# Preschool Teachers' Fidelity in Implementing a Comprehensive Language-Rich Curriculum

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mproving the quantity and quality of the language input that children receive in preschool classroom settings is a topic of keen contemporary interest to speech-language pathologists (SLPs), with direct implications for clinical practice. This interest results from the well-established linkages between the linguistic input to which children are exposed and children's own language accomplishments (e.g., Dickinson & McCabe, 2001; Dickinson & Smith, 1994; Girolametto, Hoaken, Weitzman, & van Lieshout, 2000; Girolametto & Weitzman, 2002; Girolametto, Weitzman, & Greenberg, 2004; Girolametto, Weitzman, van Lieshout, & Duff, 2000; Hart & Risley, 1995; Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002). The notion that children's language development is highly dependent on the quantity and quality of the input they receive is supported theoretically by the work of Snow (1972), who set the stage for research examining the beneficial properties of language input received by infants and

children in order to account for differences in linguistic ability for children of varying social classes. Subsequent research has confirmed that children's language accomplishments are largely influenced by their linguistic environment (e.g., Hart & Risley, 1995, 1999; Hoff, 2003), and that "environment" must be broadly defined to include not only the home environment, but also other caregiving milieus in which children spend considerable amounts of time, including the preschool classroom (Dickinson & Sprague, 2001).

Presently, approximately 57% of 3- to 5-year-old children in the United States attend center-based early childhood care and education programs, with many of these children meeting eligibility standards based on developmental risk (U.S. Department of Education, National Center for Education Statistics, 2006). Participation in high-quality preschool programs is considered a critical mechanism for equalizing early gaps in academic, social, and cognitive development for children who are at risk due to socioeconomic status

ABSTRACT: **Purpose:** This study examined preschool teachers' fidelity to the language-focused curriculum (LFC; B. Bunce, 1995), a comprehensive classroom curriculum designed to improve at-risk children's language outcomes through targeted improvements to a classroom's activity contexts (e.g., dramatic play, art, storybook reading) and instructional processes (e.g., teacher use of open-ended questions, recasts, and expansions). Specific aims included to (a) examine program differentiation by determining how measures of activity contexts and instructional processes differentiated treatment and comparison teachers, (b) determine treatment teachers' adherence to both activity contexts and instructional processes over an entire academic year, and (c) determine treatment teachers' reported quality of program delivery and comfort with curriculum implementation.

**Method:** Fourteen preschool teachers were randomly assigned to implement the LFC or to maintain their prevailing curriculum. Fidelity was measured 3 times over an academic year using a curriculum fidelity checklist.

**Results:** LFC teachers exhibited fidelity to activity contexts more readily than to instructional processes. Teacher use of language-focused instructional processes was relatively low even after a year of LFC implementation.

**Conclusion:** This study supports the need for speech-language pathologists to work closely with preschool educators to implement the activity contexts and instructional processes associated with high-quality preschool language-learning environments.

KEY WORDS: language curricula, implementation fidelity, instructional processes

and other factors (e.g., Barnett, 1995; Campbell & Ramey, 1995). This may be particularly true for children with developmental challenges in language acquisition due to genetic or environmental factors.

## **Improving Preschool Children's Language Outcomes Through Classroom Interventions**

Given the number of at-risk children who attend preschool programs designed specifically to foster their early achievements in language, the field of early childhood education has become increasingly invested in identifying effective curricular approaches that educators and their colleagues (e.g., SLPs) might employ to promote the language achievements of young children within the preschool classroom. An important companion to the emerging corpus of applied studies that focus on child outcomes resultant from the use of particular educational approaches in the preschool setting (e.g., van Kleeck, Vander Woude, & Hammett, 2006; Wasik, Bond, & Hindman, 2006) are studies that examine the capacity of the field to take these approaches to scale. For instance, although evidence shows a positive relationship between specific features of preschool teachers' language use and the linguistic gains experienced by children in their classrooms over the academic year (e.g., Huttenlocher et al., 2002; Wasik et al., 2006), little research has shown that preschool teachers are able to benefit from professional development designed to improve the quality of the linguistic input they deliver within their classrooms.

Although teacher outcomes are considered an *intermediate process* within intervention research, they represent the primary mechanism through which an intervention achieves its effect. This is a particularly important line of research for the speech-language pathology community, which is vested in identifying effective means by which SLPs and classroom-based educators might best collaborate. One possible approach that has been explored is for SLPs to provide professional development to early childhood educators on the use of language-stimulating strategies within their classrooms (e.g., Girolametto, Weitzman, & Greenberg, 2003). Contributing to this small but important body of work, in the present research, we examined the extent to which preschool teachers working in at-risk programs were able to implement the critical features of a language-rich curriculum over an academic year.

A growing body of research has shown that child language outcomes can be readily improved through targeted interventions that are delivered within the preschool classroom setting. For instance, van Kleeck and colleagues (2006) recently reported gains in literal and abstract language skills consistent with medium to large effect sizes for at-risk preschoolers who participated in 16 one-on-one experimental book-reading sessions in an 8-week period with their Head Start programs. The experimental sessions, delivered by trained research assistants, featured embedded questioning techniques designed to engage children in extended conversations involving inferential language. Practically, the gains in children's literal and abstract language skills suggest that such interventions are a promising means for preventing reading comprehension difficulties for children who are at risk for problems in this area.

Lonigan, Anthony, Bloomfield, Dyer, and Samwell (1999) reported significant receptive and expressive language gains for at-risk 2- to 5-year-olds who participated in daily small-group reading sessions in their preschool settings. The experimental sessions in this study

were delivered by research assistants who were trained to use dialogic reading techniques in which the adult evokes children's active participation through a range of techniques (e.g., open-ended questions, prompts, expansions). As with van Kleeck and colleagues' (2006) study, findings from Lonigan et al. have practical implications concerning the relationship between specific interventions and language skills that are important for later reading comprehension abilities. Although findings such as these are promising concerning the relationship between specific intervention approaches and children's subsequent language skills, the extent to which such findings can be generalized to preschool programs is unclear given that these studies involved implementation of language intervention by well-trained and carefully monitored research assistants. For this reason, it is unclear as to whether interventions such as these that require significant adjustments to a classroom's language-learning environment could be implemented successfully by preschool educators with less formal training in language development.

Girolametto and colleagues (2003) addressed this question in part in a study that involved training 8 preschool teachers to implement a language-focused intervention in their classrooms. This intervention involved training educators to improve the quality of their conversational interactions with children, to include increased use of expansions, open questions, and models. Over the course of the 14-week in-service training program, educators participated in eight group sessions that included learner-centered activities, interactive lectures, and observation and analysis of videotapes illustrating program techniques. Educators also participated in six individual sessions with the professional development staff, which included viewing 5-min segments of their own interactions with children, followed by 30 min of reflection and feedback. After the intervention, the trained educators showed increased scores on a range of measures that reflected improved conversational interactions (e.g., waiting for children to initiate, engaging children in turn-taking, scanning the room to include uninvolved children) compared to teachers in a control group. As important, children in the trained teachers' classrooms used more multiword combinations and increased their overall talkativeness to adults and peers as compared to children in the control classrooms (Girolametto et al., 2003). This intervention study provides evidence that preschool educators can enhance their conversational interactions with children in ways that improve children's language skills.

