# **Professional Development Strategies: Findings and Implications**

## Description

In this session, three studies of quality improvement intervention models were discussed, with a focus on the implications of the findings for future research and policy directions. The studies included family home providers and center teachers, with participants in seven States. Although the projects were different in their approach to enhancing quality, each was able to provide data showing the effectiveness of their model. Presenters discussed the elements of their interventions that they thought were keys to success, including which measures worked well, how they were able to overcome the challenges of conducting research in the "real world," and how they were able to include minority populations in their research. They also discussed the ways their projects could inform quality rating improvement systems and the future direction of research that will help define effective quality enhancement programs.

#### Moderator

Karen Taylor, University of North Carolina, Chapel Hill

## **Panel Members**

Donna Bryant, University of North Carolina, Chapel Hill Barbara Goodson, Abt Associates, Inc. Craig Ramey, Georgetown University Sharon Ramey, Georgetown University

### Scribe

Tamara Halle, Child Trends

## **Documents in the Session Folder**

- The Quince Study: Quality Interventions for Early Care and Education
- Findings from evaluations of professional development models: Supporting high quality early childhood education curricula in subsidized child care centers

#### **Discussion Notes**

Donna Bryant: Quality Intervention for Early Care & Education (QUINCE)

- Overview of study.
  - o OUINCE research questions.
    - Does onsite consultation improve quality?
    - Is PFI (Partnerships for Inclusion) consultation better than existing OE?
    - Can improvements be sustained?
    - Do some providers benefit more than others?
  - o PFI onsite consultation.

2008 CCPRC Meeting Session 4 (Breakout A-2) Wednesday, July 31, 10:45-12:00 noon

- Collaborative process.
- A total of 12 to 17 visits over a period of 6–10 months.
- Previous study shows effectiveness but it was not experimental.
- Design of study:
  - A total of 24 agencies and 101 consultants
  - Random assignment to PFI model, with the control group being business as usual
  - Selected children out of the classes or homes randomly to assess.
- o Data and results.
  - ECERS, FDCRS and ECERS-E as the main quality outcome measures.
  - PFI model uses the ECERS or FDCRS as a benchmark concerning what to focus on regarding onsite consultation.
  - Factor analysis produces the teaching and interactions factor and the provisions for the learning factor.
  - Teaching and interactions factor:
    - In classrooms, PFI and control consultations were both effective in improving quality.
    - In FCC homes, PFI group improved significantly more than control group.
  - Provisions for learning.
    - In classrooms, both PFI and controls improved over time.
    - In FCC homes, PFI improved significantly over time, but control family child care homes did not.
  - ECERS-E literacy score.
    - In both classrooms and FCC home, PFI improved significantly more than controls.
  - Preschool Language Scale (child outcome).
    - Effect for children in PFI-served classrooms. Children in those center-based classrooms are significantly better at time 2 than children served in control center-based classrooms. No difference in children in family child care homes.
  - The family child care homes sample size was much larger than that for centerbased classrooms, one reason for more differentiated findings within the FCC group.
- Questions and answers.
  - OPFI started as a quality enhancement and support program to improve child care programs serving children with disabilities, although it focuses on issues relevant to children of all abilities. As previously assessed in over three time periods in the Smart Start studies of the 1990s, in North Carolina there was an increase in the number of high-quality programs serving children with disabilities.
  - o It is hard to explain why the child outcome difference between PFI and control is for children in classrooms, when the significant differences in quality occurred in family child care. Other research shows that child outcomes are related to quality, and quality was improving in both PFI and control classrooms.

- A suggestion was made to run the ECERS-E differences for classrooms separate from homes and run the analyses.
- Was the teacher the only teacher or the lead teacher? The lead and assistant teacher were both part of the intervention, whenever possible. The lead teacher filled out the child behavior rating measures, but the ECERS takes into account all adults/teachers in the classroom.
- o A total of 577 children had data at both time points. The study recruited up to six children per classroom.

