

**Instructional Practices in Los  
Angeles Universal Preschool**

Final Report

June 30, 2010

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## I. INTRODUCTION

As part of Phase 3 of the Universal Preschool Child Outcomes Study (UPCOS-3), Mathematica Policy Research worked with the First 5 LA Children and Families Commission and Los Angeles Universal Preschool (LAUP) to conduct a descriptive study of the characteristics of classrooms in LAUP programs during winter 2010. This study has a particular focus on the specific instructional practices used to support English language learners (ELLs) in LAUP's center-based and family child care programs.<sup>1</sup> The study includes two key components: (1) classroom observations using measures determined as appropriate for settings with children who have diverse language backgrounds and (2) a survey of teachers regarding the instructional practices they use with children who are ELLs. In this chapter, we review the procedures underlying the selection of classroom observation measures, the development of the instructional practices questionnaire, and the sampling procedures used for each type of data collection. In subsequent chapters, we discuss the results from data collection using the classroom observation measures (Chapters II through IV) and instructional practices questionnaires (Chapter V) and in the final chapter examine the relationships among these measures and summarize across them.

### A. Selection and Implementation of Classroom Observations

To select measures appropriate for use in classrooms with ELLs, we began by reviewing currently available measures for describing classroom quality. We considered the constructs addressed by each; their suitability for use in both center-based and family child care (FCC) programs; their sensitivity to differences in quality; prior evidence of reliability and validity; prior use with classrooms serving ELLs; and practical considerations, such as how easily the training achieves reliability, availability of training materials, and expense. We identified five measures that could be used to meet the goals of the present study. We believe that this combination of scales will provide rich, reliable information about the quality of supports for language development and school readiness found in LAUP classrooms. In particular, these measures can provide evidence of instructional quality while capturing the frequency of specific practices and contextual features known to support positive child development. The measures include:

- Classroom Assessment Scoring System (CLASS; Pianta et al. 2008)
- Early Language and Literacy Environment (ELLE; Adapted from the Early Language and Literacy Classroom Observation Tool [ELLCO Research Edition; Smith and Dickinson 2002]; the ELLCO Addendum [Castro 2005]; and the Child Home Early Language and Literacy Observation [CHELLO; Neuman et al. 2007])
- Bilingual Teacher Behavior Rating Scale (B-TBRS; Landry et al. 2001)
- Language Interaction Snapshot with End-of-Visit Ratings (LISn+EVR; Atkins-Burnett et al. 2010)

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<sup>1</sup> Note that we use the term “English language learners” to refer to children whose home language is not English. Some literature uses other terms when referring to this group of children, such as “dual language learners” or “English learners.”

These measures collectively assess the constructs of interest to the study (see Table I.1) using varied approaches to measurement (see Table I.2). The constructs listed below summarize a variety of general instructional strategies, as well as language- and literacy-specific instructional strategies. For additional information about the selection process, see the Memo: Recommendation(s?) for the UPCOS-3 Classroom Observation Battery (Atkins-Burnett et al. 2010).

For implementation of classroom observations, we randomly sampled 80 center-based programs and 60 FCCs from LAUP. As shown in Table I.3, each classroom/FCC program was observed with two of three measure combinations, with each combination requiring a half-day of observation<sup>2</sup>. One observer in each classroom used the CLASS and ELLE to rate the instruction and the other observer used either the B-TBRS or the LISn+EVR at the same time as the CLASS and ELLE observations. As shown under the column “N Observed,” the final sample included 72 center-based classrooms and 52 FCC programs<sup>3</sup>. We weighted the results of the classroom observation presented in subsequent chapters to represent the mean for all LAUP classrooms.

The goals of our analysis are to address the following research questions:

How do these measures describe various aspects of quality in LAUP? What differences do we see in center-based versus FCCs and classrooms serving a high versus low proportion of ELLs<sup>4</sup>? How reliable are these measures in describing different aspects of classroom quality in both center-based and FCCs? Do the items contribute to measurement of quality in the same ways in center-based and FCCs?

How reliable are these measures in describing different aspects of classroom quality in classrooms that serve high versus low proportions of English language learners? Are the estimates of quality similar when teachers use both languages for instruction? (This question relies on the B-TBRS items and scales rated in both languages independently.) What other differences are evident in instruction by language of instruction? (This question relies on the LISn observations for teacher and other adult language use.)

What are the relationships among the scales in the selected observation measures?

## **B. Development and Distribution of the Instructional Practices Questionnaire**

The content of the instructional practices self-administered questionnaire for teachers (IP-SAQ) builds upon literature related to supportive practices for ELLs as well as focus group and cognitive interview data gathered from coaches, teachers, and FCC providers who are part of the LAUP network. All of the LAUP coaches participated in one of two focus groups held in the summer of

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<sup>2</sup> Information about the training and rater reliability is found in the individual chapters on each measure. A minimum of 80 percent inter-rater agreement was set across measures.

<sup>3</sup> Some classrooms were not able to schedule an observation time and we were not able to collect observation data in one classroom because none of the observers spoke the language being used in that classroom. Observers were fluent only in English and Spanish.

<sup>4</sup> Low ELL concentration classrooms were defined as those with less than 50 percent of the classroom comprised of ELLs.

2009. The coaches provided information about the instructional practices they observe in programs, the practices they try to foster, and the available resources about instructional practices that they consult. In the fall of 2009, LAUP teachers and FCC providers from a variety of geographic areas participated in focus groups about the instructional practices currently being used in programs with children with a home language other than English. The focus group discussions included such themes as the types of practices staff use with ELLs, the challenges in using these strategies, and the supports available for using them. Discussions also focused on teachers' and providers' beliefs about working with ELLs. In addition, questions provided information about the frequency of implementing the instructional practices outlined in the California Department of Education Guide for ELLs ("Preschool English Learners: Principles and Practices to Promote Language, Literacy, and Learning" 2009).

We developed two forms (A and B) of the IP-SAQ and tested them for problems through cognitive interviewing of teachers and FCC providers. Mathematica staff conducted 12 cognitive interviews in Northern California, two in New Jersey, and two in Washington, DC between December 4 and 9, 2009; and nine cognitive interviews at LAUP centers between December 14 and 23, 2009. We used a continuous and iterative revision process. After each full day of interviews, Mathematica researchers clarified or eliminated questions that respondents found difficult to understand or that took too much time to answer and added new items to capture the information in other ways. We then edited the interview protocol to correspond with the instrument revisions in the second and third rounds of cognitive testing. In all rounds of cognitive testing, respondents were preschool providers in family and center-based settings. Respondents were given a \$40 gift card for each survey completed. All of the 25 teachers/providers we interviewed were female; they ranged in age from 25 to 70 years old. The races and ethnicities of respondents varied across interviews and included African American, Hispanic/Latino, Asian, and White representation.

We mailed the revised IP-SAQs to all center-based and FCC programs in LAUP, including those not in the UPCOS sample ( $n=1,075$ ). We randomly assigned programs to Form A or Form B and asked all LAUP teachers and providers in the programs to complete a form. We received 376 questionnaires in return, for a response rate of 35 percent (206 responded to Form A and 171 to Form B). The goals of our analyses are to (1) construct reliable scales from the data, (2) examine the distribution and functioning of these scales in different settings (for example, center-based versus FCC setting; settings with high versus low proportions of ELLs), and (3) examine the relationships between these scales and our measures of quality based to the extent possible on direct observations of classrooms and FCCs (that is, such relationships can be explored only for the subsample of classrooms from which teachers also completed the IP-SAQ). As you read through the information about the subgroup results by ELL concentration, it is particularly important to keep in mind that the samples for the IP-SAQ and the classroom observations were not the same (Figures I.1 and I.2). For analyses of both types of data, we defined high ELL concentration classrooms as those having 50 percent or more ELLs, but the classroom observations were randomly sampled based on the percentage of ELLs in a program and the results weighted for probability of selection and nonresponse. As is evident in the figures, the results from the IP-SAQ likely are biased towards classrooms used in classrooms with high concentrations of ELLs.

**Table I.1. Construct Coverage for Selected Measures**

	B-TBRS	CLASS	ELLE	LISn+EVR
Instructional Support		x		x
Language Modeling	x	x		x
Quality of Feedback		x		
Concept Development	x	x	x	x
Emotional Support/Classroom Culture	x	x		x
Teacher Sensitivity	x	x		
Regard for Student Perspective		x		
Classroom Organization		x	x	
Behavior Management	x	x		x
Use of Time/Productivity		x	x	x
Instructional Learning Formats	x	x	x	x
Literacy Opportunities/Strategies	x		x	x
Use of Different Languages	x		x	x
Peer Support for Learning	x		x	x

**Table I.2. Approach to Measurement in Selected Candidate Measures**

	B-TBRS	CLASS	ELLE	LISn+EVR
Time Sampling		20 minute 4 samples/ observation		5 minute 5 samples for 3 children/observation
Global Ratings	x	x	x	x

**Table I.3. Approach to Implementation of Measures**

	N Sampled	N Observed	Observer 1	Observer 2
Center-based Classrooms				
Classroom A	40	36	CLASS and ELLE	B-TBRS
Classroom B	40	36	CLASS and ELLE	LISn+EVR
Family Child Care				
Classroom A	30	26	CLASS and ELLE	B-TBRS
Classroom B	30	26	CLASS and ELLE	LISn+EVR



Figure I.1 Distribution of Concentration of ELLs for IP-SAQ

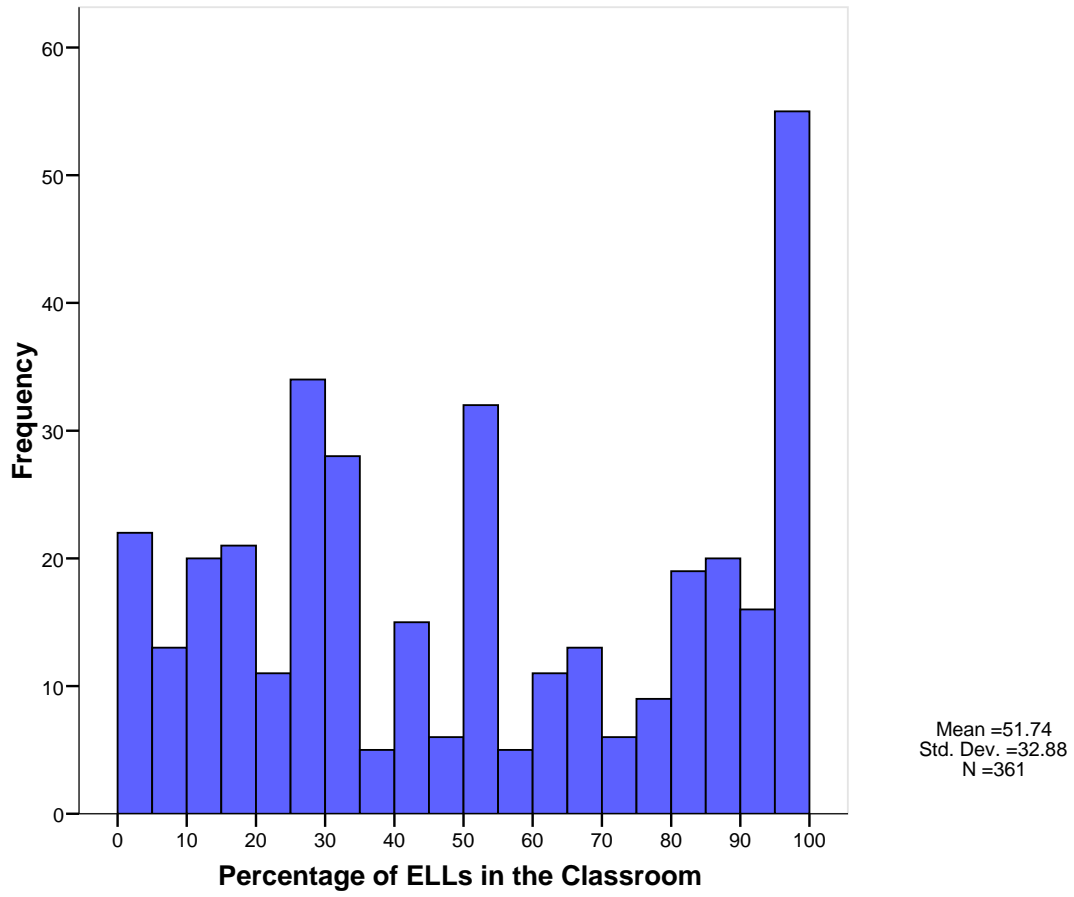
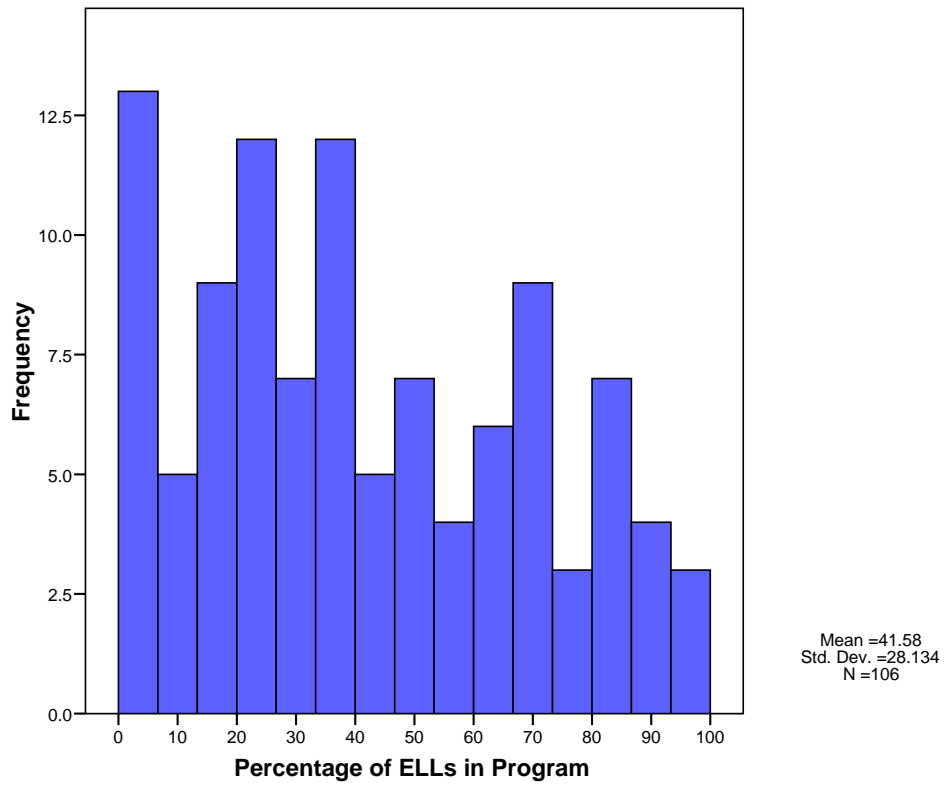


Figure I.2. Distribution of Concentration of ELLs for Classroom Observations (unweighted)



## II. CLASS AND ELLE RESULTS

In this chapter, we describe the results of the observations of a representative sample of classrooms using CLASS (Pianta et al. 2008), which focuses on the quality of interactions in the classroom and the level of instructional support that teachers provide, and ELLE, a measure of the support for language and literacy available in the environment's materials and activities.

Two features of LAUP programs are particularly relevant for our discussion of the classroom's characteristics. First, many LAUP programs include a high proportion of children who are ELLs, and these children are at greater risk for academic difficulty than those whose families speak English at home, according to data collected in Phase 2 of UPCOS (Love et al. 2009). We thus are particularly interested in measuring aspects of the classroom environments and instructional practices likely to support the development of ELLs. Second, LAUP includes both center-based and FCC programs. Practices implemented in center-based settings may not be as prevalent in FCCs and vice versa. For this reason, we examine the classrooms' characteristics by the type of setting (center-based versus FCC) and the proportion of ELLs served in the programs (programs in which 50 percent or more of children are ELLs are considered to have a high concentration and those with less than 50 percent a low concentration).

We examined both the factor structure of the CLASS in this highly diverse sample and the reliability of the scores overall and separately by subgroup for both measures, and looked at overall results, as well as differences in the mean scores in each subgroup. We weighted the means and percentages given in this report to make them representative of classrooms in LAUP.

### A. Procedures

We randomly sampled 75 center-based and 86 FCC programs from LAUP.<sup>5</sup> We stratified the selection of center-based programs by concentration of ELLs (high versus low) and the selection of FCC programs by size (large versus small). Two of the programs refused to participate in the study. Some of the programs agreed to participate but were unable to find a time for us to observe, while other classrooms scheduled observations but later needed to cancel due to teacher absences and other unexpected events. Ultimately, we observed 124 classrooms in 56 center-based programs and 52 FCCs with the CLASS and ELLE. We observed one class from each FCC, one class from 43 centers, and more than one class in 13 centers; all classes had a different lead teacher. We created weights to adjust for probability of selection and response rate.

The CLASS was administered in combination with ELLE, with items adapted from the ELLCO Research Edition (Smith and Dickinson 2002), the ELLCO Addendum (Castro 2005), and CHELLO (Neuman et al. 2007). Each classroom was observed in 20-minute cycles of observation, followed by coding of the CLASS. Observers collected information on six cycles of the CLASS. Per the developer's recommendations, gross motor and recess times were excluded from CLASS observations. During those times, the observers collected information about the environmental supports for learning for the ELLE. In addition, observers took notes about the occurrence of

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<sup>5</sup> See October 6, 2009 Sampling Memo for additional details.

different types of literacy activities throughout the observation cycles and recorded these on the ELLE.

## B. RESULTS: Classroom Assessment Scoring System

The CLASS focuses on the quality of interactions in the classroom and the level of instructional support that teachers provide. Four CLASS dimensions assess Emotional Support: (1) Positive Climate, (2) Negative Climate, (3) Teacher Sensitivity, and (4) Regard for Student Perspective; three dimensions measure Classroom Organization: (1) Behavior Management, (2) Productivity, and (3) Instructional Learning Formats; and three dimensions measure Instructional Support: (1) Concept Development, (2) Quality of Feedback, and (3) Language Modeling. The CLASS is used widely and has demonstrated relationships with child outcomes in multiple studies.

### 1. Confirmatory Factor Analysis of the CLASS

The CLASS factor structure has been examined in previous studies that included ELLs, but not in studies conducted in FCCs. We examined appropriateness of the factor structure with this diverse set of classrooms in LAUP. Given the small sample size, we did a single group confirmatory factor analysis using M-Plus with the full sample ( $N = 121$ ; that is, we included both center-based and FCC classrooms and excluded three classrooms from the analysis because of missing data). Figure II.1 provides standardized parameter estimates. The measures of model fit demonstrate that the comparative fit index (CFI) is .92, and the standardized root mean square residual (SRMR) is .07. These values indicate a good fit between the model and the observed data. By convention, rules of thumb for a well-fitting model are CFIs greater than .90 and SRMRs less than .10 so, using these criteria, the present model is acceptable. As shown in Figure II.1, the factor loadings generally were high, in the range of .58 to .998 (with  $p$ -values less than .001), with the exception of Negative Climate, which had a factor loading of only .16 ( $p < .10$ ). This suggests that the Negative Climate dimension did not contribute to the measurement of Emotional Support in our sample.

The extremely low loading of the Negative Climate scale is not surprising, given the very limited variance. More than 80 percent of the sample had the minimum extreme rating on Negative Climate, indicating that no instances of negative or harsh interactions occurred. The reliability of the Negative Climate dimension also was very low, indicating that the error may be due to occasion variance; that is, the negative interactions may have occurred infrequently in classrooms at different points in the day across classrooms.