Similar findings were reported recently by Wasik et al. (2006), who implemented a year-long intervention with 10 Head Start teachers who were trained to use a range of language-enriching techniques that were embedded primarily within book-reading interactions; these included, for instance, using open-ended questions, modeling rich vocabulary, and defining new words. To implement this intervention, which resulted in significant improvements in children's receptive and expressive vocabulary skills consistent with medium to large effects, teachers participated in a 2-hr group training session accompanied by approximately 2 hr of in-class coaching and mentoring each month. Although the findings of Girolametto et al. (2003) and Wasik et al. are promising with respect to ways to improve the language-learning environment of preschool classrooms, it may not be practical for early childhood educators to participate in the amount and types of professional development that the teachers participated in as part of these studies. This is a particularly important concern in light of current initiatives designed to scale up promising interventions—that is, which ask teachers to use strategies and approaches that have been shown to be efficacious

in controlled experimental trials but that have not yet been tested in "business as usual" conditions (e.g., Stanovich & Stanovich, 2003). Before the field can take interventions with demonstrated efficacy to scale, a thorough understanding of the processes by which educators change, enhance their practices, and implement new methods is needed.

## Studying Teacher and Child Outcomes Through Effectiveness Research

According to the U.S. Department of Education's Institute of Education Sciences (2006), the goal of effectiveness studies is "to determine whether or not fully developed interventions are effective when they are implemented under conditions that would be typical if a school district or other education delivery setting were to implement them (i.e., without special support from the developer or the research team)" (pp. 75–76). In other words, effectiveness studies are designed to determine if the causal effects on both teacher and child outcomes that have been seen in tightly controlled efficacy studies stand up in everyday "business as usual" conditions, an important step before educational innovations can be taken to scale. In the current educational context, which emphasizes the importance of improving the quality of children's language-learning experiences within the at-risk preschool classroom, effectiveness studies are particularly important for differentiating elements of language intervention that are relatively difficult for teachers to implement from those that are relatively easy. In turn, professional development for preschool teachers can be tailored to focus more intensively on those aspects of language intervention that are most challenging for teachers to implement.

In the present study, we examined preschool teachers' fidelity of implementation when adopting a comprehensive classroom curriculum—the language-focused curriculum (LFC; Bunce, 1995). The LFC is designed to increase the quality and quantity of children's language-learning experiences across the entire classroom day. Rice and Hadley (1995) described positive outcomes from LFC participation for 65 children (of which 55% exhibited language impairment) who were enrolled in the University of Kansas Language Acquisition Preschool over a 6-year period using a nonexperimental research design (pretest-posttest single group). Rice and Hadley noted that the children "either matched or exceeded the expected normative rate of language learning across at least three of the four outcome measures obtained" (p. 168). Similar to other efficacious approaches to preschool language intervention that are detailed in the experimental literature (e.g., Fey, Cleave, Long, & Hughes, 1993; Wasik et al., 2006), use of the LFC requires teachers to implement a range of activity contexts and instructional processes that are designed to accelerate children's language-learning experiences and, in turn, their language outcomes.

## **Curricular Activity Contexts and Instructional Processes**

Activity contexts (Roskos & Neuman, 2002) encompass the activities that teachers structure for children across the day through a combination of materials, props, and physical classroom organization. As one example, a teacher might set up a block activity for children by partitioning off a corner of the room with low shelves containing large wooden blocks, small plastic blocks, and a box

containing miniature construction toys. Activity contexts featured in the LFC (and other prevailing curricula, e.g., Creative Curriculum; Dodge, Colker, Heroman, & Bickart, 2002; High/Scope; Hohmann & Weikart, 2002) include art, dramatic play, storybook reading, large- and small-group activities, music, and free-choice centers (e.g., computer center, writing center, discovery center, block center, sand or water table). The LFC features weekly and daily lesson plans that provide explicit structure to thematically organized activity contexts within the classroom. Weekly thematic lesson plans include, for example, "places in the community," and the daily lesson plans elaborate this theme (e.g., grocery store, doctor's office). Daily lesson plans articulate with these weekly thematic plans to provide a comprehensive set of language targets encompassing form (e.g., verb phrase structures), content (e.g., subordinate terms), and use (e.g., initiating with peers) to address across activity contexts.

Within the LFC, instructional processes complement the teachers' implementation of the specified activity contexts; the term instructional processes is used to refer to the dynamic, relational features of the classroom, particularly the interactions that take place between adults and children. To this end, a key feature of the LFC is its emphasis on teacher-child language-focused interactions throughout the classroom day. Teachers are trained to integrate eight language stimulation techniques (LSTs) into their interactions with children (Bunce, 1995): (a) focused contrast (adult highlights contrasts among language targets), (b) modeling (adult emphasizes language targets that child does not yet use independently), (c) event cast (adult provides an ongoing description of an activity), (d) open question (adult asks questions that have many possible answers), (e) expansion (adult repeats child's utterance and fills in any missing information), (f) recast (adult repeats child's utterance using varied syntax), (g) redirect/prompted initiation (adult prompts child to initiate with a peer), and (h) scripted play (adult provides verbal representations of familiar events). (See Appendix A for definitions and examples of each of the LSTs.) When implementing the LFC, teachers integrate use of these LSTs across a range of activity contexts, such as art and dramatic play.

Many commercially available preschool language curricula, including the LFC, explicitly specify particular activity contexts and instructional processes. Conceptually, instructional processes are embedded within activity contexts, with the former serving as the primary mechanism for student learning (Morrison & Connor, 2002; Pianta, 2006; Rutter & Maughan, 2002). Whereas implementation of activity contexts may require relatively little training, research indicates that successful implementation of instructional processes might require extensive, intensive, and ongoing professional development (e.g., Girolametto & Weitzman, 2002; Girolametto et al., 2003; Wasik et al., 2006). Taking, for instance, an example from the LFC, a salient activity context featured in the curriculum is the use of dramatic play, with one lesson plan detailing a theme titled "Newspaper Carrier" (pp. 214–215). The lesson plan provides an explicit description of how to prepare the dramatic play setting by identifying props (e.g., newspapers, rubber bands, play money), roles (e.g., carrier, customer), and scripts (e.g., "Here's your paper."). The lesson plan also describes instructional processes for teachers to use during dramatic play to facilitate children's language comprehension and expression within the activity context; these include, for instance, modeling scripts, asking open-ended questions, expanding and recasting children's productions, and redirecting children to initiate with one another (Bunce, 1995). With this example in mind, it seems plausible to expect that preschool teachers would find it

easier to implement a curriculum's activity contexts relative to its instructional processes. Put another way, we may hypothesize that teachers would exhibit greater implementation fidelity to activity contexts than instructional processes. Regarding the latter, we may also hypothesize that some LSTs will occur at relatively high rates compared to others, particularly teacher use of models. Given that models are didactic in nature and can be used independent of children's language to introduce new vocabulary or syntactic structures, teachers may find models to be the most natural LST to implement.

