professional development (PD) in early childhood education, and there is growing consensus that intensive or ongoing PD efforts, like coaching, may be the best way to influence teacher practice and ultimately child outcomes. However, we have much to learn about the content of coaching approaches and models, and the drivers that facilitate the success of coaching as a form of PD.</p> <p>In this session, we will share lessons learned from three studies that directly address these issues. We will first use data from the Administration for Children and Families (ACF) Study of Coaching Practices in Early Care and Education (SCOPE) to provide a broad look at the different ways that features of coaching are implemented and combined into an overall approach. We will use coach, teacher, family child care provider, and center director perspectives on coaching—and will describe their views on what makes it challenging to implement coaching. We will then draw on lessons from two additional studies to take a deep look at more specific coaching approaches, and how implementation drivers facilitate or inhibit the success of those coaching efforts. With Cultivate Learning’s STEAM Trunk data, we will describe the implementation of coaching focused on improving the quality of a specific content area of math instruction. This coaching effort included the provision of materials tied to a PD training as well as virtual coaching. With data from ACF’s Variations in Implementation of Quality Interventions (VIQI) study, we will describe what drives take-up and engagement in coaching, how this differs by setting type (for example, Head Start versus community-based child care centers), and how this differs by the quality of classrooms. After sharing information from these studies, we will engage participants in a discussion of key features of coaching and drivers that facilitate the positive impact of coaching.</p>	<p><b>Facilitator</b></p> <ul style="list-style-type: none"><li>• <b>Laura J. Johns</b>, ICF, National Center on Early Childhood Quality Assurance</li></ul> <p><b>Presenters</b></p> <ul style="list-style-type: none"><li>• <b>Emily Moiduddin</b>, Mathematica   <i>SCOPE: Study of Coaching Practices in Early Care and Education Settings</i></li><li>• <b>Gail Joseph</b>, Cultivate Learning, University of Washington   <i>STEAM Trunk: Professional Development Interventions to Increase Teacher Confidence and Competency in Math Instruction</i></li><li>• <b>JoAnn Hsueh</b>, MDRC   <i>VIQI: Variations in Implementation of Quality Interventions</i></li></ul> <p><b>Scribe</b></p> <ul style="list-style-type: none"><li>• <b>Katie Caldwell</b>, ICF</li></ul>
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## 2. Documents Available on Website

- The STEAM Trunk: A Pilot Study of Online Coaching

## 3. Brief Summary of Presentations

- **Summary of Presentation #1:** Understanding the Interaction and Impact of Implantation, Laura Johns
  - Implementation Drivers (using National Implementation Research Network framework)
    - Leadership
    - Organizational
    - Competency

- **Summary of Presentation #2: SCOPE: Study of Coaching Practices in Early Care and Education, Emily Moiduddin**
  - SCOPE is funded by OPRE and conducted in partnership with Mathematica, Child Trends and the Children’s Learning Institute at UT Health Science Center
  - SCOPE goals
    - Identify and define core features of coaching as a form of professional development for improving early care and education teacher and family child care (FCC) provider practice
    - Document how coaching features are implemented and combined in center-based classrooms and FCC homes
  - High-level conceptual model
    - Organization and system influences
    - Characteristics of coaching participants
    - Coaching implementation
  - Survey data collection on coaching
    - February to July 2019
    - To be eligible:
      - Serve low income, preschool-age children
      - Have coaching focused on improving classroom practice
    - Purposefully included a variety of coaching approaches
    - Implemented web-based surveys in 7 states with center directors, teachers, coaches, FCC providers
  - Initial analysis steps to address study goals
    - Understand settings, respondents, and coaching delivered/experienced
    - Explore whether coaches combine features of coaching into clear profiles/overall approaches for coaching
    - Cluster analysis used
    - Not a representative sample
  - Key takeaways thus far
    - Structural features of coaching vary widely
      - Caseloads (can include teachers, assistant teachers)
        - Head Start centers have lower caseloads
      - Time of year coaching is offered (year round, seasonal)
    - Similarities in which process features coaches use
      - Conduct observations in person or via video
      - Provide feedback
      - Demonstrate skills with children
      - Set formal goals
    - Exploring profiles of process features of coaching
      - Are there profiles of process features of coaching?
      - Did not find distinct profiles
    - Wide array of challenges
      - Program/classroom management issues (turnover, teacher resistance to coaching)
      - Teacher/provider challenges (time/space for coaching, personal crises)
      - Coach challenges (time, communication)
      - Lack of training or PD for the coach