It is important to note that Pianta et al. (2008) did not use Negative Climate in the confirmatory factor analyses reported in the CLASS manual. However, as prescribed by the manual, the score for Emotional Support includes the reverse-coded Negative Climate to account for the instances of harsh interactions that occur in some classrooms. This reduces the reliability of that scale in our sample, but it is still within an acceptable range ( $\alpha > .70$ ) across subsamples. Therefore, we retained the reverse-coded Negative Climate scores in the Emotional Support domain. This allows comparisons to our previous study of quality in LAUP (Love et al. 2009), the recent RAND study of California preschool classrooms (Karoly et al. 2008), and several national studies.

### 2. CLASS Reliability

The reliability estimates of the dimensions and domain scores of the CLASS were acceptable for all subgroups ( $\alpha > .70$ ) (see Tables II.2 and II.3). Comparing classrooms by concentration of ELLs, the reliability was somewhat weaker for the Emotional Support and Classroom Organization

domain scores for classrooms with high concentrations of ELLs than those with low concentrations ( $\alpha = .71$  versus  $.79$  for Emotional Support and  $.84$  versus  $.94$  for Classroom Organization in high- and low-concentration classrooms, respectively). Comparing classrooms by program type, estimates of reliability in FCC observations were weaker for all of the domain scores (and the dimension of Instructional Support) when compared with centers. The reliability estimates for the domain scores ranged from  $.78$  to  $.91$  versus  $.75$  to  $.87$  for centers and FCCs, respectively, and from  $.93$  to  $.94$  versus  $.83$  to  $.89$  for the dimension of the Instructional Support for centers and FCCs, respectively. In all of these cases, the sample size was smaller for the subgroup with the weaker reliability.

### 3. CLASS Results

In this section, we discuss the overall results for the CLASS as well as by subgroup and describe the patterns that we see. We did not test the significance of differences, but describe the direction and magnitude of differences for the CLASS and subsequent measures. Each dimension of the CLASS is rated on a scale from 1 to 7, with 1 to 2 indicating low quality, 3 to 5 indicating average quality, and 6 to 7 indicating high quality. The overall means for the representative sample of classrooms in UPCOS-3 indicated a moderate-to-high quality for Emotional Support (5.6), average quality for Classroom Organization (4.9), and low-to-average quality for Instructional Support (2.8). Positive Climate (with the absence of Negative Climate) was the strongest feature of the classrooms observed with the CLASS; Concept Development was the weakest (see Table II.1).

Viewed by subgroup, FCCs had stronger Classroom Organization than centers but were weaker in other domains, particularly Instructional Support (see domain and dimension scores in Table II.2). Observers noted higher quality in classrooms with a high concentration of ELLs, particularly in the Instructional Support domain (see Table II.3).

In Table II.4, we present mean scores for the CLASS for the UPCOS-3 sample and samples from prior studies. First, comparing the UPCOS-3 sample of center-based and FCC classrooms with the UPCOS-2 sample of center-based classrooms, the overall means were lower for the UPCOS-3 sample in the Emotional Support and Classroom Organization domains and stronger in the mean Instructional Support domain (except the Language Modeling dimension).

Second, when compared with classrooms for 4-year-old children in the Study of Early Care and Education in California (Karoly et al. 2008), the UPCOS-3 classrooms appeared comparable with most estimates (scores are within 0.1 points of the state mean). Finally, compared to the Multi-State Study of Prekindergartens and the Study of State-Wide Early Education Programs, the UPCOS-3 classrooms showed more positive results, particularly in Instructional Support.

In Figures II.2 to II.10, we present the distribution of scores for each CLASS domain in the overall sample and by program type. As the figures indicate, the percentage of classrooms at each level of quality was similar across the different subgroups for each domain. Only the center-based programs, however, included any classroom at the high level of quality in Instructional Support (1.8 percent), although 40 percent of center-based classrooms still scored at the low level (Figure II.10).

### C. Results: Early Language and Literacy Environment

To measure the support for language and literacy available through the materials and activities in the environment, Mathematica created the ELLE by adapting scales from (1) the ELLCO Research Edition (Smith and Dickinson 2002), (2) the ELLCO Addendum (Castro 2005), and (3) the CHELLO (Neuman et al. 2007.) Each of these three measures included items relevant to

classrooms in which ELL children are enrolled, but to use all three would have overburdened both observers and classrooms. For this reason, we created the ELLE by taking the best, nonredundant items addressing the language and literacy environment and activities from each of the aforementioned measures. The ELLE consists of two sections. The first is a Literacy Checklist, with 29 items adapted from the source measures. The Literacy Checklist measures the availability of literacy resources (including toys and puzzles, technology, books, and writing materials) in English, Spanish, and other languages. The second section of the ELLE comprises ratings of Book-Reading Activities (in English, Spanish, and other languages), including the number of full-group and individual or small-group book-reading sessions observed, number of books read, and time spent on reading sessions. In addition, we added items about the use of nonfiction and adapted them to address the use of languages in addition to Spanish.

On the Literacy Checklist, the majority of the items are coded as “yes” or “no”. Three items require ratings, however. Rather than weight the scale toward those items, we created dichotomies for the ratings based on the distributions and computed a total score based on the 28 items used in all classrooms. We used one item asking about the number of learning centers that included books only in center-based classrooms, so we reported its item-level results only for those classrooms.

Observers collected ELLE data in combination with the CLASS and did not always respond to every item on the ELLE. The observation forms included a higher level of missing data than expected for some items. Observers sometimes noted only the presence of literacy materials and left the other items blank, so it is unclear whether they ran out of time or were unable to locate those materials in the classroom. We treated these as missing data. Observers sometimes also recorded “Not Applicable” (NA) for items, usually for materials or activities in Spanish or other languages. We also found these responses in classrooms that have ELLs, however, so it is unclear why observers used this designation. We report the percentages of NA in the tables of results for the ELLE. The overall mean score for the Literacy Environment Checklist includes only those classrooms with no more than three items missing. In computing the total score for a classroom with missing data, we imputed the mean of the non-missing items.

## 1. ELLE Reliability

Reliability for the Literacy Checklist in English was adequate ( $\alpha = 0.74$ ). The internal consistency estimates were very similar across programs with different concentrations of ELLs, but reliability for this checklist was lower in FCC than in centers (.66 and .79 respectively). We found the number of observations for the items addressing Spanish and other languages too limited to create reliable scales, so we report the item-level information instead. The Literacy Activities Rating Scale includes different ways of sharing books with children. Teachers may combine these activities in different ways—no one way is clearly more or less advantageous. We present information at the item level to describe the ways in which teachers share literacy activities with children in LAUP.

## 2. LAUP Early Language and Literacy Environment

**Literacy Checklist.** LAUP classrooms provided many materials for literacy learning in English (see Tables II.5 to II.16). The mean for the Literacy Checklist in English was 23.6 out of a possible 28. More than 90 percent of the classrooms (both centers and FCCs) had cognitively stimulating toys, props to support sociodramatic play, alphabet games and/or puzzles, and labels or signs in English. More than 85 percent of all the classrooms had rhyming and word-level materials and more than 26 books in English. The books in the classrooms were in good or excellent condition and

accessible to the children (see Tables II.7, II.11, and II.15). In more than 90 percent of the classrooms (95 percent overall), at least one informational text was available in English.

Technology also was available in many of the classrooms. More than half had a working computer for children (58 percent) and recorded books or stories to which children could listen in English (69 percent).

Books and materials in Spanish and other languages were found infrequently in classrooms. With the exception of labels in Spanish, materials (puzzles, labels, rhyming games) in languages other than English were found in 10 percent or less of the classrooms. Materials in languages other than English were found in a greater percentage of the center-based classrooms than the FCCs and in a greater percentage of classrooms serving a high concentration of ELLs compared with those serving a low concentration. However, there were exceptions. For example, compared to center-based classrooms, a greater percentage of the FCCs had rhyming games in other languages (9 percent and 2 percent, respectively). Among the classrooms with books in Spanish or other languages, such books in FCCs represented greater variety of genres (36 percent and 28 percent respectively for Spanish; 8 percent and 3 percent respectively for other languages). A greater percentage of classrooms with a low concentration of ELLs had recorded books for children in Spanish compared with classrooms with a high concentration (24 percent and 19 percent respectively).

Overall, the literacy environment reflected more resources (in English, Spanish, and other languages) in center-based classrooms than in FCCs and classrooms that served a high concentration of ELLs. In addition to the areas just mentioned, we found only a few exceptions to the generally infrequent presence of books and materials in Spanish or other languages in classrooms. A greater percentage of the FCCs had an alphabet visible at children's eye level compared with center-based classrooms (78 percent and 69 percent, respectively; see Tables II.9 to II.12). A greater percentage of classrooms with a low concentration of ELLs had working computers for children (63 percent and 56 percent, respectively) and word cards with names of familiar words in English (76 percent versus 71 percent) than those with a high concentration (see Tables II.13 to II.16).

**Literacy Activities.** The most common reading activities were reading along with a friend or alone (72 percent of classrooms) and full-group book reading in English (68 percent of classrooms had at least one full-group book-reading session and, among these classrooms, 70 percent usually had sessions lasting less than 10 minutes). In 16 percent of the classrooms, adults used Spanish and other languages when reading to ELL children. In classrooms with full-group book reading, teachers read more than one book in English during the session in one-fifth of the classrooms (21 percent). Of those classrooms that conducted book-reading sessions in English, few spent more than 10 minutes reading in a large group (14 percent) or small group (12 percent) in English. Less time was spent reading in Spanish or other languages, with all sessions lasting less than 10 minutes. The primary teacher led full-group book-reading sessions in most of the classrooms (89 percent). The assistant teacher led small-group book-reading sessions in English in 56 percent of the classrooms. When classrooms conducted group book-reading sessions in Spanish or another language, the assistant teacher led the session in Spanish or another language in 40 percent of the classrooms. Some of the classrooms had both full-group and individual or small-group book-reading sessions (see Tables II.17 to II.18).

In more than half of the classrooms, children participated in some kind of writing activity (see Table II.19), either writing as part of their play (50 percent) or attempting to write letters or words (60 percent). Adults modeled writing in English in more classrooms (41 percent) than writing in Spanish (4 percent) or other languages (2 percent).

On average, adults read slightly more books to children in FCC full-group sessions than in center full-group sessions (mean numbers of books were 1.5 and 1.2, respectively). Observers also reported long (more than 10 minutes) full-group book-reading sessions in a greater percentage of FCCs (22 percent) than center-based classrooms (11 percent). FCCs had slightly more book-reading sessions in total than centers (1.4 versus 1.1) (see Tables II.20 to II.21). Writing activities occurred more frequently in centers than in FCCs (see Table II.22).

Observers reported one or more full-group book-reading sessions in English in a greater percentage of classrooms serving a high concentration of ELLs compared with classrooms serving a low concentration (72 percent and 65 percent, respectively). The high-concentration classrooms typically devoted more time to full-group book reading than the low-concentration classrooms (20 percent and 11 percent of classrooms, respectively) and had full-group book-reading sessions longer than 10 minutes (see Table II.23). Individual or small-group reading in English was more evident in low-concentration than high-concentration classrooms (see Table II.23), while the reverse was true of the number of sessions for small-group reading in Spanish or other languages (see Table II.24). When looking at the full-group and individual or small-group reading together, the mean number of total sessions was similar in high- and low-concentration classrooms (1.32 versus 1.25; see Table II.23).

Observers noted children involved in writing activities in more FCCs (see Table II.22) and more of the high-concentration classrooms (see Table II.25). As expected from the concentration of ELLs, adults modeled writing in English in a greater percentage of the low-concentration classrooms and modeled writing in Spanish or another language in a greater percentage of the high-concentration classrooms.

#### **D. Summary of Findings**

Both the CLASS and the ELLE provided reliable measures of various aspects of classroom quality. Overall internal consistency was adequate to strong for all of the dimensions and domain scores of the CLASS and acceptable for the ELLE Literacy Checklist in English. However, there was some variation in the reliability estimates across subgroups. Compared to centers, FCCs had lower reliability estimates for the CLASS and the ELLE Literacy Checklist in English. Classrooms with high concentrations of ELLs had weaker reliability in Emotional Support and Classroom Organization domains than those with low concentrations.

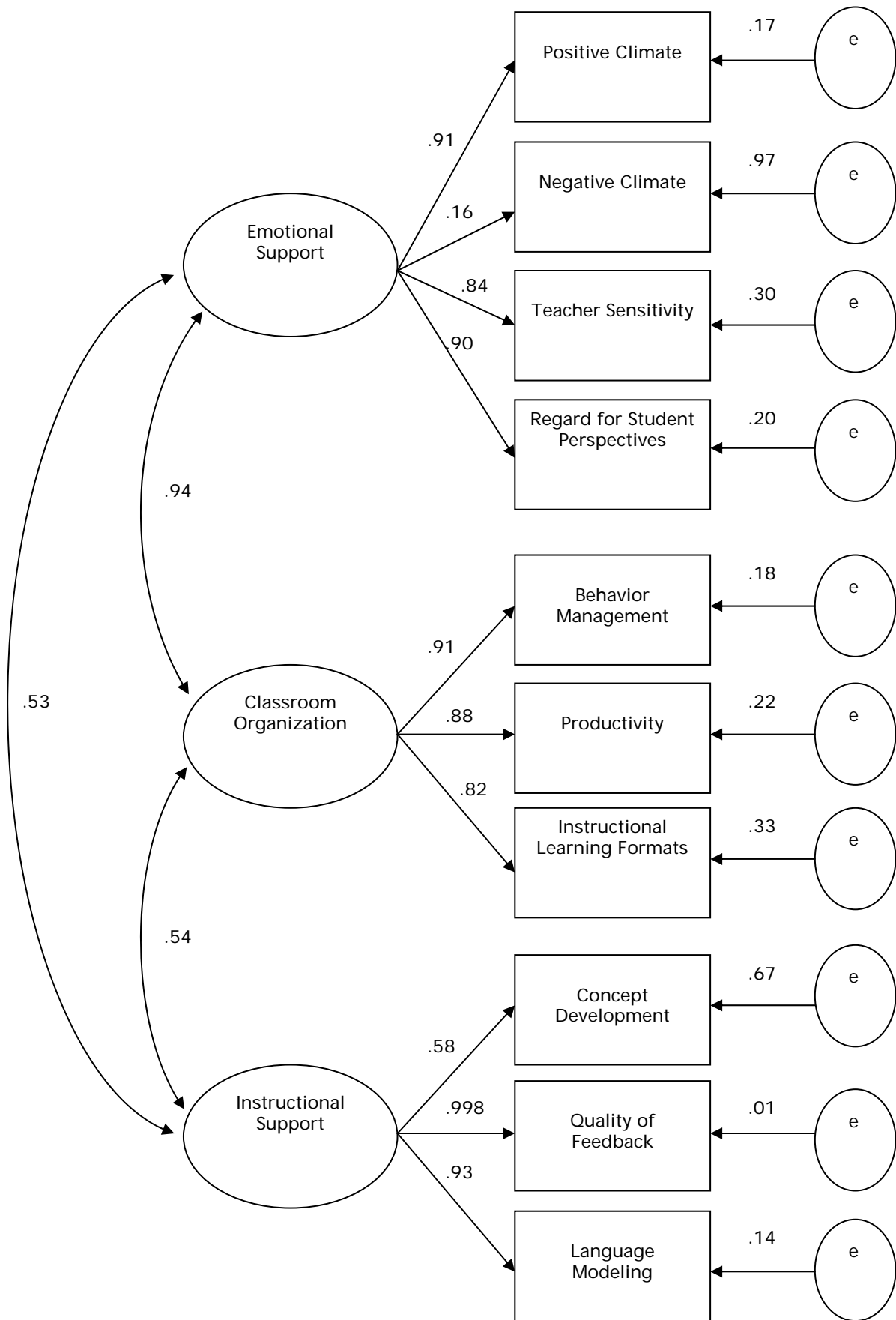
The factor structure of the CLASS was appropriate with the sample of LAUP classrooms. The measures of model fit indicate a good fit between the confirmatory factor analysis model and the observed data. Although the Negative Climate dimension does not contribute much to the measurement of emotional support in our sample, we retained this dimension in the Emotional Support domain, as instructed in the manual, and to permit comparisons with other studies.

With regard to the CLASS scores, the LAUP classrooms had a moderate-to-high quality for Emotional Support, average quality for Classroom Organization, and low-to-average quality for Instructional Support. These scores are comparable to statewide estimates and higher than those in several national studies. The CLASS scores differed by type of program and concentration of ELLs. FCCs had stronger Classroom Organization than centers but were weaker in other domains. Classrooms with a high concentration of ELLs had higher quality than those with a lower concentration.



For the ELLE Literacy Checklist, overall, the majority of LAUP classrooms provided resources for literacy learning in English. However, materials and books in Spanish and other languages were limited in classrooms. With a few exceptions, the literacy environment reflected more resources (in English, Spanish, and other languages) in center-based classrooms and classrooms that served a high concentration of ELLs. For ELLE Literacy Activities, reading along with a friend or alone and full-group book reading in English were the most common reading activities in LAUP classrooms, while book reading to ELLs in Spanish and other languages occurred infrequently. Children in more than half of the classrooms participated in some kind of writing activity. The availability of literacy activities varied across subgroups. Adults read more books in English to children for a longer time in full-group sessions in FCCs than in centers and classrooms with a high concentration of ELLs. Individual or small-group reading in Spanish or other languages was also more evident in high-concentration than in low-concentration classrooms. Children were more likely to participate in writing activities in FCCs than in centers and in high- than in low-concentration classrooms.