## Implementation Fidelity: Adherence, Program Differentiation, and Quality of Program Delivery

Implementation fidelity in the field of education describes the extent to which teachers implement an intervention, curriculum, innovation, or program as intended by the developers. Measuring implementation fidelity is a necessary intermediate step between delivering professional development to teachers and evaluating subsequent teacher and child outcomes. There are several aspects of implementation fidelity that researchers and program evaluators most typically measure (e.g., Dane & Schneider, 1998; Dusenbury, Brannigan, Falco, & Hansen, 2003): (a) program differentiation (the extent to which critical features that distinguish the program are present), (b) program adherence (the extent to which program components are delivered as prescribed in training manuals), and (c) quality of program delivery (the extent to which those who implement the program do so with enthusiasm and preparedness). Researchers and program evaluators assessing implementation fidelity for early childhood curricula might measure any or all of these aspects by, for example, observing in classrooms, obtaining information through teacher report, and examining documentation such as lesson plans.

In this study, we examined program differentiation, program adherence, and quality of program delivery for 7 preschool teachers who had been trained to implement the LFC (Bunce, 1995) relative to 7 comparison teachers. The present research was conducted as part of a larger multisite study-Preschool Curriculum Evaluation Research (PCER)—that was designed to examine the effectiveness of various preschool curricula. As members of the PCER consortium, we implemented the LFC using a randomized experimental design and, like the other PCER sites, were required to carefully monitor teachers' fidelity of implementation for their assigned curricula. We address child outcomes in a separate report (Justice, Mashburn, Pence, & Wiggins, in press) that focuses exclusively on the impact of curriculum implementation on child language outcomes. The present research focused on teacher outcomes, viewing teacher implementation of various components of a curriculum as an important outcome of interest to SLPs who engage in consultation and collaboration; to this end, we addressed three aims: (a) to examine program differentiation by determining the extent to which measures of activity contexts and instructional processes differentiated treatment and comparison teachers, (b) to examine program adherence to the LFC over the academic year by treatment teachers for both activity contexts and instructional processes, and (c) to examine treatment teachers' reported quality of program delivery and comfort with LFC implementation. Understanding the extent to which preschool teachers are able to implement the critical elements of language-focused curricula can help guide the practices of SLPs who consult and collaborate with teachers to deliver high-quality

classroom-based language interventions for at-risk pupils. Although a limitation of this study is its small sample size and limited generalizability, its intensive focus on what happens in these seven classrooms makes an important contribution to current research and practice that is vested in understanding how to improve the language-learning environment of preschool classrooms serving at-risk pupils. Indeed, measurement of procedural fidelity in intervention research is considered an essential feature (Gersten et al., 2005) that, when neglected methodologically, poses a fatal flaw (Troia, 1999). This research contributes to our understanding not only of practice issues related to curriculum implementation, but also the way in which fidelity might be measured within intervention research.

### **METHOD**

## **Participants**

Participants were 14 teachers from public preschool classrooms serving at-risk children in two counties in a mid-Atlantic state. Six classrooms were affiliated with Head Start (70 children), six classrooms were funded through Title I (100 children), and two classrooms were funded by the state's public pre-K initiative (27 children). The Title I and pre-K programs served only 4-year-old children, whereas the Head Start classrooms served 3- to 5-year-old children. All three programs were designed primarily to serve children who are at risk for later academic problems, with eligibility based on such indicators as household income, parent education, family stress, health or developmental concerns, or limited understanding of English.

Teachers were participants in the first year of a 4-year longitudinal study examining the effectiveness of various preschool curricula. Of the 14 participating teachers, 7 were randomly assigned to implement an experimental curriculum, the LFC (treatment teachers; Bunce, 1995), and 7 maintained their existing preschool curricula (comparison teachers). Classrooms were blocked according to funding source before randomization such that half of the Head Start teachers, half of the Title I teachers, and half of the state pre-K teachers were assigned to the treatment group. All teachers in the sample were White females ranging in age from 25 to 54 years. Teachers' experience ranged from 3 to 27 years. All educational services were provided to children in English, and classroom sizes ranged from 10 to 16 students (M = 13.3). Table 1 provides

**Table 1.** Teacher demographic information.

|                                 | Treatmen | t (n = 7) | Comparison ( $n = 7$ ) |          |  |
|---------------------------------|----------|-----------|------------------------|----------|--|
| Characteristic                  | M        | SD        | M                      | SD       |  |
| Age                             | 43.29    | 8.98      | 40.57                  | 9.69     |  |
| Years of experience             | 11.29    | 5.44      | 11.43                  | 10.92    |  |
| Annual salary                   | \$34,326 | \$5,631   | \$35,310               | \$10,648 |  |
| Highest degree                  | n        |           | n                      |          |  |
| Associate's degree/some college | 1        |           | 2                      |          |  |
| Bachelor's                      | 6        |           | 4                      |          |  |
| Master's                        | 0        |           | 1                      |          |  |

additional details concerning the teachers; data indicate that teachers in the treatment and comparison classrooms were comparable in terms of their age, experience in the classroom, salary, and highest degree.

The children enrolled in these classrooms (103 males, 94 females) ranged in age from 4;0 (years;months) to 4;11 at the start of the study (M=4.54, SD=.3). In terms of race and ethnicity, 143 children were White, 36 children were Black, 8 were Hispanic, and 6 were classified as mixed or an unspecified race or ethnicity. (Race/ethnicity information was not reported for 4 children.) A total of 191 of the children spoke English at home, and 6 children spoke Spanish at home. All study participants signed consent forms that were approved by the Institutional Review Board at the University of Virginia (parents signed consent forms for their children to participate).

### **General Training Procedures**

Professional development was provided for 15 hr over 3 days in August of 2003 just before the start of school. For the treatment teachers, Day 1 provided basic background information on child language development, and Day 2 included a presentation by the author of the LFC (Bunce, 1995), to include a theoretical overview of the LFC, guidelines for the development of a language-focused classroom, features of a model classroom, and an outline of curriculum objectives and sample activities. This also included discussion and video samples of the LFC's eight LSTs, as presented in Appendix A. On Day 3, treatment teachers used prop boxes to practice designing LFC activity contexts (i.e., dramatic play, art, story, group activities, music) and implementing LSTs within these contexts. Prop boxes included both realistic toy props (e.g., walkie-talkies, cameras, tools), open-ended props (e.g., blocks, fabric), and costumes as well as arts and crafts supplies and books aligned to each theme in the LFC.