## Barbara Goodson

- Study was done only in child care centers. (It was not about family child care.) Not started as a professional development (PD) study but as a curriculum study. The PD came along with the curriculum, and it is an important part of the study.
- Miami-Dade School Readiness Coalition used quality dollars to perform an intervention to improve the poor language development of 4-year-old subsidized children (lowest third nationally).
- Randomized study. Main research question: Can we affect children's language and literacy scores?
  - o Planned variation study of the curricula.
  - A total of 162 centers to three language and literacy curricula (n=36 each) or to an "as is" control group (n=54).
  - o A total of \$500 to each classroom for supplies.
  - o PD model:
    - Group training for the initial dosage of PD (2–3 days) in the 1st year (late fall)
    - Bimonthly visit from coach or mentor trained to support one of the curricula
    - Additional group training in fall of the 2<sup>nd</sup> year.
  - Assessed children 2 years after the initiation in the curricula/PD intervention.
     Bonus given to teachers to stay in place for 2 years (\$500 for the 1st year and \$500 at end of the 2nd year). Kept turnover down to 25 percent.
  - o Three curricula:
    - Ready, Set, Leap interactive electronic technology
    - Building Early Language and Literacy Two 15-minute periods a day
    - Breakthrough to Literacy.

#### Results.

- o Big impact on teachers (compared to control group).
- Also big effects on children in two of the three curricula. (The curriculum that
  was not comprehensive and did not include technology did not show effects on
  children.)
- Questions and answers.
  - Describe the process for assessing fidelity. At the time, each developer's coach told us what would be a level 5 fidelity score. Was not very sophisticated. Used our independent observation of quality practices to verify. We discovered that few

- classrooms did not implement this with a reasonable level of fidelity. We did not try to link it to outcomes.
- o Is a 2-year lag between implementation and a look at outcomes realistic? There is a tension out there: How long it takes to get up to speed versus the political pressure for quick answers on child outcomes. No, it is not realistic to expect that teachers are going to stay around for 2 years; however, it is hard to change people's behavior, and it took about 2 years to do so. Testing after 1 year will be an underestimate of what can be obtained.
- O Did you look at the impact of training on turnover? More money would change turnover. However, the training helps teachers get a better job, so we don't know if it helps or hurts turnover. Even if they leave the particular program, they may still remain in the field. These are all important issues.

## Sharon Ramey: Right from Birth (RFB)

- Research questions.
  - o Does the RFB training model improve the quality of child care and education?
  - Does the format—a series of workshops versus a highly intensive form of jobembedded coaching—produce different benefits?
  - o Are the improvements maintained over time?
- Used the television series based on the two Ramey books as the curriculum for the workshops, along with additional materials (e.g., seven research essentials). All materials for training the people who did the workshop or onsite work are available and systematic.
- Licensed centers in Mississippi and family child care homes (not regulated) in Mississippi.
- All served infants and toddlers; many also served those ages 3 to 5.
- None of the providers had more than a high school degree or Child Development Associate's degree.
- Preassessments and postassessments were blind to the condition.
- No one left the project once they were in; all sites got the full dosage of PD (although we asked one of the coaches to leave the program because she was not delivering the PD with fidelity to the model).
- Key findings:
  - o In both centers and family child care, major improvements occurred in both conditions (workshop and intensive onsite work).
  - However, the 20-day RITE (Ramey's Immersion Training for Excellence) produced much larger benefits.
  - o Benefits maintained up to 1 year later in the centers.
  - O Positive benefits to children's language development (+12 points) only happened in centers that received the 20-day RITE immersion training. Partly, they could only look at outcomes among children who stayed in the same setting over 2 years (for a gain of 12.13 points on child language scores for immersion and a decrease of 7.82 points for those who did just the workshops).