- Future analysis
  - Background of coaches and teachers
  - Caseloads
  - Dosage and communication
  - Goal setting and focus
  - Coaching strategies
  - Coaching activities
  - Individualization
- Planning a new data collection for 2021
- **Summary of Presentation #3: What Drives Engagement in Coaching? Early Insights from the Variations in Implementation of Quality Interventions (VIQI), JoAnn Hsueh**
  - Goals of the VIQI project
    - Understand differences in impacts and implementation of quality enhancement efforts across different early care and education setting types
    - Examine the causal effects of dimensions of quality on child outcomes
    - Determine whether there are thresholds in these effects
    - Understand how impacts and implementation of quality enhancement efforts vary across ECE setting types and classrooms with different initial levels of quality
  - Conceptual framework
    - Recruiting and randomly assigning to one of the two intervention conditions vs. business as usual control condition
    - Measure implementation drivers and inputs and fidelity of implementation
    - Assess quality in all classrooms
    - Assess child outcomes in all classrooms
  - Pilot study research questions
    - Did teachers engage in coaching as intended?
    - Did engagement in coaching vary systematically with setting type, initial classroom quality, curricular models, and teachers' initial readiness as rated by their coach?
  - Pilot study installation components and activities
    - Curricula used:
      - Connect4Learning and Creative Curriculum
    - Teacher professional development
      - In person workshops, dosage and content varied by intervention
      - Bi-weekly in-person coaching sessions with lead and assistant teachers
    - Support for coaches
      - Coach training for 5 days
      - TA and monitoring TA with developers and study team
      - Administration supervision from local coaching partners
    - Support for centers
      - Bulletins for each training outlining topics covered and upcoming curricular content
      - Monthly meetings for administrators
  - Coaching Model Parameters
    - 11 coaches hired by local coaching partners
    - Separate coaches for each models
    - Caseload 7-8 classrooms per coach
    - Dosage: 3-hour bi-weekly coaching sessions with lead and assistance teachers
    - Focus: practice-based coaching model aimed at reinforcing curricular training workshop content and implementing curricula with fidelity in classrooms

- Pilot Study: fidelity of implementation of coaching models
    - Coach logs: implementation and engagement of teachers in coaching
      - Collected bi-weekly from September to May
    - VIQI Pilot Sample (2018-2019)
      - Inclusion criteria for centers:
        - Be in operation at least 2 years
        - At least 2 classrooms serving a mix of 3 and 4 year olds together
        - No current intensive coaching
        - Does not serve a high population of DLLs whose primary language is not English and Spanish
        - Instruction primarily in English
      - 3 localities: Indianapolis, Los Angeles and St. Louis
      - 43 centers, 124 classrooms
    - High and low initial quality subgroups were defined with classroom observational measures captured in Fall of the pilot year
      - Structural and interactional quality subgroups are based on both ECERS-R-SF and CLASS at baseline, in line with precedent in literature
      - Instructional quality subgroups are based on study-adapted Language Interaction Snapshot (LISn) composite standardized score
    - Subgroup characteristics are not highly correlated
  - Key Insights
    - Coaching implementation and dosage
      - 8.5 average coaching sessions
    - Variability in number of coaching sessions reached
    - Variation appears linked with setting type (Head Start vs. community-based child care center) and teacher's readiness to implement, though we did not test for statistical significance in differences
    - Initial level of quality does not appear to be a strong predictor of coaching engagement
  - Slated to begin the full-scale study in 2020 but disrupted by Covid-19
  - Limitations and looking forward
    - This is a pilot study with limited sample size
    - Need to further investigate and illuminate operational barriers and challenges to engagement in coaching across different settings
    - Further investigation of how coaching content and focus varies with broader set of hypothesized drivers and inputs of fidelity of implementation
- **Summary of Presentation #4: The STEAM Trunk: A pilot study of online coaching, Gail Joseph**
  - Partners:
    - EarlyEdu Alliance
    - Expanded Learning Opportunities
    - Washington Early Achievers
  - 10 week online course- have been able to move the needle on quality in a significant ways
  - Early achievers framework
    - Coaching done in person
    - Data collection on quality
    - QRIS birth to 5
  - Kindergarten children were seen entering lower in math