Figure II.1. Standardized Parameter Estimates of Confirmatory Factor Analysis for CLASS



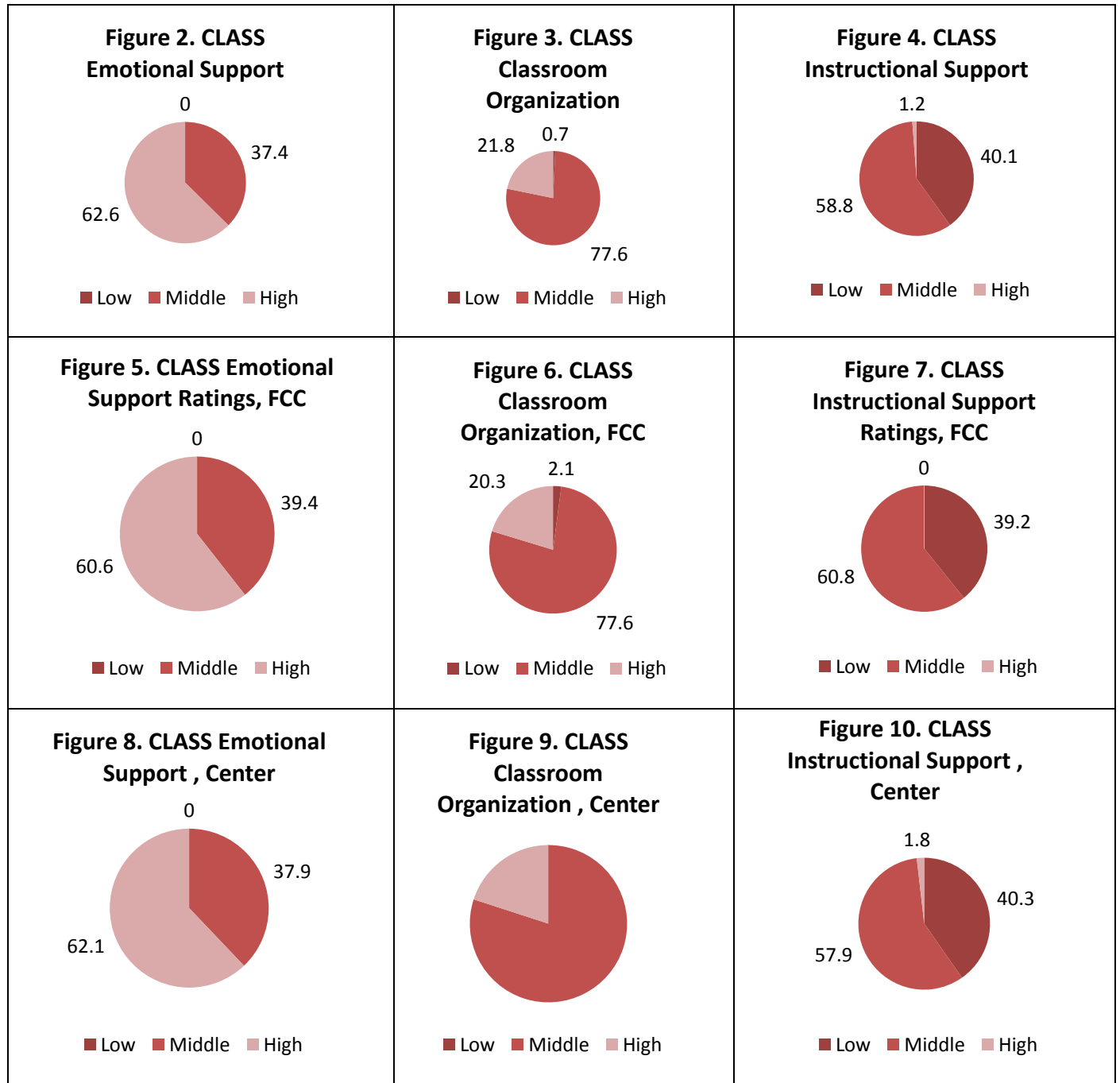


Table II.1. Weighted Descriptive Statistics of CLASS and ELLE Scores, Winter 2010

	N	Mean	Standard Error	Cronbach 's Alpha <sup>a</sup>
<b>CLASS</b>				
Domain: emotional support	117	5.58	0.06	0.77
Positive climate	119	5.56	0.07	0.91
Negative climate	120	1.08	0.02	0.35
Teacher sensitivity	119	5.04	0.09	0.88
Regard for student perspectives	117	4.81	0.08	0.88
Domain: classroom organization	115	4.87	0.08	0.90
Behavior management	119	5.07	0.08	0.86
Productivity	118	5.22	0.09	0.89
Instructional learning formats	115	4.34	0.10	0.76
Domain: instructional support	117	2.82	0.11	0.86
Concept development	118	2.62	0.12	0.90
Quality of feedback	117	2.94	0.13	0.91
Language modeling	117	2.90	0.12	0.91
<b>ELLE Literacy-Related Resources</b>				
<b>Total Score for English</b>	<b>98</b>	<b>23.6</b>	<b>0.28</b>	<b>0.74</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; ELLE = Early Language and Literacy Environment.

<sup>a</sup>Unweighted.

**Table II.2. Weighted Descriptive Statistics of CLASS, Winter 2010, by Program Type**

	Center				Family Child Care			
	N	Mean	Standard Error	Cronbach 's Alpha <sup>a</sup>	N	Mean	Standard Error	Cronbach 's Alpha <sup>a</sup>
<b>CLASS</b>								
Domain: emotional support	64	5.57	0.07	0.78	49	5.54	0.09	0.75
Positive climate	65	5.58	0.09	0.89	50	5.48	0.11	0.93
Negative climate	65	1.05	0.02	0.56	50	1.13	0.05	0.14
Teacher sensitivity	65	5.05	0.12	0.91	50	4.94	0.12	0.85
Regard for student perspectives	64	4.78	0.11	0.89	49	4.87	0.13	0.88
Domain: classroom organization	62	4.81	0.1	0.91	49	4.85	0.11	0.87
Behavior management	65	5.02	0.1	0.86	50	5.11	0.11	0.83
Productivity	64	5.16	0.11	0.91	50	5.18	0.14	0.81
Instructional learning formats	62	4.29	0.13	0.88	49	4.28	0.12	0.46
Domain: instructional support	65	2.84	0.15	0.89	48	2.72	0.12	0.76
Concept development	65	2.64	0.16	0.93	49	2.47	0.12	0.83
Quality of feedback	65	2.95	0.18	0.94	48	2.86	0.15	0.84
Language modeling	65	2.93	0.17	0.94	48	2.8	0.15	0.89
<b>ELLE Literacy-Related Resources</b>								
<b>Total Score for English</b>	<b>57</b>	<b>23.67</b>	<b>0.31</b>	<b>0.66</b>	<b>37</b>	<b>22.86</b>	<b>0.66</b>	<b>0.79</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; ELLE = Early Language and Literacy Environment.

<sup>a</sup>Unweighted.

**Table II.3. Weighted Descriptive Statistics of CLASS, Winter 2010, by Concentrations of ELLs**

	High Concentrations of ELLs				Low Concentrations of ELLs			
	N	Mean	Standard Error	Cronbach 's Alpha <sup>a</sup>	N	Mean	Standard Error	Cronbach 's Alpha <sup>a</sup>
<b>CLASS</b>								
Domain: emotional support	45	5.58	0.07	0.71	67	5.55	0.09	0.79
Positive climate	46	5.59	0.10	0.92	68	5.51	0.10	0.90
Negative climate	46	1.05	0.02	0.26	68	1.10	0.03	0.27
Teacher sensitivity	46	5.04	0.12	0.88	68	5.02	0.13	0.87
Regard for student perspectives	45	4.86	0.11	0.82	67	4.78	0.12	0.91
Domain: classroom organization	43	4.83	0.10	0.84	67	4.82	0.12	0.94
Behavior management	46	5.11	0.11	0.82	68	4.99	0.1	0.87
Productivity	45	5.15	0.12	0.88	68	5.17	0.13	0.90
Instructional learning formats	43	4.3	0.15	0.74	67	4.31	0.13	0.74
Domain: instructional support	44	2.99	0.18	0.86	68	2.67	0.14	0.84
Concept development	45	2.79	0.18	0.88	68	2.43	0.14	0.90
Quality of feedback	44	3.04	0.20	0.93	68	2.84	0.17	0.89
Language modeling	44	3.12	0.20	0.91	68	2.73	0.16	0.89
<b>ELLE Literacy-Related Resources</b>								
<b>Total Score for English</b>	<b>38</b>	<b>23.68</b>	<b>0.38</b>	<b>0.74</b>	<b>55</b>	<b>23.26</b>	<b>0.44</b>	<b>0.74</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; ELLE = Early Language and Literacy Environment.

<sup>a</sup>Unweighted.

**Table II.4. Observed Classroom Quality Scores in UPCOS Classrooms (Winter 2008, weighted) Compared with Studies of Other Preschool Programs**

Domains and Dimensions	UPCOS-3 Center and FCC	UPCOS-2	RAND California	MS/SWEEP	My Teaching- Partner
Domain: emotional support	5.6	5.9	5.6		
Positive climate	5.6	5.9	5.6	5.3	5.2
Negative climate	1.1	1.2	1.4	1.6	1.6
Teacher sensitivity	5.0	5.4	5.0	4.7	4.3
Regard for student perspectives	4.8	5.2	5.0	n.r.	4.4
Domain: classroom organization	4.9	5.4	5.0		
Behavior management	5.1	5.5	5.3	5.0	4.9
Productivity	5.2	5.6	5.1	4.5	5.4
Instructional learning formats	4.3	5.1	4.5	3.9	4.6
Domain: instructional support	2.8	2.6	2.7		
Concept development	2.6	2.1	2.4	2.1	2.7
Quality of feedback	2.9	2.5	2.8	2.0	2.9
Language modeling	2.9	3.4	3.0	n.r.	2.9
<b>Number of Classrooms</b>	<b>117-120</b>	<b>79-83</b>	<b>384</b>	<b>694</b>	<b>164</b>

Sources: For MS/SWEEP (Multi-State Study of Prekindergartens and Study of State-Wide Early Education Programs), and My Teaching-Partner: Pianta et al. 2008. For Tulsa Early Childhood Programs: Phillips et al. 2007. For RAND study: "Prepared to Learn": RAND Study of Early Care and Education in California, Karoly et al. 2008, p. 103 (we show data from the 4-year-old cohort only).

Note: n.r. = not reported.

**Table II.5. Descriptions of ELLE Literacy-Related Resources: Toys and Puzzles**

Items	N	Weighted Percentage of Classrooms
<b>Toys and puzzles</b>		
Cognitively stimulating toys in the setting	124	100
Props to support sociodramatic play	123	99.36
Alphabet games and/or alphabet puzzles	118	95.49
<b>Rhyming and other games or puzzles for learning about sounds</b>		
In English	101	87.04
In Spanish	12	8.9
Other languages	6	4.1
<b>Puzzles with words available for children's use for learning about words</b>		
In English	102	89.08
In Spanish	10	8.54
Other languages	4	3.13
<b>Labels and/or posters with words in learning areas, shelves, and other visual places in the classroom</b>		
In English	119	96.79
In Spanish	33	27.32
Other languages	8	7.24
<b>Sample Size</b>	<b>115-124</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.



**Table II.6. Descriptions of ELLE Literacy-Related Resources: Technology**

Items	N	Weighted Percentage of Classrooms
<b>Technology</b>		
A working computer for children in the setting	70	58.28
Any of the computer programs/software available in both English and Spanish or English and another language		
Yes	34	28.64
N/A	3	3.44
Recorded books or stories available for children to listen to?		
In English	79	68.76
In Spanish	29	22.86
Other languages	5	3.88
Other technology available that supports children's language and literacy	57	49.15
<b>Sample Size</b>	<b>115-124</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

Table II.7. Descriptions of ELLE Literacy-Related Resources: Book Area and Book Use

Items	N	Weighted Percentage of Classrooms
<b>Book area</b>		
An area set aside just for book reading	101	85.19
Book area orderly and inviting	99	89.77
Book area comfortable	97	87.86
Books easily accessible to children	109	97.85
<b>Book use</b>		
Books located throughout the child care environments (% of classrooms)		
English books	122	99.35
Spanish books	54	48.81
Books in other language	5	3.8
Number of books available in each area <sup>a</sup>		
<b>Science Area</b>		
<i>English</i>		
0 book	17	25.29
1-3 books	15	22.89
4 or more books	31	51.82
<i>Spanish</i>		
0 book	35	80.66
1-3 books	8	16.17
4 or more books	1	3.17
<i>Other language</i>		
0 book	39	98.24
1-3 books	1	1.76
4 or more books	0	0
<b>Dramatic Play Area</b>		
<i>English</i>		
0 book	32	50.39
1-3 books	13	23.61
4 or more books	14	26.01
<i>Spanish</i>		
0 book	34	84.18
1-3 books	5	12.46
4 or more books	1	3.36
<i>Other language</i>		
0 book	37	98.22
1-3 books	1	1.78
4 or more books	0	0
<b>Art or Sensory Area</b>		
<i>English</i>		
0 book	26	44.57
1-3 books	15	27.21
4 or more books	17	28.22
<i>Spanish</i>		
0 book	33	81.25
1-3 books	7	17.29
4 or more books	1	1.46
<i>Other language</i>		
0 book	35	92.7
1-3 books	3	7.3
4 or more books	0	0
Books range in difficulty level		
<i>English books</i>		
<i>Spanish books</i>		
Yes	35	35.72
N/A	2	2.42
<i>Books in other language</i>		
Yes	3	3.03
N/A	3	4.15

TABLE II.7 (continued)

Items	N	Weighted Percentage of Classrooms
Overall condition of the books		
<i>English books</i>		
Excellent	28	23.69
Good	89	72.87
Poor	4	3.44
<i>Spanish books</i>		
Excellent	15	25.9
Good	37	56.62
Poor	4	6.16
N/A	7	11.32
<i>Books in other language</i>		
Excellent	2	10.01
Good	4	22.1
Poor	2	9.86
N/A	9	58.03
Number of books available to children		
<i>English books</i>		
Fewer than 6 books	0	0
6-10 books	0	0
11-15 books	6	4.79
16-25 books	14	9.06
26 or more books	103	86.15
<i>Spanish books</i>		
Fewer than 6 books	52	66.42
6-10 books	12	18.98
11-15 books	8	9.73
16-25 books	3	4.87
26 or more books	0	0
<i>Books in other language</i>		
Fewer than 6 books	39	92.82
6-10 books	2	5.36
11-15 books	0	0
16-25 books	0	0
26 or more books	1	1.82
Number of books that are informational texts		
<i>English</i>		
0 book	7	5.24
1-3 books	28	22.42
4 or more books	82	72.34
<i>Spanish</i>		
0 book	52	57.75
1-3 books	32	37.16
4 or more books	5	5.09
<i>Other language</i>		
0 book	61	95.16
1-3 books	2	3.61
4 or more books	1	1.23
Books of different types (genres)		
English books	122	100
Spanish books	36	33.95
Books in other language	4	4.35
Other print resources available in the setting		
English books	71	60.29
Spanish books	13	12.47
Books in other language	1	1.66
<b>Sample Size</b>	<b>90-124</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

<sup>a</sup>For center-based programs only.

**Table II.8. Descriptions of ELLE Literacy-Related Resources: Writing Materials and Writing Around the Room Items**

	N	Weighted Percentage of Classrooms
Writing materials and writing around the room		
An alphabet visible at children's eye level	90	73.69
Templates or tools to help children form letters	106	89.7
Word cards with names of familiar words		
English	91	75.08
Spanish	17	14.49
Other language	2	0.94
Paper available for writing	115	95.48
Writing tools available	118	98.08
An area set up and available for children's writing	115	95.28
Displays of children's writing in the setting	91	75.85
<b>Sample Size</b>	<b>120-124</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.9. Descriptions of ELLE Literacy-Related Resources: Toys and Puzzles, by Program Type**

Items	Center		Family Child Care	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Toys and puzzles</b>				
Cognitively stimulating toys in the setting	66	100	52	100
Props to support sociodramatic play	67	100	50	97.93
Alphabet games and/or alphabet puzzles	64	95.93	48	93.85
<b>Rhyming and other games or puzzles for learning about sounds</b>				
In English	58	88.84	38	81.05
In Spanish	6	7.3	5	10.03
Other languages	1	2.01	5	8.95
<b>Puzzles with words available for children's use for learning about words</b>				
In English	56	90.36	41	84.77
In Spanish	6	9.53	4	7.99
Other languages	1	2.01	3	5.9
<b>Labels and/or posters with words in learning areas, shelves, and other visual places in the classroom</b>				
In English	65	98.98	48	91.97
In Spanish	23	34.74	9	16.98
Other languages	6	9.97	2	2.97
<b>Sample Size</b>	<b>63-67</b>		<b>47-52</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.10 Descriptions of ELLE Literacy-Related Resources: Technology, by Program Type**

Items	Center		Family Child Care	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Technology</b>				
A working computer for children in the setting	44	63.37	23	51
Any of the computer programs/software available in both English and Spanish or English and another language				
Yes	21	30.78	12	26.69
N/A	3	5.4	0	0
Recorded books or stories available for children to listen to?				
In English	48	72.49	25	54.57
In Spanish	19	25.5	7	13.93
Other languages	3	4.07	2	4.13
Other technology available that supports children's language and literacy	30	48.38	22	46.81
<b>Sample Size</b>	<b>62-67</b>		<b>46-52</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

Table II.11. Descriptions of ELLE Literacy-Related Resources: Book Area and Book Use, by Program Type

Items	Center		Family Child Care	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Book Area</b>				
An Area Set Aside Just for Book Reading	57	89.58	40	77.53
Book area orderly and inviting	54	89.46	40	88.46
Book area comfortable	55	89.72	37	81.71
Books easily accessible to children	60	97.72	44	97.7
<b>Book Use</b>				
Books Located Throughout the Child Care Environments				
English books	65	98.96	52	100
Spanish books	29	48.95	21	43.25
Books in other language	2	3.03	3	5.96
Books Range in Difficulty Level				
English books	55	86.36	45	91.55
Spanish books				
Yes	16	32.06	16	36.24
N/A	2	4.07	0	0
Books in Other Language				
Yes	0	0	3	7.74
N/A	2	5.96	1	2.63
Overall Condition of the Books				
<i>English books</i>				
Excellent	9	14.57	15	30.76
Good	53	80.99	35	67.17
Poor	3	4.44	1	2.07
<i>Spanish books</i>				
Excellent	7	20.48	5	20.81
Good	20	57.88	17	66.8
Poor	4	9.62	0	0
N/A	4	12.01	3	12.39
<i>Books in other language</i>				
Excellent	1	8.63	1	11.93
Good	1	16.97	3	29.25
Poor	1	8.49	1	11.78
N/A	5	65.91	4	47.04
Number of Books Available to Children				
<i>English books</i>				
Fewer than 6 books	0	0	0	0
6-10 books	0	0	0	0
11-15 books	2	3.54	4	8.03
16-25 books	6	7.25	8	14.11
26 or more books	58	89.2	40	77.86
<i>Spanish books</i>				
Fewer than 6 books	25	57.16	22	77.76
6-10 books	10	26.4	2	7.45
11-15 books	4	8.85	4	14.78
16-25 books	3	7.59	0	0
26 or more books	0	0	0	0

Table II.11 (continued)

Items	Center		Family Child Care	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<i>Books in other language</i>				
Fewer than 6 books	22	94.54	15	87.62
6-10 books	1	5.46	1	6.05
11-15 books	0	0	0	0
16-25 books	0	0	0	0
26 or more books	0	0	1	6.33
Number of Books that Are Informational Texts				
<i>English</i>				
0 book	4	5.05	3	6.48
1-3 books	13	19.03	14	29.26
4 or more books	48	75.92	31	64.26
<i>Spanish</i>				
0 book	25	56.53	26	66.47
1-3 books	19	39.46	10	25.46
4 or more books	2	4.01	3	8.07
<i>Other language</i>				
0 book	30	95.81	28	93.15
1-3 books	1	4.19	1	3.35
4 or more books	0	0	1	3.5
Books of Different Types (Genres)				
English books	66	100	51	100
Spanish books	16	27.61	16	36.27
Books in other language	1	2.82	3	8.06
Other Print Resources Available in the Setting				
English books	40	62.48	28	55.02
Spanish books	7	11.87	5	10.34
Books in other language	1	2.7	0	0
<b>Sample Size</b>	<b>47-67</b>		<b>39-52</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.