Treatment teachers additionally attended a half-day workshop in February that focused exclusively on the use of LSTs. During this "refresher" training, teachers viewed videotapes of themselves that had been collected in their classrooms and evaluated their own use of LSTs.

Comparison teachers also received 15 hr of professional development on the same 3 days on neutral topics, including behavior management strategies and the use of music and movement activities in the classroom.

### **General Measurement Procedures**

Three observations were conducted in each classroom over the academic year (fall, winter, spring) for both the treatment and comparison teachers using a curriculum fidelity checklist that was developed specifically for this study. The fall observation was conducted within 4–6 weeks following training, at the beginning of the academic year; the winter observation was conducted in February (around the same time as the refresher training); and the spring observation was conducted within the last 4–6 weeks of the academic year. Trained observers spent approximately 2 hr in each classroom and completed the checklist while also collecting a video sample of the instructional day. Observations occurred during the first few hours of the school day during a variety of instructional activities. No observations extended past the lunch hour because all of the classrooms had a scheduled rest period after lunch. Teachers were

advised to proceed through the day as they normally would, and they were not made aware of the items on the curriculum fidelity checklist. At the end of the year, teachers completed an anonymous two-page questionnaire that was designed to characterize the quality of program delivery.

The observers who completed the observations included the authors of this article, who also created the curriculum fidelity checklist, and two graduate students who had attended the teacher training sessions and devoted 20 hr per week to project tasks. Because teachers were familiar with all five observers, the extent to which demand effects may have been introduced is not clear. However, it is important to emphasize that teachers were not made aware of their treatment assignment nor of the items on the curriculum fidelity checklist.

Measurement of curriculum fidelity. To measure teachers' fidelity to the LFC, a checklist containing 45 items was developed by the authors of this article by examining core curriculum features described in Building a Language-Focused Curriculum for the Preschool Classroom, Volume II: A Planning Guide (Bunce, 1995); it is presented in Appendix B. Organized into seven sections, the first section ("Frequency of use for language stimulation techniques") focuses on instructional processes (frequency of use for the 7 LSTs); the next six sections include 38 items that focus on different activity contexts. (The LST scripted play was not included on the checklist because it is specific to the dramatic play activity context.). Items addressing LST use were scored on a scale of 0 to 3, with 0 points indicating that the LST was not observed, 1 point indicating that it was observed one time, 2 points indicating that it was observed a few times (i.e., two to three times), and 3 points indicating that it was observed many times (i.e., four or more times). This scale was designed to capture a range in teachers' use of LSTs. We estimated that most teachers would not use all of the LSTs more than four times during the observation periods. Points for items addressing LST use were summed, and possible scores ranged from 0 to 21.

Items addressing the implementation of activity contexts examined implementation of six categories of contexts: daily structure, dramatic play, art, story, group, and music (see Appendix B). Each of the 38 items in the six categories received a dichotomous rating based on whether the indicator in question was observed or not observed. A score was calculated for each category by dividing the number of points observed by the total number of points possible and then multiplying by 100.

Because the curriculum fidelity checklist was developed by the authors of this article for the present research, no independent reliability or validity data are available for the tool. To determine the internal consistency of the two sections of the curriculum fidelity checklist, Cronbach's alpha was computed separately for the instructional process and activity context items for the fall, winter, and spring observations for both treatment and comparison classrooms. Coefficients were acceptable for instructional process items: 0.67 in fall of the academic year, 0.79 in winter of the academic year, and 0.80 in spring of the academic year. For the 38 activity context items, Cronbach's alpha was also acceptable: 0.98 in fall, 0.91 in winter, and 0.88 in spring. The extent to which the checklist could be administered reliably was also examined by having two coders independently score the checklist in two classrooms in the second year of the PCER study; for the seven process items, the two coders' average agreement was 93%; for the 38 activity context items, average agreement was 97%. These data indicate that the tool could be administered reliably.

Measurement of teacher-reported quality of program delivery and comfort with implementation. Teachers were asked to anonymously complete a two-page questionnaire at the end of the academic year. Several items on the questionnaire were identical for both treatment and comparison teachers; these questions were answered on a Likert-type scale (I = strongly disagree; 5 = strongly agree) and recruited information from teachers concerning their reported quality of program delivery and their comfort with curriculum implementation (e.g., "I felt comfortable with the curriculum that was implemented in my classroom this year." and "My comfort with the curriculum increased as the school-year progressed."). Additional items were specific only to the treatment teachers and were designed to gather information on the teachers' comfort concerning their use of LSTs (e.g., "I grew more comfortable with the language stimulation techniques as the school year progressed.").

#### **RESULTS**

The first research aim was to characterize the extent to which treatment teachers exhibited classroom practices that were distinct from those of comparison teachers for both instructional processes and activity contexts of the LFC. For these analyses, we considered fidelity to LFC instructional processes and classroom activity contexts separately and focused specifically on the initial classroom observations that were conducted in the fall of the academic year. Looking first at differentiation for instructional processes, Table 2 compares treatment and comparison teachers for the use of the seven LSTs at the fall observation. Treatment teachers received, on

**Table 2.** Ratings on the language-focused curriculum (LFC) fidelity checklist for treatment and comparison teachers in the fall.

|                                    | Treatment<br>teachers |      | Comparison<br>teachers |      |       |
|------------------------------------|-----------------------|------|------------------------|------|-------|
| LFC feature                        | M                     | SD   | M                      | SD   | d     |
| Instructional process <sup>a</sup> |                       |      |                        |      |       |
| Focused contrast                   | 0.40                  | 0.79 | 0                      |      | 0.67  |
| Modeling                           | 2.10                  | 1.22 | 1.60                   | 1.40 | 0.35  |
| Event cast                         | 1.10                  | 0.90 | 0.30                   | 0.76 | 0.89  |
| Open question                      | 1.10                  | 0.90 | 1.70                   | 1.25 | -0.51 |
| Expansion                          | 1.30                  | 0.95 | 0.70                   | 1.25 | 0.50  |
| Recast                             | 2.30                  | 1.11 | 1.14                   | 1.10 | 0.98  |
| Redirect                           | 1.40                  | 1.51 | 0.40                   | 0.54 | 0.82  |
| LST total                          | 9.90                  | 4.53 | 5.90                   | 3.44 | 0.92  |
| Activity context <sup>b</sup>      |                       |      |                        |      |       |
| Daily structure                    | 85                    | 15*  | 46                     | 19   | 2.12  |
| Dramatic play                      | 89                    | 13*  | 36                     | 21   | 2.82  |
| Art                                | 98                    | 4**  | 60                     | 32   | 1.55  |
| Story                              | 83                    | 23   | 42                     | 34   | 1.31  |
| Group                              | 92                    | 20   | 65                     | 38   | 0.83  |
| Music                              | 86                    | 18*  | 57                     | 25   | 1.24  |

<sup>&</sup>lt;sup>a</sup>LST ratings based on 2-hr observation with 0 points = no use observed, 1 point = one use observed, 2 points = two or three uses observed, and

average, low ratings for rate of use for the seven types of LSTs, although they appeared to use the LSTs at higher rates than the comparison teachers (with the exception of open questions). Given the small sample size, we did not use parametric statistics to test statistical significance, although we examined effect size contrasts to determine whether the differences that were apparent in the data appear to exhibit practical significance. Specifically, effect size estimates were calculated using Cohen's *d* (with bias corrected based on Hedges & Olkin's [1985] factor) and were interpreted using Cohen's benchmarks (Cohen, 1988), for which 0.2 is small, 0.5 is medium, and 0.8 is large.