- Increasing access to Professional Development (PD)
  - Circle time magazine- replicated an online course but turned it into an online talk show format that is aimed at teachers- similar to “The View” but with educational content
    - Resource table segment- materials teachers can use in classrooms to increase learning opportunities
    - Coaching companion- online program that initially didn’t have much interaction from teachers- wanted to increase engagement from teachers
  - To increase coaching interaction, the STEAM trunk was piloted.
    - After a teacher watched an episode, a STEAM trunk of materials was delivered to their door for them to use in their interactions with children. To receive their next STEAM trunk, teachers would need to upload a video and receive feedback before moving on
    - The STEAM trunk cost was kept to the average cost of mileage in the state, meaning that the trunk was used to supplant the need for a traveling coach.
- Quasi-experimental, mixed methods, pre/post
- Study questions:
  - Can digital professional development improve the quality of math instruction and support to children?
  - Can we duplicate the success from a higher learning course by adapting incentives?
- Preliminary results:
  - Teacher comfort with math increased
  - Teacher self-efficacy increased
  - Teacher beliefs on how young children learn math strengthened
  - Increased math talk
- In partnership with DCYF, Cultivate Learning will be repeating the project and study on the topic of positive behavior supports.

#### 4. Brief Summary of Discussion

- Q: How were the Head Start programs selected for the VIQI project and their geographic locations determined?  
A: Centers and localities had to meet a certain set of criteria so that the project could be sure they had sustainability, no on-going professional development as well as the other criteria that were listed in the presentation.
- Q: What LMS system was used for the STEAM Trunk courses? Will this initiative only be limited to Washington State?  
A: Gail: Canvas was the LMS system used and many states have adopted Canvas as their LMS. You could run the Circle Time episodes on Canvas but you could also just view them on our website. The coaching companion is a separate web-based program and can also be access via the website.
- Q: Did any of these studies look at what type of coaching competencies coaches had and what type of training or professional development they received?  
A: Emily- did ask coaches about training and PD they received. Asked about the frequency in which coaches received coaching from their organization. Asked a little bit about coach background in ECE, saw some variation. In general, both coaches and ECE teachers had wide ranging background.  
JoAnn: We did have a coach survey that collects information on their background. Did see some variation anecdotally, not enough sample to dig in to that yet.  
Gail: Some demographic information but it wasn’t something we were looking at specifically. In the coaching companion, you can get a sense of the coaching fidelity because its done online.
- Q: If anyone is looking at the “sticky” factor, sustainability issue? Dosage?  
A: Emily- SCOPE is looking into this depth and breath now. Responding to the comment about the study being available- it will eventually be publically available in an archive like all OPRE projects.  
Joann-No insights on the sustainability of practices. Do know from other studies that teachers are more ready in subsequent years in a study/ongoing coaching. Don’t think there is a lot of evidence around this.

- Q: Are Circle Time videos available to download and use them in their own state sponsored trainings?  
A: Gail- yes please do!
- Q: Top key drivers for coaching model effectiveness?  
A: Emily- training, decision support data system, aspects of facilitated administration  
Joann- competing demands for other supports Head Start centers might be getting (Head Start centers versus community- based centers not receiving the same supports). If the staffing structure of the centers allow for flexibility for teachers to engage in coaching.  
Gail- competency, training, built in motivation (STEAM Trunk)

## 5. Summary of Key Issues Raised

- Coaching, like much of the professional development initiatives in ECE faces challenges such as providers finding time away from the classroom to engage in coaching sessions.
- Virtual coaching approaches such as the STEAM Trunk intervention show positive initial results and had positive feedback from teachers and providers.
- Topics for further research include:
  - Further investigation of how coaching content and focus varies with broader set of hypothesized drivers and inputs of fidelity of implementation
  - Dosage, caseloads, backgrounds of teachers and coaches and its impact on coaching