**Table II.12. Descriptions of ELLE Literacy-Related Resources: Writing Materials and Writing Around the Room, by Program Type**

Items	Center		Family Child Care	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Writing Materials and Writing Around the Room</b>				
An Alphabet Visible at Children's Eye Level	45	69.14	40	78.08
Templates or Tools to Help Children Form Letters	60	93.97	41	79.68
Word Cards with Names of Familiar Words				
English	50	75.82	37	71.44
Spanish	12	18.46	5	8.95
Other language	0	0	2	2.97
Paper Available for Writing	63	97.89	47	90.04
Writing tools available	65	100	48	93.94
An Area Set Up and Available for Children's Writing	63	96.61	47	91.85
Displays of Children's Writing in the Setting	50	76.99	36	69.51
<b>Sample Size</b>	<b>64-67</b>		<b>51-52</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.13. Descriptions of ELLE Literacy-Related Resources: Toys and Puzzles, by Concentrations of ELLs**

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Toys and Puzzles</b>				
Cognitively stimulating toys in the setting	46	100	71	100
Props to support sociodramatic play	46	98.47	70	100
Alphabet games and/or alphabet puzzles	44	96.9	67	93.89
Rhyiming and other games or puzzles for learning about sounds				
In English	35	81.41	61	90.22
In Spanish	2	4.58	9	11.2
Other languages	3	6.05	3	3.01
Puzzles with words available for children’s use for learning about words				
In English	35	86.27	61	90.01
In Spanish	5	10.27	5	8.12
Other languages	3	6.05	1	1.17
Labels and/or posters with words in learning areas, shelves, and other visual places in the classroom				
In English	44	96.86	68	96.39
In Spanish	18	40.68	14	19.75
Other languages	4	8.96	4	6.67
<b>Sample Size</b>	<b>42-47</b>		<b>68-71</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.14. Descriptions of ELLE Literacy-Related Resources: Technology, by Concentrations of ELLs**

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Technology</b>				
A working computer for children in the setting	25	56.16	42	62.97
Any of the computer programs/software available in both english and spanish or english and another language				
Yes	14	30.32	19	29.13
N/A	1	2.86	2	4.35
Recorded books or stories available for children to listen to?				
In English	30	69.25	43	65.98
In Spanish	9	18.88	17	24.1
Other languages	2	3.06	3	4.98
Other Technology Available that Supports Children's Language and Literacy	23	51.53	28	42.57
<b>Sample Size</b>	<b>43-47</b>		<b>66-71</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.15. Descriptions of ELLE Literacy-Related resources: Book Area and Book Use, by Concentrations of ELLs**

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Book Area</b>				
An Area Set Aside Just for Book Reading	37	85.63	59	85.35
Book area orderly and inviting	40	93.17	53	85.74
Book area comfortable	40	93.18	51	82.04
Books easily accessible to children	42	98.3	61	97.21
<b>Book Use</b>				
Books Located Throughout the Child Care Environments				
English books	46	100	70	98.77
Spanish books	27	64.44	23	34.21
Books in other language	1	3.05	4	4.82
Number of Books Available in Each Area <sup>a</sup>				
Science Area				
<i>English</i>				
0 book	5	17.83	12	31.43
1-3 books	7	24.34	8	21.69
4 or more books	14	57.83	17	46.87
<i>Spanish</i>				
0 book	14	71.11	21	88.65
1-3 books	4	21.94	4	11.35
4 or more books	1	6.96	0	0
<i>Other language</i>				
0 book	15	95.73	24	100
1-3 books	1	4.27	0	0
4 or more books	0	0	0	0
Dramatic Play Area				
<i>English</i>				
0 book	12	44.71	20	54.84
1-3 books	6	24.58	7	22.84
4 or more books	6	30.71	8	22.32
<i>Spanish</i>				
0 book	13	69.98	21	97.16
1-3 books	4	22.98	1	2.84
4 or more books	1	7.03	0	0
<i>Other language</i>				
0 book	15	95.98	22	100
1-3 books	1	4.02	0	0
4 or more books	0	0	0	0
Art or Sensory Area				
<i>English</i>				
0 book	11	46.22	15	43.25
1-3 books	8	36.72	7	19.59
4 or more books	5	17.06	12	37.16
<i>Spanish</i>				
0 book	13	73.91	20	87.75
1-3 books	4	22.98	3	12.25
4 or more books	1	3.11	0	0
<i>Other language</i>				
0 book	14	87.95	21	96.62
1-3 books	2	12.05	1	3.38
4 or more books	0	0	0	0

Table II.15 (continued)

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Books Range in Difficulty Level</b>				
English books	38	84.57	61	90.95
Spanish books				
Yes	18	43.97	14	25
N/A	0	0	2	4.91
Books in other language				
Yes	0	0	3	5.76
N/A	1	2.73	2	5.92
<b>Overall Condition of the Books</b>				
<i>English books</i>				
Excellent	12	24.69	12	16.74
Good	31	70.45	56	80.5
Poor	2	4.86	2	2.76
<i>Spanish books</i>				
Excellent	7	23.32	5	16.86
Good	20	60.71	17	60.63
Poor	3	9.13	1	3.15
N/A	2	6.84	5	19.35
<i>Books in other language</i>				
Excellent	0	0	2	15.88
Good	1	26.74	3	19.37
Poor	1	13.37	1	7.8
N/A	3	59.89	6	56.94
<b>Number of Books Available to Children</b>				
<i>English books</i>				
Fewer than 6 books	0	0	0	0
6-10 books	0	0	0	0
11-15 books	2	3.14	3	5.39
16-25 books	4	6.28	10	12.22
26 or more books	40	90.57	58	82.39
<i>Spanish books</i>				
Fewer than 6 books	21	54.66	26	73.98
6-10 books	9	26.48	3	13.65
11-15 books	4	11.22	4	9.89
16-25 books	2	7.63	1	2.48
26 or more books	0	0	0	0
<i>Books in other language</i>				
Fewer than 6 books	17	92.54	20	92.35
6-10 books	1	7.46	1	3.74
11-15 books	0	0	0	0
16-25 books	0	0	0	0
26 or more books	0	0	1	3.91
<b>Number of Books that Are Informational Texts</b>				
<i>English</i>				
0 book	4	7.84	3	3.66
1-3 books	10	18.36	16	24.57
4 or more books	32	73.8	47	71.76
<i>Spanish</i>				
0 book	23	54.35	27	66.09
1-3 books	17	40.85	12	27.59
4 or more books	2	4.8	3	6.33
<i>Other language</i>				
0 book	25	94.52	32	94.95
1-3 books	1	5.48	1	2.47
4 or more books	0	0	1	2.58

Table II.15 (continued)

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
Books of Different Types (Genres)				
English books	46	100	70	100
Spanish books	22	47.44	10	15.94
Books in other language	1	4.29	3	4.95
Other Print Resources Available in the Setting				
English books	28	65.26	40	56.59
Spanish books	8	19.29	4	4.88
Books in other language	1	4.29	0	0
<b>Sample Size</b>	<b>33-47</b>		<b>52-71</b>	

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

\*For center-based programs only.

Table II.17. Descriptions of ELLE Book-Reading Activities in English

Items	N	Weighted Mean/ Percentage	Standard Error	Range
<b>Full-Group Book Reading</b>				
Number of Sessions Observed	124	0.81	0.06	0 -3
Percentage of Classrooms with Sessions Observed				
0 session	40	31.57	--	--
1 session	71	58.07	--	--
2 sessions	11	8.59	--	--
3 sessions	2	1.77	--	--
Number of Books Read	84	1.27	0.07	0 -5
Percentage of Classrooms with Different Number of Books Read				
0 book	1	0.93	--	--
1 book	64	78.36	--	--
2 books	14	15.37	--	--
3 books	4	4.40	--	--
5 books	1	0.94	--	--
Who Leads the Book-Reading Session (% of Classrooms)				
Primary teacher	74	88.65	--	--
Teacher assistant	11	13.15	--	--
Other	3	2.89	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)				
Fewer than 5 minutes	14	16.16	--	--
5-10 minutes	55	69.67	--	--
More than 10 minutes	13	14.17	--	--
<b>Individual or Small-Group Book Reading</b>				
Number of Sessions Observed	124	0.46	0.08	0 -3
Percentage of Classrooms with Sessions Observed				
0 session	88	68.88	--	--
1 session	24	19.30	--	--
2 sessions	9	8.78	--	--
3 sessions	3	3.04	--	--
Number of Books Read	34	1.57	0.18	0 -4
Percentage of Classrooms with Different Number of Books Read				
0 book	1	4.25	--	--
1 book	22	57.09	--	--
2 books	6	19.82	--	--
3 books	4	14.58	--	--
4 books	1	4.25	--	--
Who Leads the Book-Reading Session (% of Classrooms)				
Primary teacher	21	61.36	--	--
Teacher assistant	18	56.30	--	--
Other	2	6.42	--	--

Table II.17 (continued)

Items	N	Weighted Mean/ Percentage	Standard Error	Range
Time Spent on Individual or Small-Group Book Reading (% of Classrooms)				
Fewer than 5 minutes	6	14.36	--	--
5-10 minutes	24	73.84	--	--
More than 10 minutes	4	11.80	--	--
<b>Total Number of Book-Reading Sessions Observed</b>				
Total Number of Sessions	124	1.27	0.11	0-6
Percentage of Classrooms With Sessions Observed				
0 session	28	22.84		
1 session	60	46.51		
2 sessions	23	17.68		
3 sessions	10	9.45		
4 sessions	2	2.39		
6 sessions	1	1.12		

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.



Table II.18. Descriptions of ELLE Book-Reading Activities with English Language Learners (ELLs)

Items	N	Weighted Mean/Percentage	Standard Error	Range
<b>Languages Adults Used When Reading to ELLs (% of Classrooms)</b>				
English	75	76.81	--	--
Spanish	7	8.61	--	--
Other/bilingual	7	7.02	--	--
N/A	8	7.56	--	--
<b>Time Spent on Full-Group Book Reading To ELLs In English (% of Classrooms)</b>				
Fewer than 5 minutes	24	27.56	--	--
5-10 minutes	40	49.09	--	--
More than 10 minutes	12	13.10	--	--
N/A	9	10.25	--	--
<b>Time Spent on Individual or Small-Group Book Reading To ELLs In English (% of Classrooms)</b>				
Fewer than 5 minutes	31	42.18	--	--
5-10 minutes	22	29.71	--	--
More than 10 minutes	3	3.07	--	--
N/A	20	25.03	--	--
<b>Full-Group Book Reading In Spanish or Other Language (Non-English or Bilingual)</b>				
Number of Sessions Observed	124	0.12	0.04	0 -3
Percentage of Classrooms with Sessions Observed				
0 session	115	90.27	--	--
1 session	8	8.61	--	--
3 sessions	1	1.12	--	--
Number of Books Read	9	1.10	0.26	0 -3
Percentage of Classrooms with Different Number of Books Read				
0 book	1	13.05	--	--
1 book	7	75.40	--	--
3 books	1	11.54	--	--
Who Leads the Book-Reading Session (% of Classrooms)				
Primary Teacher	7	80.37	--	--
Teacher Assistant	2	19.63	--	--
Other	0	0.00	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)				
Fewer than 5 minutes	1	13.05	--	--
5-10 minutes	8	86.95	--	--
More than 10 minutes	0	0.00	--	--

Table II.18 (continued)

Items	N	Weighted Mean/Percentage	Standard Error	Range
<b>Individual or Small-Group Book Reading in Spanish or Other Language (Non-English or Bilingual)</b>				
Number of Sessions Observed	124	0.07	0.03	0 -1
Percentage of Classrooms with Sessions Observed				
0 session	117	92.85	--	--
1 session	7	7.15	--	--
Number of Books Read	7	1.36	0.00	0 -4
Percentage of Classrooms with Different Number of Books Read				
0 book	1	17.77	--	--
1 book	5	64.47	--	--
4 books	1	17.77	--	--
Who Leads the Book-Reading Session (% of Classrooms)				
Primary Teacher	5	69.15	--	--
Teacher Assistant	2	39.66	--	--
Other	1	8.95	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)				
Fewer than 5 minutes	1	17.77	--	--
5-10 minutes	6	82.23	--	--
More than 10 minutes	0	0.00	--	--

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.19. Descriptions of ELLE Reading Along or Alone Time and Writing Activities**

Items	N	Weighted Percentage of Classrooms
<b>Reading Along or Alone Time</b>		
Time Is Set Aside for Children to Look at Books Alone or with a Friend	104	72.47
<b>Writing Activities</b>		
Children include writing in their play	50	50.47
Children attempting to write letters or words	59	59.51
An adult modeled writing in English	41	40.75
An adult modeled writing in Spanish	3	3.55
An adult modeled writing in another language	2	1.56

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.20. Descriptions of ELLE Book-Reading Activities in English, by Program Type**

Items	Center				Family Child Care			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
<b>Full-Group Book Reading</b>								
Number of Sessions Observed	67	0.80	0.08	0-3	52	0.81	0.09	0 -2
Percentage of Classrooms With Sessions Observed								
0 session	23	32.82	--	--	16	30.75	--	--
1 session	37	56.74	--	--	30	57.35	--	--
2 sessions	5	7.64	--	--	6	11.90	--	--
3 sessions	2	2.80	--	--	0	0.00	--	--
Number of Books Read	44	1.20	0.07	0-3	36	1.46	0.15	1-5
Percentage of Classrooms With Different Number of Books Read								
0 book	1	1.50	--	--	0	0.00	--	--
1 book	35	81.44	--	--	25	68.33	--	--
2 books	6	12.90	--	--	8	23.06	--	--
3 books	2	4.17	--	--	2	5.68	--	--
5 books	0	0.00	--	--	1	2.93	--	--
Who Leads the Book-Reading Session (% of Classrooms)								
Primary teacher	37	86.18	--	--	33	91.30	--	--
Teacher assistant	7	15.94	--	--	4	10.19	--	--
Other	2	3.17	--	--	1	2.89	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)								
Fewer than 5 minutes	7	14.16	--	--	5	14.95	--	--
5-10 minutes	31	74.45	--	--	22	62.67	--	--
More than 10 minutes	5	11.39	--	--	8	22.37	--	--
<b>Individual or Small-Group Book Reading</b>								
Number of Sessions Observed	67	0.58	0.12	0-3	52	0.24	0.07	0 -2
Percentage of Classrooms With Sessions Observed								
0 session	45	64.32	--	--	40	78.89	--	--
1 session	12	18.51	--	--	10	18.05	--	--
2 sessions	7	12.36	--	--	2	3.06	--	--
3 sessions	3	4.81	--	--	0	0.00	--	--

Table II.20 (continued)

Items	Center				Family Child Care			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
Number of Books Read	22	1.75	0.23	0-4	10	1.06	0.06	1-2
Percentage of Classrooms With Different Number of Books Read								
0 book	1	5.63	--	--	0	0.00	--	--
1 book	11	44.64	--	--	9	93.97	--	--
2 books	5	24.79	--	--	1	6.03	--	--
3 books	4	19.31	--	--	0	0.00	--	--
4 books	1	5.63	--	--	0	0.00	--	--
Who Leads the Book-Reading Session (% of Classrooms)								
Primary teacher	14	65.03	--	--	6	53.23	--	--
Teacher assistant	13	58.36	--	--	4	46.77	--	--
Other	2	8.50	--	--	0	0.00	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)								
Fewer than 5 minutes	2	8.50	--	--	3	29.46	--	--
5-10 minutes	18	80.04	--	--	5	53.18	--	--
More than 10 minutes	2	11.46	--	--	2	17.37	--	--
<b>Total Number of Book-Reading Sessions Observed</b>								
Total Number of Sessions	67	1.38	0.16	0 -6	52	1.05	0.10	0 -3
Percentage of Classrooms With Sessions Observed								
0 session	17	24.49			10	19.76		
1 session	28	41.03			30	58.23		
2 sessions	11	15.49			10	18.96		
3 sessions	8	13.42			2	3.06		
4 sessions	2	3.79			0	0.00		
6 sessions	1	1.78			0	0.00		

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.21. Descriptions of ELLE Book-Reading Activities with English Language Learners (ELLs), by Program Type**

Items	Center				Family Child Care			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
<b>Languages Adults Used When Reading to ELLs (% of Classrooms)</b>								
English	41	77.18	--	--	29	70.99	--	--
Spanish	4	9.81	--	--	3	7.98	--	--
Other/bilingual	3	6.07	--	--	4	10.54	--	--
NA	4	6.94	--	--	4	10.49	--	--
<b>Time Spent on Full-Group Book Reading to ELLs in English (% of Classrooms)</b>								
Fewer than 5 minutes	14	27.55	--	--	8	24.54	--	--
5-10 minutes	23	50.39	--	--	15	44.60	--	--
More than 10 minutes	6	13.25	--	--	6	15.38	--	--
NA	4	8.81	--	--	5	15.47	--	--
<b>Time Spent on Individual or Small-Group Book Reading to ELLs in English (% of Classrooms)</b>								
Fewer than 5 minutes	20	44.53	--	--	11	39.09	--	--
5-10 minutes	14	30.49	--	--	7	23.36	--	--
More than 10 minutes	1	2.91	--	--	2	3.67	--	--
NA	10	22.07	--	--	10	33.88	--	--
<b>Full-Group Book Reading in Spanish or Other Language (Non-English or Bilingual)</b>								
Number of Sessions Observed	67	0.17	0.07	0-3	52	0.04	0.03	0 -1
Percentage of Classrooms with Sessions Observed								
0 session	60	86.63	--	--	50	95.95	--	--
1 session	6	11.59	--	--	2	4.05	--	--
3 sessions	1	1.78	--	--	0	0.00	--	--
Number of Books Read	7	1.12	0.30	0-3	2	1.00	0.00	1-1
Percentage of Classrooms with Different Number of Books Read								
0 book	1	15.03	--	--	0	0.00	--	--
1 book	5	71.68	--	--	2	100.00	--	--
3 books	1	13.29	--	--	0	0.00	--	--

Table II.21 (continued)

Items	Center				Family Child Care			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
<b>Who Leads the Book-Reading Session (% of Classrooms)</b>								
Primary Teacher	6	84.97	--	--	1	50.00	--	--
Teacher Assistant	1	15.03	--	--	1	50.00	--	--
Other	0	0.00	--	--	0	0.00	--	--
<b>Time Spent on Full-Group Book Reading (% of Classrooms)</b>								
Fewer than 5 minutes	1	15.03	--	--	0	0.00	--	--
5-10 minutes	6	84.97	--	--	2	100.00	--	--
More than 10 minutes	0	0	--	--	0	0.00	--	--
<b>Individual or Small-Group Book Reading in Spanish or Other Language (Non-English or Bilingual)</b>								
Number of Sessions Observed	67	0.08	0.05	0-1	52	0.06	0.03	0-1
<b>Percentage of Classrooms With Sessions Observed</b>								
0 session	63	91.73	--	--	49	93.92	--	--
1 session	4	8.27	--	--	3	6.08	--	--
Number of Books Read	4	1.49	0.00	0-4	3	1.00	0.00	1-1
<b>Percentage of Classrooms With Different Number of Books Read</b>								
0 book	1	24.29	--	--	0	0.00	--	--
1 book	2	51.42	--	--	3	100.00	--	--
4 books	1	24.29	--	--	0	0.00	--	--
<b>Who Leads the Book-Reading Session (% of Classrooms)</b>								
Primary Teacher	3	70.06	--	--	2	66.67	--	--
Teacher Assistant	2	54.23	--	--	0	0.00	--	--
Other	0	0.00	--	--	1	33.33	--	--
<b>Time Spent on Full-Group Book Reading (% of Classrooms)</b>								
Fewer than 5 minutes	1	24.29	--	--	0	0.00	--	--
5-10 minutes	3	75.71	--	--	3	100.00	--	--
More than 10 minutes	0	0.00	--	--	0	0.00	--	--

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.22. Descriptions of ELLE Reading Along or Alone Time and Writing Activities, by Program Type**

Items	Center		Family Child Care	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Reading Along or Alone Time</b>				
Time Is Set Aside for Children to Look at Books Alone or with a Friend	56	72.74	43	73.15
<b>Writing Activities</b>				
Children include writing in their play	28	51.67	19	42.82
Children attempting to write letters or words	34	63.04	22	48.83
An adult modeled writing in English	24	44.97	16	34.37
An adult modeled writing in Spanish	3	5.70	0	0.00
An adult modeled writing in another language	1	1.25	1	2.41

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.