Consideration of effect size estimates in Table 2 shows that the treatment teachers received higher ratings than the comparison teachers for all LSTs except open questions, for which there were medium-sized differences to favor the comparison teachers (d = -0.51). For the other six LSTs, effect size contrasts ranged from medium to very large in size, with the greatest differences observed for recasts (d = 0.98), event casts (d = 0.89), and redirects (d = 0.82). The nonparametric Mann-Whitney U test was used to evaluate the differences between the two groups on the overall use of LSTs; this test was selected due to the small sample size and the likelihood that the distribution of scores was not normal. A total LST score was calculated by summing each teacher's scores for the seven LSTs, and the Mann-Whitney U test was applied to these total scores. The results of the test showed that the scores between the two groups did not differ enough to achieve statistical significance, z = 1.69, p = .092, although the mean rank of 5.64 for the comparison teachers was lower than that for the treatment teachers at 9.36, and the effect size contrast, d = 0.92, was consistent with a very large effect.

Table 2 also provides fall fidelity ratings for the six activity context categories on the curriculum fidelity checklist for the treatment and comparison teachers. Scores represent the percentage of items to which fidelity was observed for a specific category. For instance, for the daily structure category, treatment teachers demonstrated fidelity to 85% of the items (SD = 15), whereas comparison teachers demonstrated fidelity to 46% of the items (SD = 19). To examine program differentiation, we compared ratings for the six categories for the treatment and comparison teachers using a series of two-way contingency table analyses. The chi-square test statistic showed no difference between the two classroom types for implementation of story,  $\chi^2(5, N=14) = 8$ , p = .16, and large group,  $\chi^2(3, N=14) =$ 5.24, p = .16, but significant differences for daily structure,  $\chi^2(4, N =$ 14) = 10.8, p = .03, dramatic play,  $\chi^2(7, N = 14) = 14$ , p = .05, and music,  $\chi^2(2, N=14)=6$ , p=.05; the comparison for art,  $\chi^2(5, N=14)=6$ 14) = 10.57, p = .06, was marginally significant. Table 2 provides estimates of effect size contrasts for the six categories and shows that the observed differences in fidelity ratings on the activity context items of the curriculum fidelity checklist were large to very large in size.

Our second research aim was to determine the extent to which treatment teachers exhibited adherence to the LFC for the entire academic year, keeping in mind the potential contribution of the mid-year refresher training focusing on instructional processes. We considered first the treatment teachers' long-term adherence to the LFC instructional processes, namely their use of LSTs. The data in Table 3 show that the treatment teachers maintained or increased their rate of use for five of the seven LSTs from the fall to winter observations. Specifically, the rate of use of event casts remained the same from fall to winter; the rate of use of focused contrasts, open questions, expansions, and redirects increased; and the rate of use of

<sup>3</sup> points = four or more uses observed.

<sup>b</sup>Activity context scores represent the percentage of items to which fidelity was observed for a specific category.

<sup>\*</sup>p < .05; \*\*p = .06

**Table 3.** Ratings on instructional process items of the curriculum fidelity checklist for treatment teachers.

|                  | Fall |      | Win  | Winter |      | Spring |      |
|------------------|------|------|------|--------|------|--------|------|
| Technique        | M    | SD   | M    | SD     | M    | SD     | da   |
| Focused contrast | 0.4  | 0.79 | 0.6  | 0.79   | 1.0  | 1.29   | 0.52 |
| Modeling         | 2.1  | 1.22 | 1.7  | 0.95   | 2.6  | 0.79   | 0.45 |
| Event cast       | 1.1  | 0.90 | 1.1  | 1.22   | 2.1  | 1.07   | 0.94 |
| Open question    | 1.1  | 0.90 | 2.6  | 0.79   | 2.7  | 0.49   | 2.05 |
| Expansion        | 1.3  | 0.95 | 1.6  | 1.40   | 2.3  | 1.11   | 0.90 |
| Recast           | 2.3  | 1.11 | 1.7  | 1.38   | 3.0  | 0      | 0.83 |
| Redirect         | 1.4  | 1.51 | 2.1  | 1.22   | 1.6  | 1.51   | 0.12 |
| LST total        | 9.9  | 4.53 | 11.4 | 4.50   | 15.3 | 3.90   | 1.19 |

<sup>a</sup>Effect size estimate (Cohen's d adjusted for bias) calculated for fall to spring contrast.

modeling and recasts decreased: modeling (decrease in ratings from 2.1 to 1.7) and recasts (decrease in ratings from 2.3 to 1.7). Looking at the rate of use of LSTs at the winter and spring observations, teachers maintained or increased their use of six of the seven LSTs, with a decrease seen only for use of redirects (from 2.1 to 1.6). Overall, when comparing rate of use for the seven types of LSTs over the academic year by contrasting ratings at the fall versus spring observations, these descriptive data indicate that teachers not only maintained their rate of use for all seven LSTs, but that each showed an overall increase in use; Figure 1 depicts this trend. To characterize the magnitude of change over the academic year, Table 3 provides effect size estimates that were calculated by comparing the fall versus spring LST ratings for the treatment teachers. Differences between the fall and spring rate of LST use is consistent with medium to large effect sizes, with the only exception being the use of redirects.

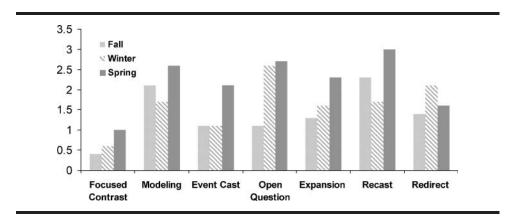
Considering next the teachers' long-term adherence to the LFC activity contexts, the descriptive data in Table 4 show that the treatment teachers' adherence decreased for all six activity context categories of the curriculum from fall to winter. To illustrate, whereas the teachers achieved an average of 98 percentage points for implementation of the art activity contexts at the fall observation, they achieved an average of only 87 points at the winter observation. This decline was consistent across all six curriculum

activity context categories, and indicates that teachers did not maintain fidelity to curriculum activity contexts during the first half of the academic year, at least to the extent that our fidelity observations accurately captured trends in teachers' fidelity across measurement points. Nonetheless, examination of winter and spring scores shows that after the winter observation, teachers' adherence to all six activity context categories increased, resulting in spring scores that were more or less similar to the fall scores. Figure 2 illustrates this trend, namely that teachers readily exhibited fidelity to structural features of the curriculum at the start of the year, followed by a decline in fidelity, and then a recovery to the original level of fidelity that was displayed earlier in the academic year.