- Family home providers started out at about the same level of quality and showed gains for the immersion condition over time. Also, there were gains in those who received workshop training.
- O Did not find benefits for children in the family child care homes, but very few children stayed in the same family child care over 1 year. Some of the sites were not even in operation 1 year later. Similar findings were found across the country.
- o Meaningful improvements (return on investment):
  - Centers: 72 percent of centers that received immersion gained one point in quality at Post 1; only 10 percent getting workshops had a one-point gain at Post 1—RITE 71 percent and workshops 20 percent at Post 2.
  - In family day care homes: RITE 71 percent and workshops 20 percent at Post 1. RITE 64 percent and workshops 14 percent at Post 2, gaining one point in quality.
- This model is being adopted in other sites across the country, including in a new study in Washington, D.C. (An adaptation of the model is being used for this study.)
- Questions and answers (see below)

## Discussion

- Conducting research in the real world.
  - o How did you identify the homes and centers in your study?
    - In Mississippi, had lists of providers for the centers. For the unregulated care, took advantage of the USDA extension service to identify the sites. Had individual calls to recruit. Selected randomly from those who self-nominated to be a part of the study.
    - In Miami-Dade, had list of centers who received the subsidies. Recruited, gave information, and had to meet certain selection criteria. Ended up with a sample that is not ever truly a random sample of the universe; it is a random sample of those who self-select to be a part of the study.
    - In PFI Study in 5 States, had to rely on 24 participating agencies and the 101 consultants who volunteered for the study. They recruited to the study the providers they served, those who sought services from their agency and were willing to be randomly assigned, thus some self-selection amongst providers. Enough carrots to get to the next stage of licensing. Sometimes unwilling volunteers. But it could help them get to the next level of reimbursement.
  - Oraig Ramey—Random selection followed by random assignment is a highly unusual design to find in any field. Usually, you start with someone who self-selects to be a part of the study, even in medical studies. We are just getting started in this field. We should not let the excellent be the enemy of the good. Just because we cannot always have a truly random selection of the universe of early care and education (ECE) settings does not mean that we cannot learn something useful from these studies.

- o Barbara Goodson—Although some sites may have preferred one curriculum over another, this is like real life, as school districts select curricula for teachers to use and teachers do not always get a choice.
- Maintenance of effects and costs of intervention.
  - O Sharon Ramey—We do not know if there is a spread effect. Will a trained teacher engage a less skilled teacher to engage in good practices that help maintain the PD impact? We are going to be testing this in the Washington, D.C., study.
  - Donna Bryant—The Ramey study showed some pretty remarkable results from a 3-day workshop. We should pay attention to the characteristics of that workshop when others are saying do not bother with workshops.
  - Sharon Ramey—These are workshops that are highly proscribed, a lot of fun, and hands-on and interactive. It is much more about how you interact with children and understand brain development using interactive and engaging ways. Particular facts to learn for each structured workshop. Manual has been around for 6 years. Has been adapted for parents and has been shown to have a lot of benefits.
  - Sharon Ramey—The 1-day workshop was exhausting and too rushed. The 6-day workshop was too expensive to run in rural settings, given that it is hard for folks to take that much time to attend an event.
  - O Donna Bryant—A policymaker may look at the Ramey data and say that we could reach a lot more people and save a lot of money if we did these intensive workshops rather than onsite consultation.
  - Craig Ramey—We need to learn to titrate the dosage of PD. Some people will be fine with just a workshop, but others will need more support. On the other hand, not everyone may need 20 days of onsite PD. We need to do an economic analysis to understand how to be the most efficient and cost effective in providing PD to achieve benefits for different types of providers. There may even be some providers who do not respond to any PD offered. For these folks, we should consider the usefulness of providing any PD.
  - o Providing funds to all classrooms, regardless of the intervention strategy.
- Role of the consultant—How does the person's training play into the results?
  - Comment—A recent consultation study in Chicago (Bromer, 2008) found that when the consultant/coordinator had special training (e.g., graduate-level infanttoddler training), the effects of the home visits to improve FCC quality are enhanced.
  - O Donna Bryant— It is good that you know from your study that a particular type of training, as opposed to another, made a difference. We do not have that kind of data in our study. For the PFI model, 25 percent of coaches did not have degrees of any kind. We tried to use our data to predict who would deliver the services well and who would not. There was a wide range of fidelity, and we cannot predict fidelity with any of our entry characteristics. I wish we could do a better job of predicting. It is really a relationship-based type of intervention.
  - Craig Ramey—It is not just the characteristics of the individuals (e.g., how
    personable they are). If you know the particular change in behavior you want, and
    if you know how to present that in a way that is perceived as desirable by the