**Table II.23. Descriptions of ELLE Book-Reading Activities in English, by Concentrations of ELLS**

Items	High Concentrations of ELLs				Low Concentrations of ELLs			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
<b>Full-Group Book Reading</b>								
Number of Sessions Observed	47	0.89	0.10	0-3	71	0.75	0.07	0 -2
Percentage of Classrooms With Sessions Observed								
0 session	14	27.87	--	--	24	34.70	--	--
1 session	27	59.50	--	--	40	55.59	--	--
2 sessions	4	8.39	--	--	7	9.71	--	--
3 session	2	4.24	--	--	0	0.00	--	--
Number of Books Read	33	1.32	0.13	0-5	47	1.26	0.08	1-3
Percentage of Classrooms With Different Number of Books Read								
0 book	1	2.11	--	--	0	0.00	--	--
1 book	24	76.15	--	--	36	77.71	--	--
2 books	5	13.73	--	--	9	18.66	--	--
3 books	2	5.88	--	--	2	3.63	--	--
5 books	1	2.13	--	--	0	0.00	--	--
Who Leads the Book-Reading Session (% of Classrooms)								
Primary Teacher	32	97.87	--	--	38	79.18	--	--
Teacher Assistant	3	9.59	--	--	8	17.85	--	--
Other	0	0.00	--	--	3	5.77	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)								
Fewer than 5 minutes	5	12.69	--	--	7	16.01	--	--
5-10 minutes	21	67.25	--	--	32	73.44	--	--
More than 10 minutes	7	20.07	--	--	6	10.55	--	--
<b>Individual or Small-Group Book Reading</b>								
Number of Sessions Observed	47	0.43	0.13	0-3	71	0.50	0.12	0 -3
Percentage of Classrooms With Sessions Observed								
0 session	35	69.87	--	--	49	68.25	--	--
1 session	8	20.16	--	--	14	17.14	--	--
2 sessions	3	7.27	--	--	6	10.95	--	--
3 sessions	1	2.69	--	--	2	3.65	--	--

Table II.23 (continued)

Items	High Concentrations of ELLs				Low Concentrations of ELLs			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
Number of Books Read	11	1.39	0.28	0-3	21	1.78	0.25	1-4
Percentage of Classrooms With Different Number of Books Read								
0 book	1	10.65	--	--	0	0.00	--	--
1 book	6	49.21	--	--	14	57.84	--	--
2 books	3	30.72	--	--	3	14.06	--	--
3 books	1	9.42	--	--	3	20.17	--	--
4 books	0	0	--	--	1	7.93	--	--
Who Leads the Book-Reading Session (% of Classrooms)								
Primary Teacher	7	65.53	--	--	13	60.68	--	--
Teacher Assistant	5	43.89	--	--	12	65.23	--	--
Other	0	0.00	--	--	2	11.96	--	--
Time Spent on Full-Group Book Reading (% of Classrooms)								
Fewer than 5 minutes	1	10.65	--	--	4	13.95	--	--
5-10 minutes	10	89.35	--	--	13	64.07	--	--
More than 10 minutes	0	0	--	--	4	21.98	--	--
<b>Total Number of Book-Reading Sessions Observed</b>								
Total Number of Sessions	47	1.32	0.19	0 -6	71	1.25	0.13	0 -4
Percentage of Classrooms With Sessions Observed								
0 session	12	23.29			14	21.69		
1 session	22	46.61			36	47.44		
2 sessions	7	15.89			14	17.45		
3 sessions	4	8.82			6	11		
4 sessions	1	2.69			1	2.42		
6 sessions	1	2.69			0	0.00		

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.24. Descriptions of ELLE Book-Reading Activities with English Language Learners (ELLs), by Concentrations of ELLs**

Items	High Concentrations of ELLs				Low Concentrations of ELLs			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
<b>Languages Adults Used When Reading to ELLs (% of Classrooms)</b>								
English	21	64.22	--	--	49	84.34	--	--
Spanish	7	21.96	--	--	0	0.00	--	--
Other/bilingual	3	7.68	--	--	4	7.50	--	--
NA	3	6.14	--	--	4	8.16	--	--
<b>Time Spent on Full-Group Book Reading to ELLs in English (% of Classrooms)</b>								
Fewer than 5 Minutes	4	11.76	--	--	18	37.54	--	--
5-10 Minutes	16	56.58	--	--	22	43.75	--	--
More than 10 Minutes	6	22.24	--	--	6	8.26	--	--
NA	4	9.42	--	--	4	10.45	--	--
<b>Time Spent on Individual or Small-Group Book Reading to ELLs in English (% of Classrooms)</b>								
Fewer than 5 Minutes	9	35.09	--	--	22	49.05	--	--
5-10 Minutes	10	37.03	--	--	11	23.08	--	--
More than 10 Minutes	1	5.17	--	--	2	1.80	--	--
NA	7	22.71	--	--	12	26.07	--	--
<b>Full-Group Book Reading in Spanish or Other Language (Non-English or Bilingual)</b>								
Number of Sessions Observed	47	0.29	0.10	0-3	71	0.00	0.00	0 -0
Percentage of Classrooms with Sessions Observed								
0 Sessions	38	76.67	--	--	71	100.00	--	--
1 Session	8	20.64	--	--	0	0.00	--	--
3 Sessions	1	2.69	--	--	0	0.00	--	--
Number of Books Read	9	1.10	0.26	0-3	0	0.00	.	
Percentage of Classrooms with Different Number of Books Read								
0 Books	1	13.05	--	--	0	0.00	--	--
1 Book	7	75.40	--	--	0	0.00	--	--
3 Books	1	11.54	--	--	0	0.00	--	--
<b>Who Leads the Book-Reading Session (% of Classrooms)</b>								
Primary Teacher	7	80.37	--	--	0	0.00	--	--
Teacher Assistant	2	19.63	--	--	0	0.00	--	--
Other	0	0.00	--	--	0	0.00	--	--

Table II.24 (continued)

Items	High Concentrations of ELLs				Low Concentrations of ELLs			
	N	Weighted Mean/ Percentage	Standard Error	Range	N	Weighted Mean/ Percentage	Standard Error	Range
Time Spent on Full-Group Book Reading (% of Classrooms)								
Fewer than 5 Minutes	1	13.05	--	--	0	0.00	--	--
5-10 Minutes	8	86.95	--	--	0	0.00	--	--
More than 10 Minutes	0	0	--	--	0	0.00	--	--
<b>Individual or Small-Group Book Reading in Spanish or Other Language (Non-English or Bilingual)</b>								
Number of Sessions Observed	47	0.12	0.06	0-1	71	0.04	0.03	0 -1
Percentage of Classrooms with Sessions Observed								
0 Sessions	42	88.15	--	--	69	95.80	--	--
1 Session	5	11.85	--	--	2	4.20	--	--
Number of Books Read	5	1.51	0.29	0-4	2	1.00	0.00	1-1
Percentage of Classrooms with Different Number of Books Read								
0 Books	1	25.69	--	--	0	0.00	--	--
1 Book	3	48.61	--	--	2	100.00	--	--
4 Books	1	25.69	--	--	0	0.00	--	--
Who Leads the Book-Reading Session (% of Classrooms)								
Primary Teacher	4	87.05	--	--	1	29.02	--	--
Teacher Assistant	1	25.69	--	--	1	70.98	--	--
Other	1	12.95	--	--	0	0.00	--	--
Time Spent on Individual or Small-Group Book Reading (% of Classrooms)								
Fewer than 5 Minutes	1	25.69	--	--	0	0.00	--	--
5-10 Minutes	4	74.31	--	--	2	100.00	--	--
More than 10 Minutes	0	0	--	--	0	0.00	--	--

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.

**Table II.25. Descriptions of ELLE Reading Along or Alone Time and Writing Activities, by Concentrations of ELLs**

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	N	Weighted Percentage of Classrooms	N	Weighted Percentage of Classrooms
<b>Reading Along or Alone Time</b>				
Time is set aside for children to look at books alone or with a friend	37	74.08	61	72.97
<b>Writing Activities</b>				
Children include writing in their play	19	54.04	27	44.15
Children attempting to write letters or words	25	68.07	31	51.75
An adult modeled writing in English	11	35.44	29	46.37
An adult modeled writing in Spanish	2	7.34	1	1.23
An adult modeled writing in another language	1	1.96	1	1.43

Source: UPCOS-3 Winter 2010 Classroom Observations.

Note: ELLE = Early Language and Literacy Environment.



### III. BILINGUAL TEACHER BEHAVIOR RATING SCALE (B-TBRS)

The Bilingual Teacher Behavior Rating Scale (B-TBRS; Landry et al. 2001) is an adaptation of the Teacher Behavior Rating Scale (TBRS; Landry et al. 2001), an observational tool designed to measure the quantity (usually assessed by the frequency) and quality of instructional practices in early childhood classrooms with an emphasis on language and literacy instruction. The TBRS was developed to be “sensitive to classroom environments and instructional practices that promote the skills important for school readiness,” as well as “to ensure that the instructional areas measured were predictive of change in children’s literacy and language skills, thus providing documentation that improvement in teaching practices would promote improvements in children’s academic readiness.” (Halle et al. 2010). The bilingual version examines the quantity and quality of instructional practices in relation to the language used. Observers rated both teacher behaviors and the learning environment. A three-point scale (rarely, sometimes, often) or a count of different types of activities or opportunities for learning was used to assess quantity and a four-point scale (low, middle-low, middle-high, and high) was used to assess quality.

The B-TBRS has nine scales: (1) General Teaching Classroom Community/Sensitivity Behaviors, (2) Lesson Plans and Assessments, (3) Centers, (4) Book Reading Behaviors (5) Print and Letter Knowledge, (6) Written Expression, (7) Phonological Awareness, (8) Oral Language Use, and (9) Team Teaching. The Book Reading Behaviors, Print and Letter Knowledge, Written Expression, Phonological Awareness, and Oral Language Use scales include ratings in at least two languages (English plus Spanish); that is, the quantity and quality of the practice in English is rated and then the same is done for Spanish. In addition, the B-TBRS collects information about the number of staff and children in the room, the length of the observation, and the activities observed.

In previous research, five of the B-TBRS scales have been found to be associated with child outcomes. The authors (April Crawford, personal communication, November 18, 2009) report that the General Teaching Classroom Community/Sensitivity, Oral Language, Book Reading Behaviors, and Phonological Awareness scales show moderate bivariate relationships with child outcomes (unadjusted Pearson  $r > .40$  for related outcomes with both the TBRS and the B-TBRS in separate studies). In addition, the Print and Letter Knowledge scale of the TBRS demonstrated moderate associations ( $r > .35$ ) with child outcomes. Researchers have not found significant relationships between child outcomes and the scales for Lesson Plans and Assessments, Written Expression, Team Teaching, or Centers (April Crawford, personal communication, November 18, 2009).

For this study of LAUP, we included the B-TBRS scales on Classroom Community/Sensitivity, Oral Language Use, Book Reading Behaviors, Print and Letter Knowledge, Written Expression, Phonological Awareness, Team Teaching, and an adapted version of Centers<sup>6</sup>. Although not previously used in FCCs, the majority of the items in the subscales used in our study are appropriate for that setting; possible exceptions include one item in the Print and Letter Knowledge scale about the use of a letter/word wall and a few items in the original Centers scale about furniture arrangement and use of space. We dropped the items about the use of space<sup>7</sup> from the scale for both

<sup>6</sup> In this context, “Centers” refers to the activity structure that provides free choice learning experiences for children.

<sup>7</sup> The items excluded from the Centers scale of the B-TBRS in the UPCOS version are: (1) Centers have clear boundaries that allow children to easily distinguish between learning centers; (2) Tables in classrooms are arranged in a manner that support centers; (3) Centers provide space that encourages child interaction.

Centers and FCCs in order to provide more comparable measurement across settings and keep the focus of the measurement on interactive processes and activities. We added items to the scale to examine more carefully how teachers support children during center time. The authors approved the addition of items that examine how teachers:

- Use parallel language, questions, and responsive language around themes
- Coach peers to increase interactions and peer modeling
- Foster rich sociodramatic play
- Group children to increase time spent in interaction with peers speaking English

One of the authors of the TBRS (April Crawford) and the author of the additions to the B-TBRS (Sabrina Sanchez) trained our field observers in person for four days. Additional remote training discussing issues and questions via phone and testing of field reliability continued for three more days. In order to pass field reliability, observers needed to reach a difference score pre-approved by the authors of the measures. Initially, field average scale means were within .58 for quality and .45 for quantity with the trainers. The three additional days were spent training on the measures to reach greater inter-rater reliability. All observers passed reliability standards on the first observation. Drift scores (that is, reliability checks in the field to ensure scoring was still on target) with QA observers were 96 percent.

## A. Procedures

Sixty classrooms were observed using the B-TBRS at the same time that another observer was completing observations of the CLASS and ELLE in the same classroom. The procedure for the observer using the B-TBRS involved taking extensive notes throughout a half-day session (2.5 hours) that included literacy instruction. At the end of the observation, the observer used the notes to rate the different areas covered by the scales.

To analyze these observations, we first constructed each scale within the B-TBRS as specified by the developer and evaluated the reliability of these measures with this diverse sample. Then we examined each scale's contribution of the different variables to the construct (that is, the strength of the factor loadings and the item to total correlations).

We conducted exploratory factor analyses to examine the empirical factor structure—that is, what solution best describes the variance present in the data. The minimum sample size for identifying a stable factor solution is 50 to 60 cases (Arrindell and van der Ende 1985; MacCallum et al. 1999). However, obtaining a stable factor structure with this minimal number of cases required that the level of communality be high and that few factors with multiple items loading on them were retained (MacCallum et al. 1999; Preacher and MacCallum 2002). We used a principal component analysis and the Kaiser criterion (eigenvalues greater than one) with a varimax rotation. We used the scree test to look for breaks and discontinuities in the pattern of eigenvalues that suggested that a smaller number of factors is more optimal for explaining the data (Ford et al. 1986). We used an orthogonal varimax rotation to maximize the differences between factors and increase interpretability of the results. We also limited the number of factors to the number of scales defined by the developer to determine if the factor structure was replicated in our sample. Because many items were rated separately on quantity and quality, we created the mean of quantity and quality for each item to use in the factor analysis.



## B. B-TBRS Results

Quantity and quality scores were available for most of the items in the B-TBRS. Quantity scores usually represent frequency and range from 1 (rarely) to 3 (often). The quality scores range from 1 (low) to 4 (high). The developer recommends creating the mean of the quantity and the mean of the quality and then taking the mean or sum of those two scores for the scale score. Previous studies (Preschool Curriculum Evaluation Research Consortium 2008) with the TBRS used the sum of the quantity and quality in reporting results, and we followed this approach for the overall subscale scores. The quantity and quality scores were highly correlated ( $r > .70$  except for the Written Expression scores<sup>8</sup>) (Tables 3.1–3.8). In Table 3.9 we present the weighted means separately for the quantity and quality scores, and then provide the overall subscale scores. The possible range for the subscale score is 1 to 7. A score of 4 usually represents medium–low quality with quantity “sometimes.”

## C. B-TBRS Item Level Results

### 1. General Teaching Behaviors—Classroom Community

While more than half of classrooms (60 percent) oriented children to their expectations of classroom using rules and routines, they were split on quality ratings with 43 percent in the low to medium–low categories and 57 percent in the medium–high to high categories. Despite this, 81 percent of classrooms fell in the low to medium–low-quality range for encouraging children to work with the teacher in establishing these rules and routines. Classrooms fared better for the remaining Classroom Community characteristics: 79 percent of classrooms were in the medium–high to high-quality range for space being arranged in a way that allows children to move around the room safely and 74 percent had a medium–high to high rating for designing a layout that allows children to get materials on their own (clearly labeled shelves, learning materials on children’s eye level, and clearly labeled personal space for each child’s belongings). Finally, 69 percent of classrooms were medium–high to high quality for valuing children by displaying their work around the room. (Table 3.10). High quality is defined as having a display that is unique, personal, or individualized instead of generic.

### 2. General Teaching Behaviors—Sensitivity Behaviors

The majority of classrooms (63 percent) often have teachers who use Sensitivity Behaviors when responding to children’s signals and needs. The quality of such action is medium–high to high in 68 percent of classrooms. To be considered high quality, a teacher’s typical response and supportive language must be warm and positive, the teacher should get on the child’s eye level, and use language to show that they support the child’s interest and cognitive needs. Additionally, the teacher should provide extra support or adjust the activity when needed. Nearly 65 percent of classrooms also often have teachers who use nonspecific praise and encouragement that acknowledges positive behavior or provides reinforcement. The quality for this indicator is medium–high to high for most classrooms (72 percent) (Table 3.11). High-quality classrooms reflect more intense warmth in all praise or encouragement.

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<sup>8</sup> For Written Expression in English, correlations between quantity and quality was .68 and .49 for Spanish .

Teachers should improve the quality of engaging children in literacy, language, and/or math activities using varied and playful techniques that make cognitive activities appealing, as 65 percent of classrooms were low to medium–low quality for this indicator (Table 3.11).

In the majority of classrooms (81 percent), teachers often respond to children’s comments and questions. Teachers who show acceptance by responding consistently to all children was present in 88 percent of the classrooms (Table 3.11).

Language that is negative in content or tone occurred rarely in 95 percent of classrooms, and classrooms were rated positively with respect to the tone. . Classrooms often (63 percent) had teachers who used positive, nonverbal behaviors such as getting on the child’s eye level, smiling, and using affectionate touch. Nearly all classrooms (96 percent) had teachers who rarely used negative nonverbal behaviors such as rough touching, harsh physical control, frowning, or negative affect. All classrooms were rated as medium–high to high quality for absence of negative nonverbal behaviors (Table 3.11).

### 3. Centers

Although in 87 percent of the classrooms, teachers devoted instructional time to working in centers (the section of the day devoted to free choice time for children), on average, these items were rated with low to medium–low quality. More than half the classrooms were rated as low or medium–low quality for each of the following indicators: number of centers that cover critical learning activities and learning objectives linked to the theme (70 percent); coaches children how to interact with peers in ways that support understanding of the learning goals (68 percent); materials, activities, and objectives follow the current theme and were linked to learning goals (65 percent); prepares children with specific information and discussion as to how to use centers (66 percent); and increases children’s understanding of the theme or learning goals by talking about what the child is doing, asking questions, and responding to what the child says (57 percent). However, for each indicator, a quarter or more of the classrooms (24–40 percent) were ranked as medium–high quality (Table 3.12).

The quality of the support for sociodramatic play in English was also limited in 65 percent of the classrooms (ranked low to medium–low quality). Almost a quarter of classrooms were ranked medium–high quality while only 11 percent were ranked high in fostering rich sociodramatic play experiences by providing varied props, modeling roles and associated vocabulary, prompting children to take on roles, and extending representational play with questions and comments. The quality of support for sociodramatic play in Spanish or dual language was limited in even more classrooms (93 to 99 percent of the classrooms ranked low to medium–low quality) (Table 3.12).

### 4. Book Reading Behaviors

Ninety percent of the classrooms observed with the B-TBRS had at least one book read with at least one child. Twenty percent of the teachers shared books with children in small group settings with 5 or fewer children, while approximately 30 percent of teachers read books to children in group sizes of 15 or greater.

Prior to a read aloud, in nearly half (48 percent) of classrooms, teachers rarely introduced the book through display of the book cover, reading of title, author, or illustrator, while 46 percent of teachers often did so. Some discussion about one or more of these book features was rarely encouraged by teachers in 77 percent of classrooms. Additionally, in 74 percent of classrooms,

teachers rarely discussed vocabulary words prior to a read aloud, and the quality of such discussion was low in 64 percent of classrooms. In 87 percent of classrooms, teachers rarely combined vocabulary words with pictures or objects when preparing for or during a read aloud, and the quality was low in the vast majority of classrooms (88 percent) (Table 3.13).