Our third research aim addressed the quality of program delivery as measured by treatment teachers' reported quality of program delivery and comfort with implementation. We analyzed the endof-year project evaluation questionnaires to address this question, specifically the five questionnaire items (see Table 5) that were most indicative of the quality of program delivery. These items queried teachers about their comfort with the LFC, including use of the LSTs, as well as their perception concerning the effectiveness of their implementation. Questionnaires were completed by all 7 treatment teachers, although 2 teachers did not complete some items; thus, for several questions, data were only available for 5 teachers. As the data in Table 5 show, treatment teachers provided moderate to high ratings of reported quality of program delivery. Teachers' ratings with regard to feeling comfortable implementing the LFC in their classrooms were lower than ratings on other items (M = 3.0, SD = 1.6). Teachers' ratings regarding their comfort with using LSTs, in particular, were high, and converge with observational ratings of teachers' maintenance of fidelity to LFC processes over the academic year (as shown in Figure 1).

Five of the 7 comparison teachers also completed an end-of-year program evaluation questionnaire, and we compared the ratings for treatment and comparison teachers for two items in Table 5 that were similar across the two questionnaires. For the item "I felt comfortable with the curriculum implemented in my classroom this year," comparison teachers provided a mean rating of 4.8 (SD = 0.4, range 4-5). The results of a Mann–Whitney U test showed that the comparison teachers' ratings to this item were significantly higher than those of treatment teachers (M = 3, SD = 1.2), z = -2.39, p = .017; treatment teachers had an average rank of 31.5, whereas comparison teachers had an average range of 46.5. For the item "I did an effective job

**Figure 1.** Ratings on instructional process items of the curriculum fidelity checklist for treatment teachers in the fall, winter, and spring.



**Table 4.** Percentages for activity context categories of the curriculum fidelity checklist for treatment teachers.

|                 | F  | Fall Winter |    | Spring |     |    |
|-----------------|----|-------------|----|--------|-----|----|
| Category        | M  | SD          | M  | SD     | M   | SD |
| Daily structure | 85 | 15          | 79 | 20     | 91  | 11 |
| Dramatic play   | 89 | 13          | 81 | 20     | 89  | 10 |
| Art             | 98 | 4           | 87 | 16     | 95  | 6  |
| Story           | 83 | 23          | 61 | 35     | 84  | 9  |
| Group           | 92 | 20          | 70 | 27     | 100 | 0  |
| Music           | 86 | 18          | 67 | 33     | 73  | 15 |

implementing the curriculum used in my classroom," comparison teachers provided a mean rating of 5 (SD=0). The results of a Mann–Whitney U test showed that the comparison teachers' ratings on this item were significantly higher than those of the treatment teachers (M=3.8, SD=1.1), z=-2.19, p=.028; treatment teachers had an average rank of 17, whereas comparison teachers had an average rank of 28.

#### **DISCUSSION**

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This study was conducted to examine preschool teachers' implementation of a comprehensive language-rich curriculum within their preschool classrooms serving at-risk pupils. Implementation of the LFC requires that teachers make a set of comprehensive modifications to both activity contexts and instructional processes within their classrooms. In light of current educational initiatives that emphasize the need to ensure the quality of children's language-learning experiences within their preschool classrooms, particularly those that serve at-risk pupils, the present research is timely. Specifically, this research contributes to an emerging corpus of studies that specify the impact of curricular adoptions not only on child outcomes

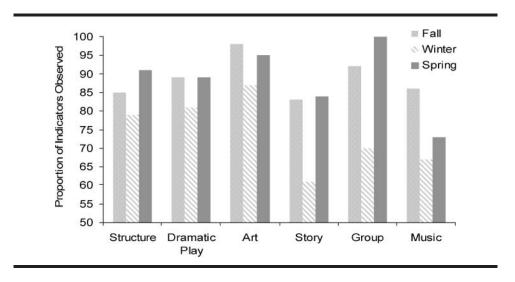
but also on teacher outcomes. This research is also likely to be of interest to SLPs who work closely with preschool educators in efforts to improve the language-learning environment of their classrooms. Although an important limitation of this work is its small sample size, it provides an enlightening glimpse of teacher outcomes when implementing a comprehensive language-oriented curriculum. Understanding the way in which teachers are able to take curricular innovations to scale, particularly those innovations that require modifications to not only structures within the classroom but also relational processes, is an important consideration in educational research and clinical practice. Here, we discuss three major findings of this research.

## **Teachers' Implementation of Instructional Processes Versus Activity Contexts**

In the fall of the academic year, following a 3-day professional development workshop, treatment teachers exhibited generally low levels of fidelity to the LFC instructional processes. Ratings on the curriculum fidelity checklist revealed that, on average, treatment teachers did not implement focused contrasts at all, and implemented event casts, open questions, expansions, and redirects only one time during a 2-hr classroom observation. Although the treatment teachers used modeling and recasts at slightly higher rates, they did not implement any of the LSTs four or more times during the observation period. Although the low uptake by educators for the use of LSTs was surprising, it indicates the need for ongoing research that characterizes effective approaches to provide professional development to teachers with no or little formal training in language development in order to increase the quality of instructional processes.

Some research provides guidance on how this might be crafted (e.g., Girolametto et al., 2003; Wasik et al., 2006) and suggests that sustained support over time that features analysis and reflection by teachers within their own classrooms is crucial. For example, Schuele, Rice, and Wilcox (1995) implemented an intervention that was designed to increase teachers' use of redirects in preschool

**Figure 2.** Percentage of points earned in activity context categories of the curriculum fidelity checklist for treatment teachers in the fall, winter, and spring.