2008 CCPRC Meeting Session 4 (Breakout A-2) Wednesday, July 31, 10:45-12:00 noon

learner, then you can direct your training in a much more focused way. We know from neural biological research, not to rely on generalization; make sure you get specific information delivered and that you can monitor that the information is there. Things like years of education and type of degree are not predictive of bringing about changes in children's level of cognition (Peg Burchinal's research).

- Sharon Ramey—It is not that we do not focus on adult learning strategies, such as achieving your goals. Some of the field notes suggest that the relationship was not particularly special, but that there was a lot of learning going on. The focus was on promoting children's development, both social-emotionally as well as cognitively. We have not found resistance from providers.
- O Barbara Goodson—We also had a more structured type of coaching. By the end, you develop a relationship through the work that you do. It happened that all our coaches had college degrees. We hired them based on their previous knowledge of child development. If you have something structured and worthwhile to do, they will work.
- Craig Ramey—If we need master's level coaches, we aren't going to get there in the next quarter century. Maybe we will have to look to a different part of the market to do this type of work.
- Where should the research in the field go from here?
  - Understanding the different types of consulting models and the characteristics of consultants.

### Key Themes and Issues

- Professional development interventions have been found to be effective. All three studies presented in this workshop reported finding changes in provider practices through the delivery of PD interventions. There were fewer effects on child outcomes, although some interventions found changes in child outcomes.
- *Differences in outcomes by setting*. However, there were differences in the changes in provider practice and child outcomes depending on the setting, for example, *centers versus family child care homes*. This suggests that more research is needed to explore the mechanisms that underlie the effects of PD by setting.
- *Maintenance of change*. Two of the three studies found maintenance over time for PD interventions. (The first study did not report on maintenance effects.) The pressure to show change in child outcomes sooner than 2 years since the start of an intervention was identified as a challenge in the field, especially with regard to the preferences of policymakers.
- Characteristics of consultants. The effect of having control over who you hire as a coach seems to matter. That is, if you are able to hand-select the background characteristics of your coaches, it seems to have an effect on the outcomes you get with providers and teachers. However, it is not realistic to expect that you can guarantee high levels of qualifications or background knowledge and training of coaches if you are trying to implement widely. The field needs to address how to

2008 CCPRC Meeting Session 4 (Breakout A-2) Wednesday, July 31, 10:45-12:00 noon

- ensure that people other than those with a college or master's degree can effectively provide PD to the ECE workforce. This speaks to more focus on the training of PD staff.
- Research design. All three studies used an experimental design with a randomly assigned experimental and control group. In several cases, the control group was "business as usual," but in others the control group was given monetary support for supplies. In all cases, the sites were randomly assigned to experimental and control group status after an initial self-selection into the study. The group discussed the fact that it is not realistic to expect a truly random selection of the universe of ECE settings; this is not even the case in other fields of study. (People self-select into experimental studies.) However, it does not mean that we cannot learn something useful from these studies.
- *Meaning of impact*. The effect sizes in some of these studies are quite impressive, given that an effect of 0.2 or 0.3 in our field has been found to affect changes in outcomes. However, the ability to show an impact of a PD intervention depends in large part on what constitutes your comparison group. There is a difference between an absolute level of change and the level of change relative to the group who serves as your control.