In over half of the classrooms (57 percent), teachers often asked open ended questions to encourage discussion of facts in the book, details, plot, characters, topics, or rhyming. To be rated as high quality for this indicator, teachers had to take time to involve children in reading, discussion, and expression of ideas. Furthermore, teachers should have asked children to consider their own experiences and emotions. Over half (60 percent) of the classrooms displayed these qualities and were rated in the medium–high- to high-quality range. (Table 3.13).

Although in a quarter of classrooms teachers often took time to involve children in activities or discussions that extended books that were read, this occurred rarely in 61 percent of classrooms. Of classrooms in which teachers involved children in these activities, 73 percent were rated as medium–high to high quality and no classrooms as low quality (Table 3.13).

## 5. Print and Letter Knowledge Items—English

As shown in Table 3.14, classrooms showed both strengths and weaknesses for the quality of Print and Letter Knowledge items in English. The majority of classrooms (69 percent) had a medium–high- to high-quality rating for engaging children in name and theme- or topic-related activities that promote letter/word knowledge, associating names of letters with shapes, and making sound/letter matches. Here, quality is based on typical engagement. Over half (64 percent) of classrooms were medium–high- to high-quality for involving children in a range of activities that promote Print and Letter Knowledge. To determine quality, observers based their rating on typical engagement across the domains of promoting letter/word knowledge, comparing and discussing same/different, and discussing concepts about print. Nearly half of the classrooms (49 percent) were rated medium–high to high for having an environment and centers with a theme or topic related to print. High quality includes print that is functional (not just used for decoration) and created with children during shared writing activities.

There were many areas where English could improve Print and Letter Knowledge items. In the majority of classrooms (76 percent), teachers rarely provided opportunities for children to compare and discuss same/different in letters, names, and words, although the quality of such opportunities was medium–high to high for about two-thirds of classrooms providing these opportunities at least sometimes. None of these classrooms were rated as low quality. Similarly, in 89 percent of classrooms, teachers rarely discussed concepts about print, although for those that did at least sometimes, the quality was medium–high to high for most (76 percent). Providing a literacy connection (books/extenders) in all centers that were linked to a theme or topic was low to medium–low in quality for 78 percent of classrooms. The quality of a letter wall being used as an interactive teaching tool was also low to medium–low in 84 percent of classrooms (Table 3.14), indicating that most classrooms may not have pictures to go with printed words, be sloppy or difficult to read, have a poor quality activity organized around it, only display children’s names, or not have pictures with every word.

## 6. Written Expression Items

Classrooms need to work on areas related to Written Expression. In 63 percent of classrooms using English, teachers rarely modeled writing (e.g., experience charts, morning message, news of

the day, child dictations) and the quality of modeling was low to medium–low in 43 percent of classrooms where teachers modeled writing at least sometimes. Teachers in almost all (99 percent) of classrooms where Spanish was in use rarely modeled writing—it was observed in only one classroom—and the quality was medium–low. A variety of opportunities and materials for children to engage in writing (e.g., journals, response to literature, etc.) were rarely provided (zero to two opportunities) in 90 percent of classrooms. The quality of the opportunities and materials for engagement in writing was low to medium–low for 80 percent of classrooms and most (74 percent) only had zero to two centers (excluding the writing center) where writing materials were provided. The quality of these centers was low to medium–low for 75 percent of classrooms; the centers only had plain paper and pencils (Table 3.15).

## 7. Oral Language Use

While classrooms were split between high- and low-quality Oral Language Use indicators in English, classrooms consistently ranked on the low end for all Oral Language Use indicators in Spanish (Table 3.16). One of the strengths for using English is that 78 percent of classrooms had teachers that often spoke clearly and used grammatically correct sentences. Here, the quality was rated as medium–high to high for 78 percent of classrooms. In comparison, 56 percent of classrooms rarely had teachers that spoke clearly and used grammatically correct sentences in Spanish, and the quality was low to medium–low for 55 percent of those classrooms. An additional strength in terms of English use was that in 86 percent of classrooms, teachers sometimes or often used thinking questions or comments to support children’s thinking or activity of interest. The quality of the thinking questions or comments in English was medium–high to high for 52 percent of classrooms. In contrast, thinking questions or comments were rarely used by teachers in 74 percent of classrooms that used Spanish and the quality was low in 69 percent of those classrooms and medium–low in 19 percent.

Teachers in over half (54 percent) of classrooms using English often encouraged children’s use of language throughout the observation period irrespective of the type of activity. To be considered high quality for this indicator, the teacher had to encourage more of the child’s thoughts rather than being overly directive or structured in their conversations. Sixty percent of teachers that use English fell into the medium–high- to high-quality range. However, encouragement of children’s use of Spanish rarely happened in 72 percent of classrooms, and in 72 percent of classrooms the quality was low. In 56 percent of classrooms, children were often engaged in conversations that involved the child and teacher taking multiple turns (three to five exchanges) in English. Sixty-six percent of classrooms were rated as medium–high to high quality for these sustained conversations. Conversely, 69 percent of classrooms rarely engaged children in multiple turn conversations in Spanish and the quality was low to medium–low in 86 percent of classrooms (Table 3.16).

There were areas where classrooms could improve their Oral Language Use in both English and Spanish. Almost 75 percent of classrooms were low or medium–low quality in modeling for children expressing their ideas in complete sentences in English. The majority of the classrooms (91 percent) were rated as low quality with an additional 6 percent as medium–low quality in modeling Spanish. Modeling in Spanish rarely happens in 93 percent of the classrooms, compared to 59 percent where modeling English rarely happens. The use of both English and Spanish to scaffold language (through the use of rich labels, descriptions, and questions to expand children’s vocabulary) and to provide links to encourage higher level thinking were rated as low to medium–low quality. Twenty percent of classrooms were low quality and 41 percent were medium–low quality in English, while in Spanish 75 percent of classrooms were low quality and 14 percent were medium–low quality. The amount of scaffolding also differs across the languages as this was used sometimes or often in

English in 78 percent of classrooms, but was rarely used in Spanish (78 percent of classrooms). Finally, teachers rarely related previously learned words or concepts to an activity in English in half of classrooms and in Spanish in 94 percent of the classrooms. The quality was low to medium–low in English in 65 percent of classrooms and low in Spanish in 94 percent of classrooms. (Table 3.16).

## 8. Developer-Defined Scales

We calculated the scores from B-TBRS subscales on Classroom Community, Sensitivity, Oral Language Use, Book Reading Behaviors, Print and Letter Knowledge, Written Expression, Phonological Awareness, Team Teaching, and an adapted version of Centers. The reliability of all the subscale scores is adequate except Phonological Awareness ( $\alpha > .70$ ). The reliability of the quantity scores is low, particularly for Written Expression, Centers, and Print and Letter Knowledge (the coefficient alpha is below .60, ranging from a -.06 to .56 for the latter three scales). With the exception of Written Expression, Classroom Community, Team Teaching, and many of the Spanish quality estimates, the reliability estimates for the quality scores were greater than .70 (Table 3.9).

We did not compute a score for the Phonological Awareness scale. This scale included only activities that occur without print being used and only two of the items had any variance in the ratings of the LAUP classrooms. The remainder of the items included behaviors/activities that did not occur in the classroom and received the minimum ratings (1) for quantity and quality. The application of a minimum rating for quality when something is not observed decreased the reliability and scale estimates for most of the Spanish scales scores, since classrooms without Spanish would be scored at 1 on both quantity and quality. In future use of the B-TBRS, the inclusion of a “not applicable” category may be needed.

The Classroom Community/Sensitivity Behaviors subscales included items about how the teacher builds the Classroom Community by using rules and routines, designing the physical space, and items about the sensitivity of the teacher to children’s verbal and nonverbal communication. The Sensitivity Behaviors and the Classroom Community were the strongest scores for LAUP classrooms on the B-TBRS (5.46 and 5.06 respectively) (Table 3.9). For both scales, the mean quantity was close to often (mean  $> 2.5$ ) and the mean quality was between medium–low and medium–high (Table 3.9). Mean scores were slightly lower for FCCs compared with center-based classrooms and lower for classrooms with a high concentration of ELLs compared with low concentration classrooms (Tables 3.17 and 3.18).

English Oral Language Use and English Team Teaching also had mean scores greater than four (4.58 and 4.68 respectively) (Table 3.9). The Oral Language Use scale rates how often and how well the teacher models and scaffolds language, makes connections among words and concepts, encourages children’s language and engages in sustained conversations. The mean quality rating in English was between medium low and medium high (2.39) overall (Table 3.9). FCCs had lower English Language Use scores, but slightly higher Spanish Oral Language scores (Table 3.17).

The Team Teaching scale rates how well and how often the assistant teacher provides instruction, scaffolds children’s languages, supports behavior regulation, and improves the teaching environment. On the English Team Teaching scale, the quality rating was greater than the midpoint score suggesting high quality (2.58), but this reflects the higher scores obtained in centers (Table 3.9). The mean English Team Teaching quality scores was 2.86 in center and 2.03 in FCCs (Table 3.17).

The mean for each of the remaining scores was less than 4, reflecting low to medium–low quality and rarely to sometimes quantity (Table 3.9). Overall, the mean scores were generally slightly greater in Centers than FCCs, with the exception of the Spanish Oral Language Use and the Book Reading Behaviors (Table 3.17). In classrooms with a high concentration of ELLs, the mean scores for Spanish Oral Language Use were greater than in low ELL concentration classrooms. Overall, scores tended to be the same or slightly greater in low ELL concentration than in high ELL concentration classrooms. The Spanish/dual Print and Letter Knowledge is an exception, with slightly higher scores found in high ELL concentration classrooms (Table 3.18). The sample size for high concentration classrooms was only 19.

**Exploratory Factor Analysis.** We wanted to examine whether the factor structure would replicate with our sample, but too many items had to be excluded due to no variance and our sample size was not adequate. We attempted exploratory factor analysis of the B-TBRS with a subset of items including the Classroom Community, Sensitive Behaviors, and English Oral Language Use; however the small sample size and limited variance meant that we were unable to estimate a reliable model.

**Table III.1. Correlations Between B-TBRS Oral Language Use Scores**

	English			Spanish		
	Quantity Score	Quality Score	Subscale Score	Quantity Score	Quality Score	Subscale Score
<b>English</b>						
Quantity score	--					
Quality score	0.89	--				
Subscale score	0.96	0.98	--			
<b>Spanish</b>						
Quantity score	0.28	0.2	0.24	--		
Quality score	0.32	0.3	0.32	0.94	--	
Subscale score	0.31	0.26	0.29	0.98	0.99	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.2. Correlations Between B-TBRS Classroom Community Scores**

	Quantity Score	Quality Score	Subscale Score
Quantity score	--		
Quality score	0.74	--	
Subscale score	0.96	0.9	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.3. Correlations Between B-TBRS Sensitivity Behaviors Scores**

	Quantity Score	Quality Score	Subscale Score
Quantity score	--		
Quality score	0.77	--	
Subscale score	0.9	0.97	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.4. Correlations Between B-TBRS Centers Scores**

	English			Spanish		
	Quantity Score	Quality Score	Subscale Score	Quantity Score	Quality Score	Subscale Score
<b>English</b>						
Quantity score	--					
Quality score	0.85	--				
Subscale score	0.96	0.97	--			
<b>Spanish/Dual</b>						
Quantity score	1	0.85	0.96	--		
Quality score	0.85	0.96	0.95	0.85	--	
Subscale score	0.97	0.94	0.99	0.97	0.96	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.5. Correlations Between B-TBRS Book-Reading Behaviors Scores**

	Quantity Score	Quality Score	Subscale Score
Quantity score	--		
Quality score	0.93	--	
Subscale score	0.99	0.98	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.



Table III.6. Correlations Between B-TBRS Print and Letter Knowledge Scores

	English			Spanish		
	Quantity Score	Quality Score	Subscale Score	Quantity Score	Quality Score	Subscale Score
<b>English</b>						
Quantity score	--					
Quality score	0.78	--				
Subscale score	0.92	0.96	--			
<b>Spanish/Dual</b>						
Quantity score	0.49	0.42	0.48	--		
Quality score	0.28	0.33	0.33	0.7	--	
Subscale score	0.41	0.4	0.43	0.9	0.94	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

Table III.7. Correlations Between B-TBRS Written Expression Scores

	English			Spanish		
	Quantity Score	Quality Score	Subscale Score	Quantity Score	Quality Score	Subscale Score
<b>English</b>						
Quantity score	--					
Quality score	0.68	--				
Subscale score	0.86	0.96	--			
<b>Spanish/Dual</b>						
Quantity score	0.69	0.31	0.48	--		
Quality score	0.53	0.85	0.8	0.49	--	
Subscale score	0.69	0.72	0.76	0.82	0.91	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.8. Correlations Between B-TBRS Team Teaching Scores**

	English			Spanish		
	Quantity Score	Quality Score	Subscale Score	Quantity Score	Quality Score	Subscale Score
<b>English</b>						
Quantity score	--					
Quality score	0.84	--				
Subscale score	0.95	0.97				
<b>Spanish/Dual</b>						
Quantity score	0.33	0.25	0.3	--		
Quality score	0.63	0.74	0.72	0.78	--	
Subscale score	0.51	0.53	0.55	0.94	0.95	--

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

Table III.9. Weighted Descriptive Statistics for B-TBRS Scores

	Mean	Standard Error	Cronbach's Alpha
<b>Oral Language Use</b>			
English			
Quantity score	2.18	0.06	0.68
Quality score	2.39	0.08	0.80
Subscale score	4.58	0.14	0.93
Spanish			
Quantity score	1.29	0.06	0.91
Quality score	1.40	0.07	0.89
Subscale score	2.69	0.13	0.97
Classroom Community			
Quantity score	2.62	0.07	0.68
Quality score	2.44	0.04	0.47
Subscale score	5.06	0.11	0.85
Sensitivity Behaviors			
Quantity score	2.56	0.05	0.80
Quality score	2.91	0.08	0.77
Subscale score	5.46	0.12	0.87
<b>Centers</b>			
English			
Quantity score	1.74	0.08	0.44
Quality score	1.95	0.10	0.75
Subscale score	3.69	0.18	0.91
Spanish/Dual			
Quantity score	1.74	0.08	0.44
Quality score	1.71	0.07	0.64
Subscale score	3.46	0.15	0.91
Book Reading Behaviors			
Quantity score	1.84	0.07	0.79
Quality score	1.74	0.06	0.76
Subscale score	3.58	0.13	0.96
<b>Print and Letter Knowledge</b>			
English			
Quantity score	1.79	0.05	0.56
Quality score	1.95	0.07	0.71
Subscale score	3.74	0.11	0.87
Spanish/Dual			
Quantity score	1.11	0.02	0.01
Quality score	1.15	0.02	0.23
Subscale score	2.26	0.04	0.81
<b>Written Expression</b>			
English			
Quantity score	1.30	0.04	-0.10
Quality score	1.68	0.07	0.30
Subscale score	2.98	0.10	0.82
Spanish/Dual			
Quantity score	1.16	0.03	-0.06
Quality score	1.37	0.04	0.25
Subscale score	2.52	0.06	0.70

Table III.9 (continued)

	Mean	Standard Error	Cronbach's Alpha
<b>Team Teaching</b>			
English			
Quantity score	2.10	0.09	0.84
Quality score	2.58	0.12	0.94
Subscale score	4.68	0.19	0.92
Spanish			
Quantity score	1.36	0.07	0.94
Quality score	2.00	0.07	0.84
Subscale score	3.36	0.13	0.87
<b>Sample Size</b>	<b>60</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.10. Weighted Frequency of B-TBRS Classroom Community Items**

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
Children for the expectations in the classroom through established rules and routines	1.33	38.39	60.28	4.00	39.20	45.46	11.34
Children are encouraged to work with the teacher in establishing rules and routines	56.14	27.59	16.26	48.43	32.31	16.61	2.65
Space is arranged and organized in a way that allows children to move around the room safely/facilitates interaction with their peers.	2.65	20.67	76.68	2.68	18.52	54.72	24.08
Classroom is laid out so children are able to get materials on their own	4.31	22.38	73.31	5.15	20.93	50.59	23.33
Children’s work is displayed around the room	7.95	23.99	68.06	4.05	26.55	41.99	27.42
<b>Sample Size</b>	<b>59-60</b>			<b>58-60</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.11. Weighted Frequency of B-TBRS Sensitivity Behaviors Items**

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
Teacher uses sensitivity behaviors when responding to children’s signals and needs	1.33	35.95	62.72	4.36	27.86	45.82	21.96
Teacher provides guidance that encourages children to regulate their behavior in learning and problem solving situations vs. teacher “solving the problem.	25.32	32.35	42.33	13.30	31.47	41.48	13.75
Teacher uses non-specific praise and encouragement	2.65	32.58	64.76	2.65	25.87	42.76	28.72
Teacher uses encouragement and positive feedback and provides child(ren) specific information regarding what they are doing well	23.99	40.91	35.10	--	--	--	--
Teacher takes advantage of opportunities to deepen children’s understanding by responding to their questions and comments	18.65	48.18	33.18	19.25	35.45	32.71	12.58
Teacher fails to respond to children’s comments and questions	81.49	18.51	0.00	--	--	--	--
Teacher responds to children’s emotional and affective signals	4.03	45.43	50.54	4.15	32.56	38.14	25.15
Teacher’s response style varies across children; responses to some children show acceptance while some children experience a lack of acceptance	87.99	8.02	3.99	--	--	--	--
Teacher uses language that is negative in content of tone	94.66	5.34	0.00	94.24	5.76	0.00	0.00
Teacher uses positive non-verbal behaviors	5.35	31.88	62.77	--	--	--	--
Teacher uses negative non-verbal behaviors	96.15	1.18	2.67	94.46	5.54	0.00	0.00
Teacher engages children in literacy, language, and math activities using varied and playful techniques	3.99	43.20	52.80	15.69	49.12	24.00	11.19
Teacher Pairs or groups children who are less fluent in English with more fluent peers	100.0	0.00	0.00	--	--	--	--
<b>Sample Size</b>	<b>59-60</b>			<b>55-60</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.12. Weighted Frequency of B-TBRS Centers Items**

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
Provides centers that cover critical learning activities and learning objectives linked to the theme	65.40	11.23	23.37	57.97	11.59	23.70	6.74
Provides materials, activities, and objectives that follow the current theme and are linked to learning goals	--	--	--	36.71	28.02	29.77	5.49
Prepares children to use center materials for learning	--	--	--	28.88	37.05	28.60	5.47
Talks with children about the theme or learning goals	32.57	30.49	36.94	35.38	21.74	40.02	2.86
Coaches children on how to interact with peers in ways that support understanding of the learning goals	53.68	26.09	20.23	55.81	12.53	28.88	2.78
Fosters rich socio-dramatic play experiences (							
English	--	--	--	39.72	24.92	24.33	11.03
Spanish	--	--	--	79.49	13.79	5.35	1.37
Dual	--	--	--	94.50	4.14	1.36	0.00
<b>Sample Size</b>	<b>58</b>			<b>56-58</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

Table III.13. Weighted Frequency of B-TBRS Book Reading Behavior Items

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
Introduces concepts in the books	48.45	5.35	46.21	--	--	--	--
Encourages discussion about one or more of these book features	76.56	20.53	2.91	72.75	11.98	15.27	0.00
Discuss vocabulary words	73.77	17.13	9.10	63.99	18.34	16.17	1.50
Combines vocabulary words	87.31	6.87	5.82	87.83	2.22	9.95	0.00
Uses facial expressions and voice to capture children's attention	18.43	36.46	45.11	17.71	33.55	38.33	10.41
Paces the reading	13.51	32.34	54.15	16.86	33.28	39.16	10.70
Asks questions to encourage discussion of contents	16.40	26.43	57.17	22.39	17.27	52.76	7.58
Takes time to involve children in activities or discussions that extend books	60.60	13.66	25.74	0.00	27.29	51.92	20.79
<b>Sample Size</b>	<b>55-60</b>			<b>21-56</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.