**Table 5.** Treatment teachers' responses to the end-of-year program evaluation questionnaire.

| Questionnaire item  | N           | M                 | SD                | Range             |
|---|-------------|-------------------|-------------------|-------------------|
| I felt comfortable with the curriculum implemented in my classroom this year.  My comfort with the curriculum increased as the school year progressed.  I grew more comfortable with the language stimulation techniques as the school year progressed. | 7<br>7<br>7 | 3.0<br>4.0<br>4.1 | 1.6<br>1.2<br>0.9 | 2-5<br>2-5<br>3-5 |
| The language stimulation techniques increased the quality and/or amount of conversation in my classroom. I did an effective job implementing the curriculum in my classroom.  |             |                   | 0.8<br>1.1        | 3-5<br>2-5        |

Note. Items responded to on a Likert-type scale, for which I = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

classrooms. Teachers participated in a 2-hr professional development session in which they learned about redirects, watched video examples, and discussed ways to redirect children's initiations. Following the 2-hr professional development session, teachers participated in two sessions during which they discussed with the trainer missed opportunities and ways to tailor redirects to different children and situations. This comprehensive training program resulted in increased use of redirects by preschool educators and is notably different in nature from the amount and kinds of professional development concerning LSTs that teachers received in the current study. When newly adopted curricula or instructional programs require teachers to use sophisticated instructional processes with children in their classrooms to improve the language-learning environment, the present research suggests that ongoing supports with authentic applications are necessary (e.g., participating in ongoing feedback sessions with a trainer, observing a trained professional such as an SLP implement the LSTs in the classroom), as teachers show little use of these instructional processes immediately following workshop

This noted, it is worthwhile to recognize that when examining program differentiation by comparing treatment and comparison teachers' ratings on LFC instructional processes immediately following workshop training, treatment teachers received higher ratings on the LFC curriculum fidelity checklist than did comparison teachers on six of the seven LSTs. Although it is important to remind readers that statistical differences were not obtained, program differentiation was particularly pronounced for event casts, recasts, and redirects, all of which had large effect size differences. Although treatment teachers did not achieve the greatest fidelity to models, as we had originally hypothesized, their use of models did exceed the use of models by comparison teachers, thereby differentiating the treatment and comparison classrooms. The greatest program differentiation was seen for recasts. Recasts may have been easy for treatment teachers to implement because they can be used following most child utterances (by using varied syntax). These findings show that the 3-day workshop in which treatment teachers participated likely increased their use of some of the LSTs in relation to what would be expected in the absence of professional development, although teachers' use of LSTs in absolute terms was far from optimal. Additional research indicates that teachers' LST use is related to the activity context (Massey, Pence, Justice, & Bowles, 2008; Pence, Beckman, Justice, & Bowles, in press) and group size (Pence et al., in press) in which they are interacting with children. Future research might further explore why some LSTs are easier to implement than others.

A particularly interesting finding from this research was that treatment teachers exhibited strikingly high fidelity to the LFC

activity contexts immediately following professional development. Treatment teachers exhibited fidelity to at least 85% of the items in each of the six activity context categories measured by the LFC curriculum fidelity checklist. Treatment teachers likely demonstrated high adherence to the LFC activity contexts because their implementation was tangible and was clearly specified in the LFC lesson plans. It may also be the case that only minor adjustments to existing classroom contexts were needed in order to transform classrooms to exhibit adherence to the LFC activity contexts. Regardless, this study shows that some aspects of a language-rich curriculum are relatively easy for teachers to implement following fairly minimal training, whereas other aspects of a curriculum are more challenging. Specifically, teachers are able to implement the more tangible aspects of a language curriculum with apparent ease, whereas the relational, dynamic aspects that require teachers to modify the way they converse with children pose a greater challenge.

#### Teachers' Adherence to the LFC Over Time

An interesting finding emerged when comparing treatment teachers' adherence to the LFC instructional processes versus activity contexts over the course of the academic year. Specifically, results indicated that when comparing the rate of use for the seven types of LSTs across the year, teachers demonstrated an overall increase in use. Given that the treatment teachers showed notably low rates of implementation of the instructional processes in the fall of the year, this was a promising finding regarding the capability of the teachers to improve their use of LSTs. Examining treatment teachers' adherence to LFC activity contexts over the academic year revealed a different pattern, with teachers showing high levels of adherence in the fall followed by a decline in the winter. This decline in fidelity ratings was evident for all six curriculum activity contexts. At the spring observation, however, fidelity ratings returned to their original levels or better, with the majority of categories meeting or exceeding their fall rating. This finding suggests that there may, perhaps, be a trade-off in teachers' adherence to the various components of a comprehensive language curriculum, such that attention to activity contexts declines as teachers shift their attention to improving instructional processes. The teachers initially focused their implementation attention to the structural and tangible aspects of the curriculum, followed by an increased focus on the instructional processes. Teachers' participation in the mid-year refresher training likely also contributed to their increased use of instructional processes and their recovery to original levels or better in activity contexts.

## **Quality of Program Delivery and Comfort With Curriculum Implementation**

Treatment teachers' reports of the quality of their program delivery provided an important complement to the observational ratings from the curriculum fidelity checklist. Specifically, ratings indicated that treatment teachers exhibited moderate to high ratings of program delivery and comfort with LFC implementation, and that their ratings of curriculum processes (LSTs) converged with observational data. Teachers reported that they grew more comfortable with the LSTs as the year progressed, similar to observation data showing a gradual increase in teachers' use of LSTs over the year. However, treatment teachers exhibited lower reports of program delivery and overall comfort with the curriculum compared to the group of teachers who maintained the prevailing curriculum. It is possible that implementing a new curriculum in the context of a research study may impact negatively on the providers' sense of comfort and their quality of program delivery. We can draw on some parallels in earlier studies on the implementation of language intervention. Fey, Cleave, and Long (1997) compared a parentadministered approach to language facilitation to a clinicianadministered approach, where parents attended monthly group sessions in which they participated in role playing and group discussion concerning language stimulation. Clinicians also met with parents once monthly to observe parents' implementation of the intervention and set new goals, where appropriate. Despite the relatively intense nature of the professional development program, Fey et al. reported that the parents were less comfortable with and less skilled in the delivery of the intervention than were the clinicians. Although we did not probe teachers on these findings, it is plausible that they felt a heightened degree of scrutiny as a result of their participation in implementing a new curriculum, in comparison to their colleagues who implemented a curriculum with which they had experience and familiarity. Ensuring teachers' comfort with curriculum interventions would be one important area to address in professional development sessions.

#### IMPLICATIONS AND LIMITATIONS

Assuredly, a range of factors likely contribute to teachers' fidelity in implementing the instructional processes and activity contexts associated with language-focused preschool curricula in the context of large-scale educational interventions. In addition to teacher characteristics (e.g., years of experience, educational background) and school/classroom characteristics (e.g., administrative support, pupil demographics), features of the curriculum itself also are likely to be influential. For instance, a curriculum that is fairly well prescribed and features clearly articulated lesson plans and activity contexts may be more readily implemented than one focusing primarily on enhancements of relational and instructional processes within the classroom. This study provided evidence to this point with respect to preschool teachers' implementation of a comprehensive LFC, showing that modifications to activity contexts occur relatively more quickly than do modifications to relational processes.