**Table III.14. Weighted Frequency of B-TBRS Print and Letter Knowledge Items**

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
<b>English</b>							
Engages children in name and theme/topic -related activities that promote letter/word knowledge	24.40	47.89	27.72	4.71	26.78	58.75	9.77
Provides opportunities for children to compare and discuss same/different in letters, names, and words	76.36	18.27	5.37	0.00	32.36	54.89	12.75
Discusses concepts about print	89.01	9.65	1.33	12.14	11.69	51.89	24.28
Involves children in a range of activities that promote print and letter knowledge	20.68	63.45	15.87	7.98	27.61	56.93	7.48
Provides a literacy connection (books/extenders) in all centers that are linked to theme/topic	67.22	24.57	8.21	56.40	21.22	18.23	4.16
Provides theme/topic-related print in centers	14.66	35.40	49.94	15.94	35.46	28.13	20.47
Uses letter wall as an interactive teaching tool	26.40	11.04	62.57	36.82	47.02	16.17	0.00
<b>Spanish</b>							
Engages children in name and theme/topic -related activities that promote letter/word knowledge	100.00	0.00	0.00	0.00	31.92	42.89	25.20
Provides opportunities for children to compare and discuss same/different in letters, names, and words	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Discusses concepts about print	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Involves children in a range of activities that promote print and letter knowledge	98.67	1.33	0.00	0.00	28.71	71.29	0.00
Provides a literacy connection (books/extenders) in all centers that are linked to theme/topic	76.97	15.80	7.23	75.88	12.08	10.50	1.54

Table III.14 (continued)

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
Provides theme/topic-related print in centers	97.12	0.00	2.88	94.14	0.00	2.91	2.96
<b>Dual</b>							
Engages children in name and theme/topic -related activities that promote letter/word knowledge	100.00	0.00	0.00	0.00	100.00	0.00	0.00
Provides opportunities for children to compare and discuss same/different in letters, names, and words	97.33	2.67	0.00	0.00	0.00	100.00	0.00
Discusses concepts about print	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Involves children in a range of activities that promote print and letter knowledge	100.00	0.00	0.00	0.00	100.00	0.00	0.00
<b>Sample Size</b>	<b>56-60</b>			<b>0-60</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.15. Weighted Frequency of B-TBRS Written Expression Items**

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
Models writing							
English	62.96	28.73	8.31	3.66	39.76	52.14	4.44
Spanish	98.67	1.33	0.00	0.00	100.00	0.00	0.00
Dual	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Provides children with a variety of opportunities and materials to engage in writing	89.98	7.05	2.98	51.34	29.02	18.29	1.35
Number of centers (excluding the writing center) where writing materials are provided	74.48	18.79	6.72	51.19	23.34	21.35	4.11
<b>Sample Size</b>	<b>60</b>			<b>1-59</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.16. Weighted Frequency of B-TBRS Oral Language Use**

	Quantity			Quality			
	Rarely	Sometimes	Often	Low	Medium-Low	Medium-High	High
<b>English</b>							
Speaks clearly and uses grammatically correct sentences	3.85	18.28	77.87	2.65	19.60	46.53	31.22
Models for children how to express their ideas in complete sentences	58.77	34.51	6.72	54.88	19.84	22.52	2.75
Uses “scaffolding” language (nouns, descriptors, action words, linking concepts)	22.36	36.35	41.29	19.96	41.43	32.90	5.71
Uses “thinking” questions (open-ended, “why,” “how”) or comments to support children’s thinking or activity of interest	14.27	37.62	48.12	10.37	37.63	46.33	5.68
Relates previously learned words/concepts to activity	50.50	29.34	20.16	47.81	17.19	28.24	6.76
Encourages children’s use of language throughout the observation period irrespective of types of activities	17.12	28.47	54.41	20.47	19.52	36.24	23.77
Engages children in conversations that involves child and teacher taking multiple turns (e.g., 3-5 turns)	6.60	37.34	56.06	6.96	27.07	45.57	20.40
<b>Spanish</b>							
Speaks clearly and uses grammatically correct sentences	55.98	23.93	20.08	54.83	3.02	27.24	14.91
Models for children how to express their ideas in complete sentences	92.71	7.29	0.00	90.89	6.01	3.11	0.00
Uses “scaffolding” language (nouns, descriptors, action words, linking concepts)	78.26	14.48	7.26	75.36	13.82	9.28	1.54
Uses “thinking” questions (open-ended, “why,” “how”) or comments to support children’s thinking or activity of interest	74.05	20.14	5.82	69.18	19.00	10.35	1.47
Relates previously learned words/concepts to activity	94.27	1.44	4.29	93.90	0.00	4.58	1.52
Encourages children’s use of language throughout the observation period irrespective of types of activities	71.80	18.17	10.03	71.62	4.58	22.28	1.52
Engages children in conversations that involves child and teacher taking multiple turns (e.g., 3-5 turns)	68.88	23.96	7.16	68.39	17.20	10.06	4.35
<b>Sample Size</b>	<b>56-60</b>			<b>52-60</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.17. Weighted Descriptive Statistics for B-TBRS Scores, by Program Type**

	Center			Family Child Care		
	Mean	Standard Error	Cronbach's Alpha	Mean	Standard Error	Cronbach's alpha
<b>Oral Language Use</b>						
English						
Quantity score	2.21	0.07	0.65	2.13	0.09	0.70
Quality score	2.47	0.12	0.80	2.24	0.10	0.80
Subscale score	4.68	0.19	0.97	4.37	0.18	0.87
Spanish						
Quantity score	1.25	0.07	0.90	1.37	0.10	0.93
Quality score	1.39	0.10	0.88	1.42	0.11	0.90
Subscale score	2.63	0.16	0.98	2.79	0.21	0.97
Classroom Community						
Quantity score	2.73	0.08	0.55	2.39	0.13	0.77
Quality score	2.53	0.05	0.25	2.26	0.08	0.49
Subscale score	5.27	0.12	0.84	4.65	0.19	0.84
Sensitivity Behaviors						
Quantity score	2.60	0.06	0.81	2.47	0.07	0.80
Quality score	2.99	0.10	0.79	2.74	0.10	0.73
Subscale score	5.59	0.16	0.88	5.21	0.16	0.85
<b>Centers</b>						
English						
Quantity score	1.74	0.11	0.48	1.75	0.12	0.48
Quality score	2.05	0.14	0.73	1.74	0.12	0.76
Subscale score	3.79	0.24	0.93	3.50	0.23	0.94
Spanish/Dual						
Quantity score	1.74	0.11	0.48	1.75	0.12	0.48
Quality score	1.77	0.10	0.67	1.61	0.10	0.66
Subscale score	3.50	0.20	0.91	3.36	0.21	0.94
Book-Reading Behaviors						
Quantity score	1.82	0.09	0.74	1.88	0.11	0.84
Quality score	1.71	0.07	0.67	1.80	0.10	0.82
Subscale score	3.53	0.17	0.97	3.68	0.21	0.95
<b>Print and Letter Knowledge</b>						
English						
Quantity score	1.86	0.06	0.40	1.65	0.07	0.70
Quality score	2.04	0.10	0.72	1.78	0.08	0.68
Subscale score	3.90	0.15	0.87	3.43	0.14	0.87

Table III.17 (continued)

	Center			Family Child Care		
	Mean	Standard Error	Cronbach's Alpha	Mean	Standard Error	Cronbach's alpha
Spanish/Dual						
Quantity score	1.13	0.03	-0.08	1.07	0.03	0.14
Quality score	1.16	0.03	0.28	1.12	0.03	0.15
Subscale score	2.30	0.05	0.84	2.19	0.05	0.74
<b>Written Expression</b>						
English						
Quantity score	1.36	0.06	-0.21	1.19	0.04	-0.49
Quality score	1.79	0.10	0.17	1.45	0.09	0.37
Subscale score	3.15	0.15	0.79	2.63	0.11	0.80
Spanish/Dual						
Quantity score	1.21	0.04	-0.22	1.05	0.03	0.00
Quality score	1.45	0.06	0.13	1.19	0.05	0.30
Subscale score	2.66	0.09	0.67	2.25	0.07	0.51
<b>Team Teaching</b>						
English						
Quantity score	2.30	0.11	0.81	1.70	0.15	0.81
Quality score	2.86	0.15	0.92	2.03	0.18	0.94
Subscale score	5.16	0.24	0.87	3.73	0.32	0.95
Spanish						
Quantity score	1.36	0.08	0.91	1.34	0.13	0.98
Quality score	2.14	0.08	0.82	1.74	0.13	0.86
Subscale score	3.50	0.14	0.90	3.08	0.24	0.86
<b>Sample Size</b>	<b>34</b>			<b>26</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales.

**Table III.18. Weighted Descriptive Statistics for B-TBRS Scores, by ELL Concentration**

	High Concentrations of ELLs			Low Concentrations of ELLs		
	Mean	Standard Error	Cronbach's Alpha	Mean	Standard Error	Cronbach's Alpha
<b>Oral Language Use</b>						
<b>English</b>						
Quantity score	2.16	0.08	0.59	2.21	0.07	0.67
Quality score	2.28	0.13	0.78	2.49	0.09	0.78
Subscale score	4.44	0.21	0.86	4.70	0.16	0.94
<b>Spanish</b>						
Quantity score	1.51	0.11	0.91	1.17	0.05	0.89
Quality score	1.63	0.13	0.87	1.28	0.08	0.89
Subscale score	3.14	0.23	0.97	2.45	0.13	0.97
<b>Classroom Community</b>						
Quantity score	2.52	0.12	0.70	2.69	0.09	0.65
Quality score	2.44	0.07	0.33	2.47	0.05	0.41
Subscale score	4.96	0.18	0.90	5.16	0.13	0.81
<b>Sensitivity Behaviors</b>						
Quantity score	2.49	0.09	0.80	2.61	0.05	0.78
Quality score	2.84	0.16	0.82	2.97	0.07	0.74
Subscale score	5.33	0.24	0.90	5.58	0.11	0.82
<b>Centers</b>						
<b>English</b>						
Quantity score	1.68	0.14	0.57	1.79	0.10	0.38
Quality score	1.86	0.17	0.71	2.01	0.11	0.74
Subscale score	3.54	0.31	0.93	3.80	0.20	0.90
<b>Spanish/Dual</b>						
Quantity score	1.68	0.14	0.57	1.79	0.10	0.38
Quality score	1.64	0.12	0.55	1.77	0.09	0.65
Subscale score	3.32	0.26	0.95	3.56	0.18	0.89
<b>Book-Reading Behaviors</b>						
Quantity score	1.82	0.12	0.86	1.87	0.09	0.73
Quality score	1.76	0.10	0.82	1.74	0.07	0.69
Subscale score	3.58	0.21	0.97	3.61	0.16	0.95
<b>Print and Letter Knowledge</b>						
<b>English</b>						
Quantity score	1.77	0.08	0.64	1.80	0.06	0.57
Quality score	1.91	0.14	0.74	2.00	0.08	0.67
Subscale score	3.67	0.21	0.94	3.80	0.13	0.86

Table III.18 (continued)

	High Concentrations of ELLs			Low Concentrations of ELLs		
	Mean	Standard Error	Cronbach's Alpha	Mean	Standard Error	Cronbach's Alpha
Spanish/Dual						
Quantity score	1.14	0.03	0.27	1.10	0.02	-0.21
Quality score	1.20	0.05	0.46	1.12	0.02	-0.10
Subscale score	2.33	0.07	0.75	2.23	0.04	0.85
<b>Written Expression</b>						
English						
Quantity score	1.29	0.05	-0.48	1.31	0.06	0.11
Quality score	1.70	0.13	0.28	1.67	0.09	0.32
Subscale score	2.99	0.16	0.64	2.98	0.14	0.88
Spanish/Dual						
Quantity score	1.17	0.04	-0.14	1.15	0.05	0.05
Quality score	1.41	0.07	0.19	1.35	0.06	0.29
Subscale score	2.57	0.07	0.36	2.49	0.10	0.82
<b>Team Teaching</b>						
English						
Quantity score	2.15	0.14	0.88	2.10	0.13	0.83
Quality score	2.54	0.18	0.94	2.64	0.15	0.94
Subscale score	4.69	0.31	0.94	4.73	0.26	0.91
Spanish						
Quantity score	1.48	0.13	0.91	1.30	0.08	0.95
Quality score	2.11	0.10	0.84	1.97	0.09	0.84
Subscale score	3.59	0.20	0.89	3.26	0.16	0.86
<b>Sample Size</b>	<b>19</b>			<b>40</b>		



## IV. LANGUAGE INTERACTION SNAPSHOT AND END OF VISIT RATINGS (LISn+EVR)

In this chapter, we present the findings for the Language Interaction Snapshot (LISn) and the End of Visit Ratings (EVR). We discuss the item-level findings overall and summarize differences by type and nature of setting—Centers versus FCCs and high versus low ELL concentration. We then present the results of exploratory factor analyses (EFA) and present the findings on the empirical scales for the overall sample as well as by key subgroups.

### A. Language Interaction Snapshot (LISn)

#### 1. Description

The LISn examines language interactions of an individual focus child with both adults and peers in 30-second cycles or timepoints<sup>9</sup> over a period of 10 intervals for a total five minutes.<sup>10</sup> This five-minute observation, called a snapshot, was developed so that all verbal interactions are coded at the utterance level. A verbal utterance is defined as the natural unit of speech bounded by breaths or pauses. Multiple codes can be employed throughout each coding cycle; however, once an individual code is employed within a cycle, it is not recorded again. Thus, the prevalence of different types of talk across the five minutes is captured rather than frequencies of individual codes within each 30-second timepoint.

The LISn comprises four specific aspects of the early childhood classroom language environment: (1) language spoken (e.g., the actual language a child, lead teacher, or another adult in the room is speaking), (2) focus child’s verbal communication, (3) teacher’s verbal communication, and (4) global classroom setting. These aspects are further detailed below:

- **Language Spoken.** This set of codes is used every time a child or a teacher in the classroom speaks. Observers determine whether the speaker has spoken a complete utterance in English, another language (e.g., Spanish, Chinese, etc.), or in a mixed utterance (e.g., in both English or Spanish, e.g., “My mom está feliz” [My mom is happy]).
- **Focus Child Verbal Communication.** This set of codes identifies whether the focus child is speaking in English, another language, or in mixed utterances to the lead teacher, another adult in the classroom, or other children.
- **Teacher Verbal Communication.** This set of codes captures whether the lead teacher or another teacher in the classroom communicates with the focus child alone, or, with the focus child as part of a small or whole group instruction. Nine codes are used to describe the content of the interaction and these codes fall into three broad domains: (1) response to child, including direct teacher responses clarifying or elaborating children’s utterances; (2) types of teacher instructional language, including directions and talk that

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<sup>9</sup> To keep track of time, observers are provided with an ear bud and an MP3 player with a prerecorded time sequence indicating when they should change to the next timepoint.

<sup>10</sup> 30 seconds x 10 = 300 seconds or five minutes. Including global ratings, a full LISn takes seven minutes.

teachers either produce spontaneously or in response to children; and (3) classroom talk including reading and singing. Table IV.1 provides the codes and definitions.

- **Global Classroom Setting.** This set of codes is used globally (for description and background) after the five-minute coding cycle and captures information about the classroom context, specifically, the structure and focus of the activities. It takes approximately two minutes to make these ratings after each cycle. There are three types of information coded about the classroom context: (1) class instructional content, (2) classroom activity structure, and (3) classroom ratings that include the frequency of sustained conversations with different partners. Classroom content captures whether during the five minutes the children were involved in print-related content, non-print-related content, sounds, writing/copying, mathematics, singing, aesthetics, science/nature, social studies, fine motor, or gross motor activities. Classroom structure captures whether the child was involved in whole-group instruction, small-group instruction, individual work, routines, meals/snacks, free choice activities or recess/outside activities during the five-minute observation. Finally, classroom ratings allow the observer to note the extent to which the focus child was engaged. The observer also rates the extent to which the child participated in sustained conversations—those that have more than two complete conversational turns.

The EVR is designed to collect information about the instruction used by the teacher and other adults to support language and literacy development and provide information about how the classroom is organized and managed. Based on the entire observation period, the observer rates how characteristic different language-related instructional practices, classroom management, time use, and social support behaviors are of that particular classroom. **2. Procedure for LISn+EVR**

Three children were randomly selected as focus children, and the verbal interactions of an individual focus child were recorded for a five-minute snapshot, alternating children after each snapshot. Each focus child was observed for six snapshots for a total observation time of 30 minutes per child. After six snapshots were completed for each of the three focus children (total of 18 snapshots and 90 minutes of class time recorded), the observers recorded End of Visit Ratings (EVR).

## B. Results

### 1. Context for Observation

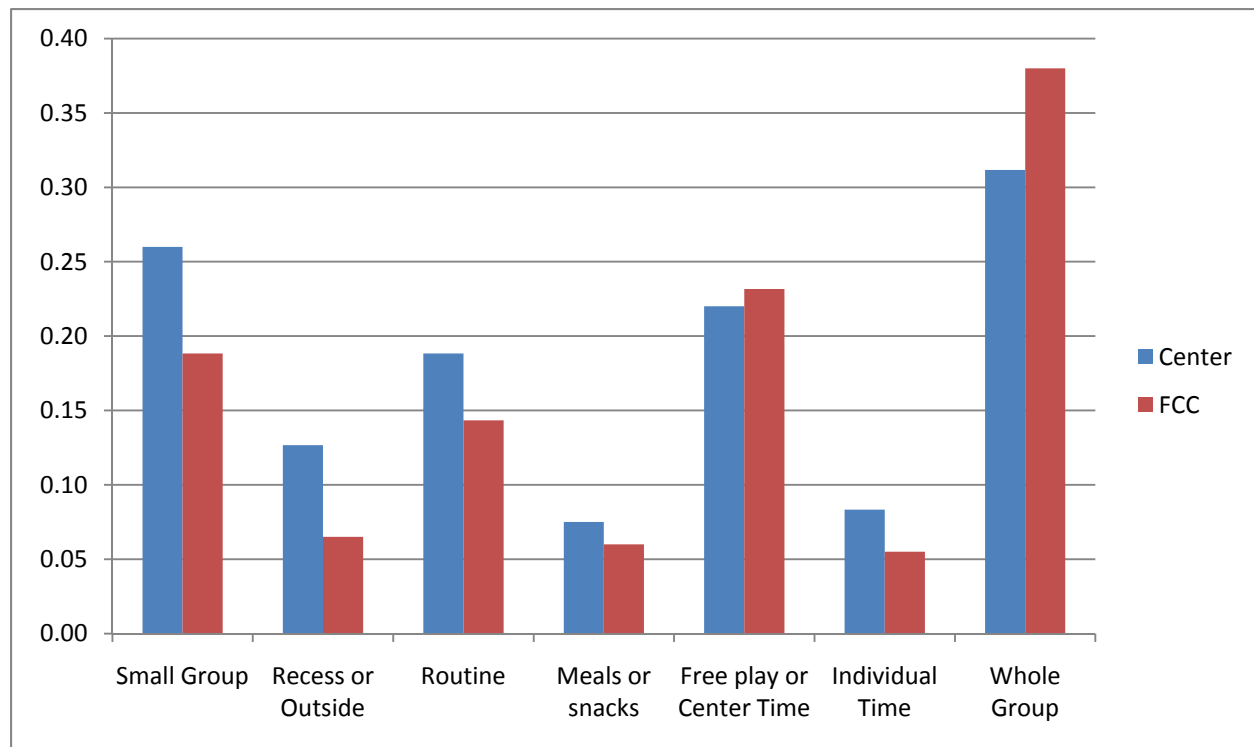
More than one context was possible during a five-minute snapshot. Observers noted all the content and activity structures that occurred during the five minute period. The greatest percentage of snapshots occurred during large group, small group, center time, and routines (Tables IV.2 and IV.3). More snapshots in centers included individual time compared with FCCs and more included whole group in FCCs than in Centers<sup>11</sup> (see Tables IV.4 and IV.5 and Figure IV.1). Small group and

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<sup>11</sup> The estimates at the child level are unweighted.

center time are noted more frequently in programs with a low ELL concentration<sup>12</sup> (Tables IV.6 and IV.7).