Although this study represents an important first look at preschool teachers' fidelity in implementing the instructional processes and activity contexts associated with implementing a comprehensive LFC, there are several limitations that warrant mention. First, the small sample size of 7 treatment teachers and 7 comparison teachers limited the options for statistical procedures that were appropriate to our sample. Future research, especially those involving curriculum effectiveness studies, should address implementation fidelity in larger samples to the extent possible and attempt to replicate our findings. When teacher outcomes are of relevance, sample sizes must be determined based on the number of classrooms instead of the number of children. Although the data in this study provide an interesting illustration of 14 preschool teachers' experiences when implementing curricula in their classrooms, the validity of our conclusions needs to be replicated with additional samples.

Second, fidelity was measured in each classroom only three times across the academic year. It is possible that the particular activities and themes being implemented on a given day may have contributed to teachers' performance on the 3 days that they were observed. We would have likely obtained a clearer picture of trends in teachers' fidelity across the academic year with more frequent observations and by designing the tool to allow examination of the interaction between activity contexts and instructional processes. Furthermore, we examined program differentiation only in the fall of the academic year. We might have seen greater differences between the treatment and control groups had we compared their fidelity to the LFC in the spring rather than in the fall.

Finally, we did not consider the potential variation among treatment teachers with respect to their implementation of instructional processes and activity contexts. Characteristics of individual teachers or classrooms might have helped to account for some of the variance in teachers' implementation fidelity; however, we were not able to explore these possibilities given the small sample size. Because we collected teacher reports anonymously, we were not able to compare teacher's reported quality of program delivery and comfort in implementation with their observational data. Future studies that delineate features of teachers and classrooms that explain variance in teachers' implementation of new curricula will be a worthwhile pursuit.

Results of this study point to the importance of providing ongoing supports to teachers as they implement new instructional approaches, as implementation appears to be a dynamic and ongoing process. These supports appear particularly crucial for teachers' implementation of curricular processes compared to activity contexts, perhaps because the former are not as tangible and concrete as the latter. Although curricular activity contexts set the stage for quality language interactions and help to differentiate early child-hood education programs from elementary programs, the current study indicates that they may be more readily achieved than curricular processes. This finding may help to pinpoint where SLPs might focus their consultative efforts, namely by helping preschool teachers promote their language-learning interactions with children rather than helping them implement specific activity contexts in their classrooms.

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## APPENDIX A. LANGUAGE STIMULATION TECHNIQUES, DEFINITIONS, AND EXAMPLES

| Technique                    | Definition  | Example  |
|------------------------------|---|--|
| Focused contrast             | Provides a contrast between two or more speech sounds, lexical items, or syntactic structures   | Ship starts with 'sh' and sip starts with 's'.                         |
| Modeling                     | Statements, comments, or requests that contain a sound, word, or grammatical construction not yet mastered by the child or that represents a form or function used in the classroom | A veterinarian is a doctor who cares for animals.                      |
| Event cast                   | Provides an ongoing description of an activity or event   | You're writing a capital letter A on your paper.                       |
| Open question                | Questions that have a variety of possible answers   | What do you think will happen next?                                    |
| Expansion                    | Utterances that follow a child utterance and provide additional   | Child: I have new shoes.   |
|                              | semantic information  | Adult: Yes, you have a new pair of black and white tennis shoes.       |
| Recast                       | Utterances that follow a child utterance and uses varied syntax   | Child: His dog eated the pizza.  |
|                              | ·   | Adult: Oh, his dog ate the pizza?                                      |
| Redirect/prompted initiation | Directs a child to initiate interaction with another child  | Child: I want that crayon.   |
|                              |   | Adult: Ask Jay if you can use the crayon. Say "Can I use that crayon?" |
| Scripted play                | Provides a verbal representation of familiar events   | Adult: "I'd like to order a burger, fries, and a small soda please."   |

## APPENDIX B. LANGUAGE-FOCUSED CURRICULUM FIDELITY CHECKLIST (BASED ON BUNCE, 1995)

|     | quency of use for Language Stimulation Techniques 0 (none); 1 (one); F (few, 2-3); M   |
|-----|--|
|     | Teacher uses focused contrasts   |
|     | Teacher uses modeling  |
|     | Teacher uses event casting   |
|     | Teacher uses open questions  |
|     | Teacher uses expansions  |
|     | Teacher uses recasts   |
|     | Teacher uses redirects and prompted initiations  |
| Adh | eres to the DAILY STRUCTURE of the LFC through the following:  |
|     | Teacher displays print labels of objects in the classroom  |
|     | Daily Theme is evident in classroom  |
|     | Activities rotate between child-centered and teacher-directed  |
|     | Teacher organizes daily lessons around a particular theme, per the LFC manual  |
|     | Teacher provides explicit structure to the daily dramatic play, art centers, and the large                                       |
|     | group session  |
| Adh | eres to LFC guidelines for DRAMATIC PLAY through the following:  |
|     | Clear space is dedicated to dramatic play  |
|     | The dramatic play area has enough room for at least 4-6 children to play at one time   |
|     | Teacher and/or assistant are present in the dramatic play area   |
|     | Teacher and/or assistant present schemas related to the dramatic play theme  |
|     | The dramatic play is centered around a theme per the lesson plan   |
|     | Teacher demonstrates 3 or 4 possible roles for children  |
|     | Teacher prepares materials and environment in advance  |
|     | Dramatic play props are readily available for the children   |
|     | New settings reflecting daily theme are created (daily) *  Dramatic play activities are appealing and motivating to the children |
|     | Setting and props allow different levels of participation  |
|     | Print labels are used in dramatic play area where appropriate  |
| _   | This labels are asset in dramatic play area where appropriate  |
| Adh | eres to LFC guidelines for ART through the following:  |
|     | The art lesson changes daily per the lesson plan *   |
|     | Teacher prepares materials and environment in advance to facilitate flow of activities   |
|     | Art area has a table with 4-6 chairs   |
|     | The teacher makes a variety of materials accessible to children  |
|     | The teacher/ assistant engages with children during the art activity   |
|     | Process is emphasized over product   |
|     | Activity encourages creativity   |
|     | Activity can be adapted to accommodate a variety of skill levels and motor demands   |
|     | Activity reflects the daily theme  |
|     | eres to LFC guidelines for STORY through the following:  |
|     | Large or small group story occurs  |
|     | Story is related to the daily theme  |
|     | Children are asked to predict what will happen in the story  |
|     | Children are asked to help tell the story  |
|     | Teacher delivers the story in an engaging manner   |
| _   | eres to LFC guidelines for GROUP through the following:  |
|     | A clear large group session exists   |
|     | The group session lasts between 10-15 minutes  |
|     | Group activities vary daily per lesson plan *  |
|     | Group activities provide a balance of concepts throughout the week *   |
| Adh | eres to LFC guidelines for MUSIC through the following:  |
|     | Song is related to the daily theme   |
|     | Song allows for movement or hand motions when appropriate  |
|     | Song appeals to children   |