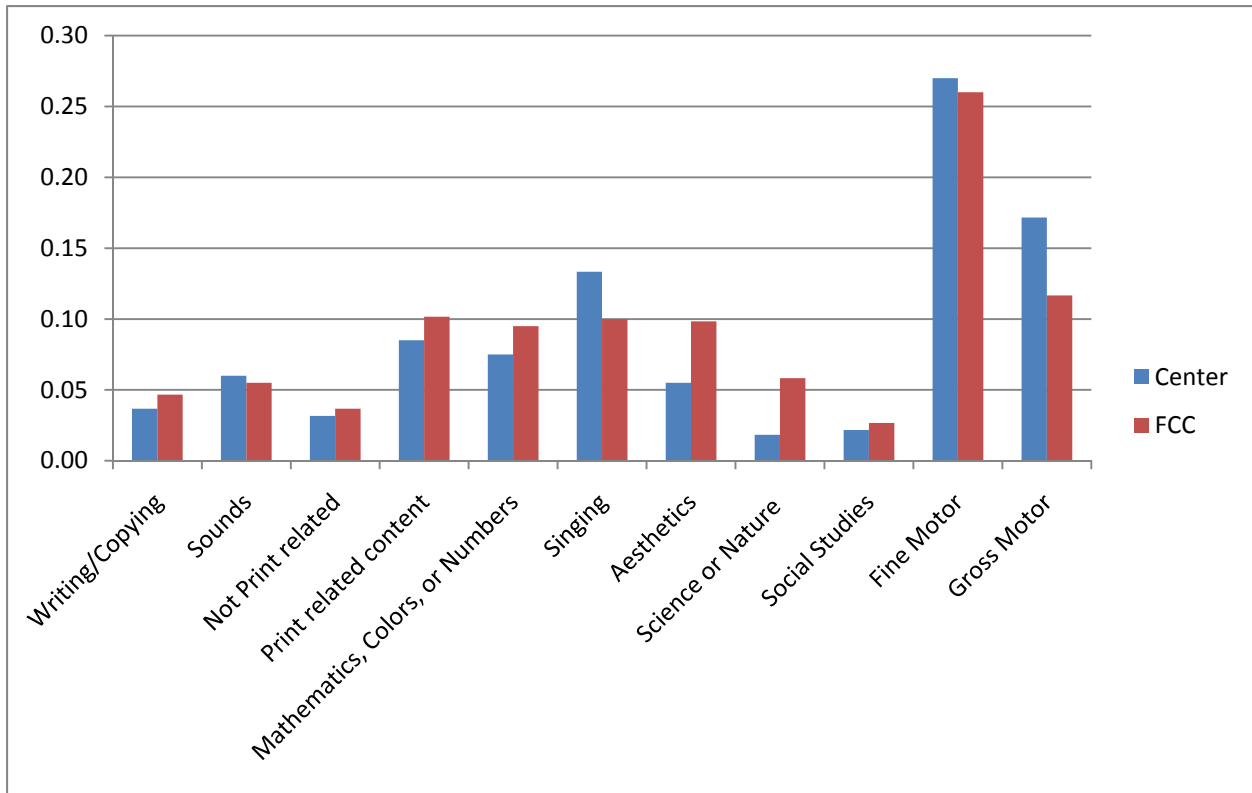
**Figure 4.1. Percentage of Snapshots in Different Activity Structures by Program Type**



Fine motor was the most frequently observed content area in the snapshots. Singing and gross motor were the only other areas noted in more than 10 percent of the snapshots (Tables IV.8 and IV.9). More than a quarter of the snapshots in both Centers (27 percent) and FCCs included fine motor (Table IV.10 to IV.11, and Figure IV.2).. In both high and low concentration ELL programs, fine motor is also noted most frequently (Tables IV.12 to IV.13). The “other” category was checked in 33 percent of the snapshots in Centers and 26 percent in FCCs (Table IV.10). This category was also checked more frequently in low concentration ELL classrooms than in high ELL classrooms (37 percent versus 27 percent; Table IV.12). Observers checked “other” when they were unsure how to code an activity or for clarification. For example, observers noted watching a movie, sensory activities such as sandbox and water table, working on a computer, listening to an audiotape of a book, sitting while waiting to wash hands, Valentine’s Day and birthday parties, and cooking activities as “other.”

<sup>12</sup> ELL concentration is determined by the percentage of children in the program who are ELLs. Classrooms in programs where less than 50 percent of the children are ELL are considered low ELL concentration classrooms, and those with fifty or more percent ELLs are high ELL concentration classrooms..

Figure 4.2. Percentage of Snapshots with Different Types of Content by Program Type



## 2. LISn Child Talk

Focus child talk was observed most frequently in English, with a mean of 17.8 timepoints with child- to-child talk (30 percent of the timepoints), 7.1 timepoints with child to teacher talk (12 percent), and 4.9 timepoints with child to other adult talk (8 percent). Focus child talk with other children in Spanish was noted in only 2.5 timepoints (4 percent), and child talk in Spanish with the teacher (0.81) and other adults (1.23) was very infrequent (Table IV.14 and Figure IV.3).

More than a quarter of the children (26 percent) did not have any sustained conversations with adults or children during the time that they were observed. Children participated more frequently in sustained conversations in FCCs (mean total 5.3) than in Centers (mean total 3.7)<sup>13</sup> (Table IV.15 and Figure IV.4).<sup>14</sup>

<sup>13</sup> Sustained conversations involved more than two complete conversational turns about a topic. For each snapshot, each child was rated on a frequency of 0–2 for sustained conversations with teacher, other adults, and children with a two indicating two or more sustained conversations with that partner. The sum of those three items across six snapshots results in a possible range of 0–36.

<sup>14</sup> Estimates are at the child level, which are unweighted.

Figure 4.3. Percent of Timepoints with Child Talk in Each Language by Conversational Partner

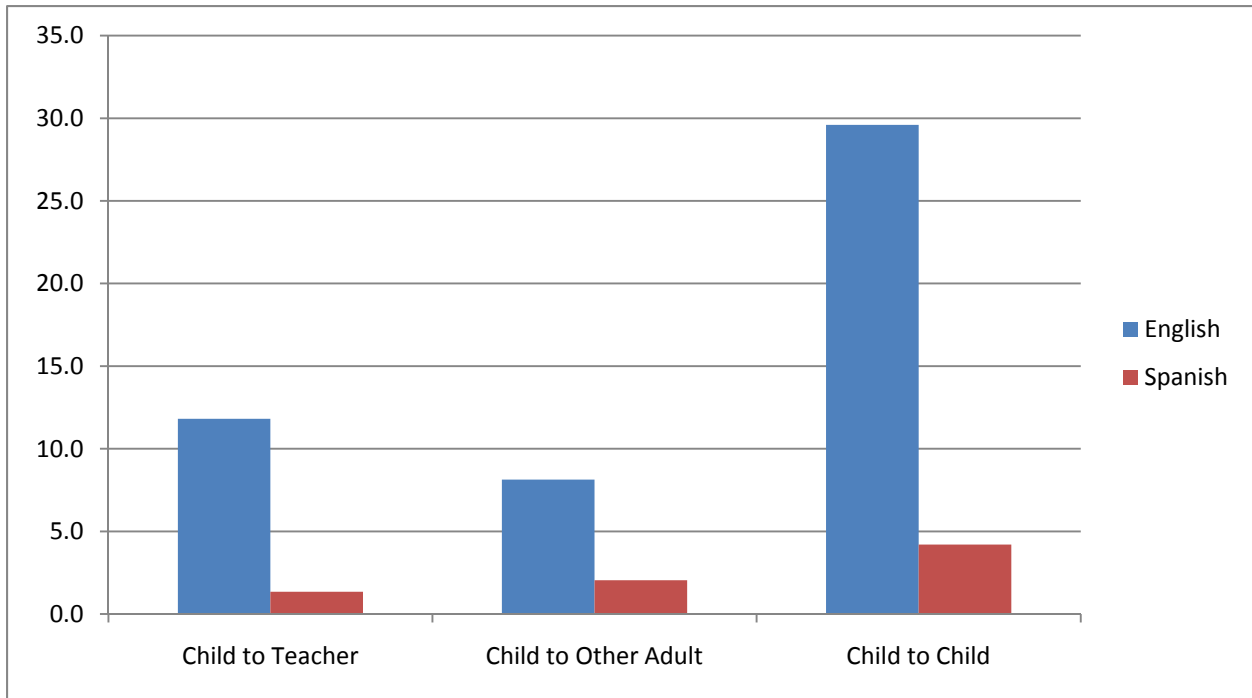
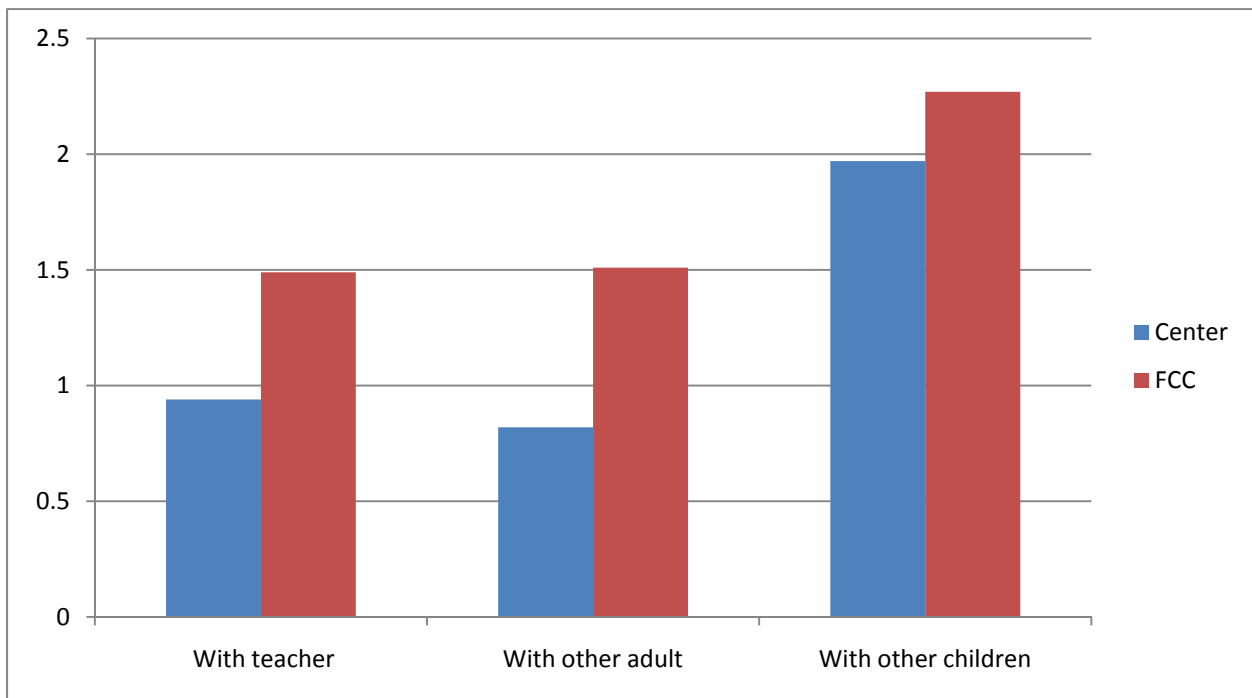
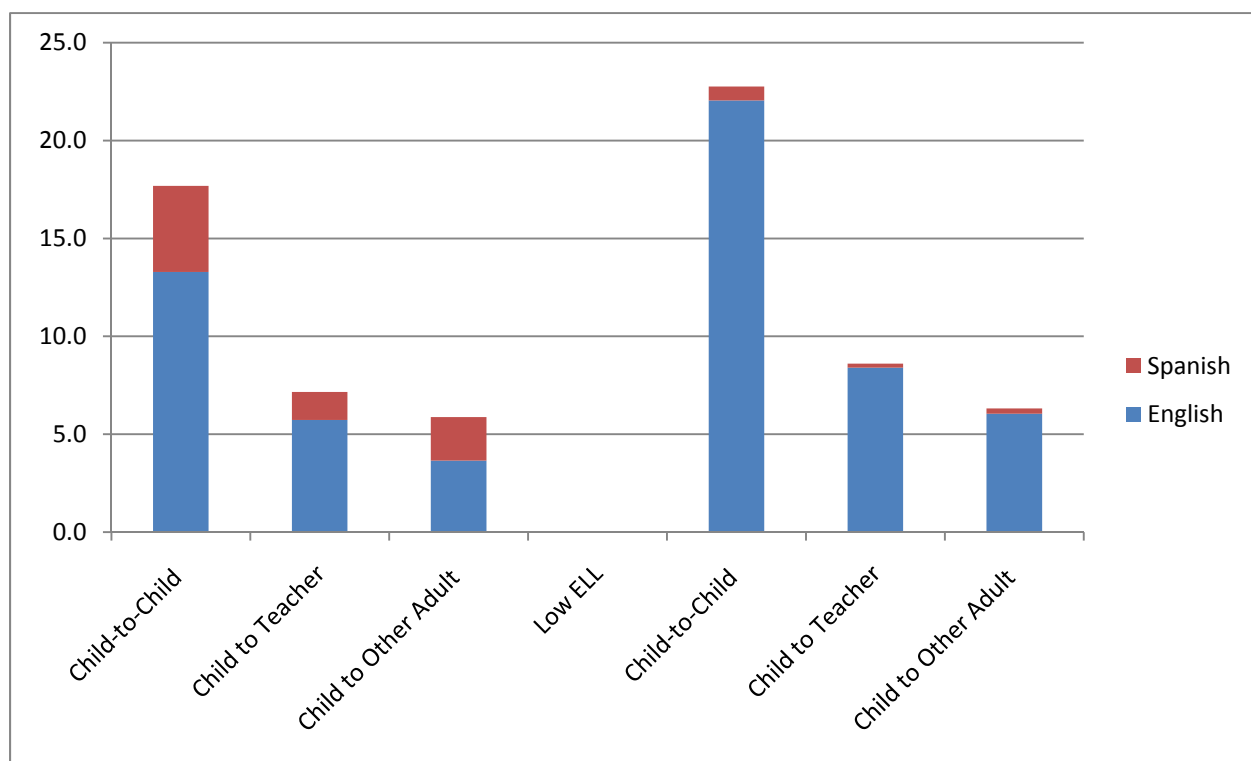


Figure 4.4. Sustained Conversations in Center-Based and Family Child Care Classrooms



Children in high ELL concentration classrooms participate in less talk in any language—particularly with peers—when compared with children in low ELL concentration classrooms (Table IV.16 and Figure IV.5). There are also less frequent sustained conversations with other adults and other children in high ELL classrooms than in low ELL classrooms, although the mean total of all sustained conversations (high ELL 4.0; low ELL 4.6) are not as different as between Centers and FCCs (Centers 4.3; FCC 5.4; Figure IV.6). When we look at sustained conversation by child ELL status, the picture is even bleaker. ELL children participated less frequently in sustained conversations (mean total 3.2) than their English-speaking peers (mean total 5.2) (Table IV.17). Sustained conversations are important because they typically indicate the use of more elaborate language and feedback to and with children. The use of language beyond lecturing to children or basic communication of daily activities requires multiple turn-taking between the conversational participants.

Figure 4.5. LISn Child Talk in High and Low ELL Concentration Classrooms



### 3. LISn Teacher Talk Items

The most frequent type of talk used by the lead teacher was providing contextualized information in English or Spanish (Tables IV.18 and IV.19). On average, there was no difference in providing this information in English or Spanish in FCC and Centers (Tables IV.20 and IV.21). However, this was observed more frequently in English in low ELL concentration classrooms (Table IV.22 and Figure IV.7). The pattern reversed in Spanish—this was observed more frequently in high ELL classrooms (Table IV.23 and Figure IV.7). Using English to ask about things that were present and to give directions were the next most frequent types of talk observed for the lead teacher (Table IV.18). Singing was observed more often than reading. Decontextualized talk was

Figure 4.6. LISn Sustained Conversations in High and Low ELL Concentration Classrooms

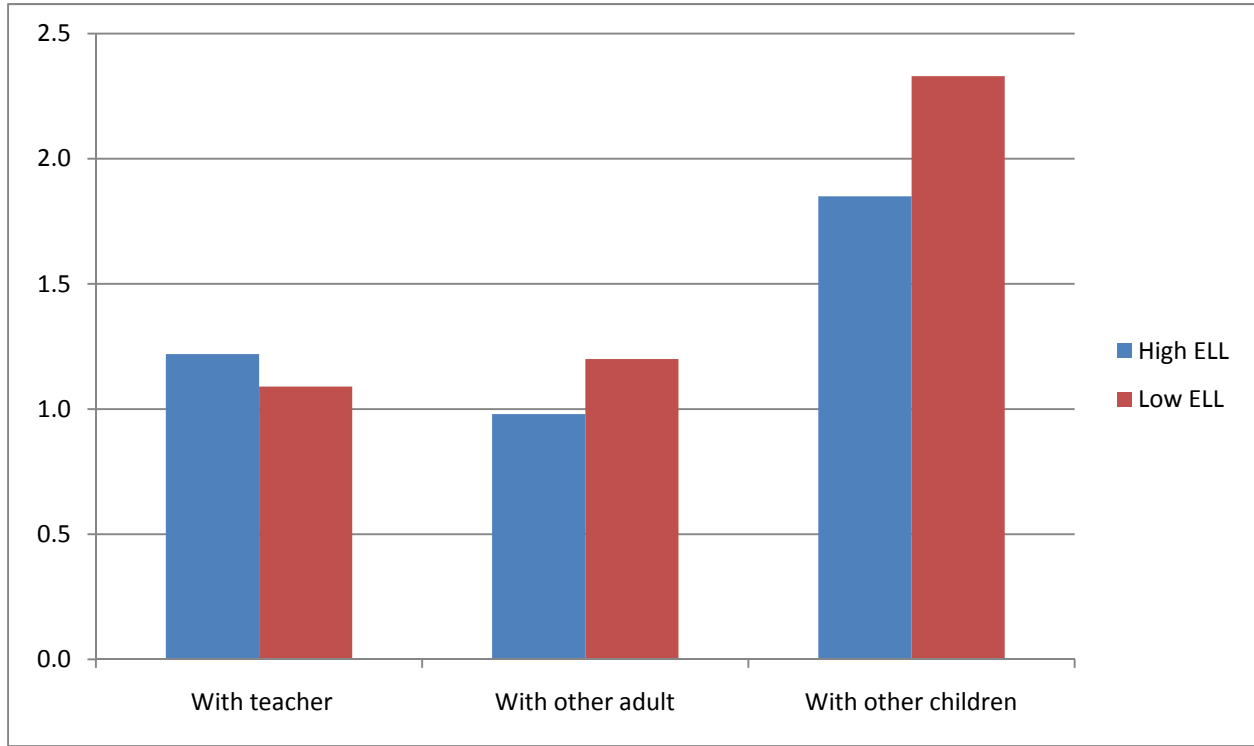
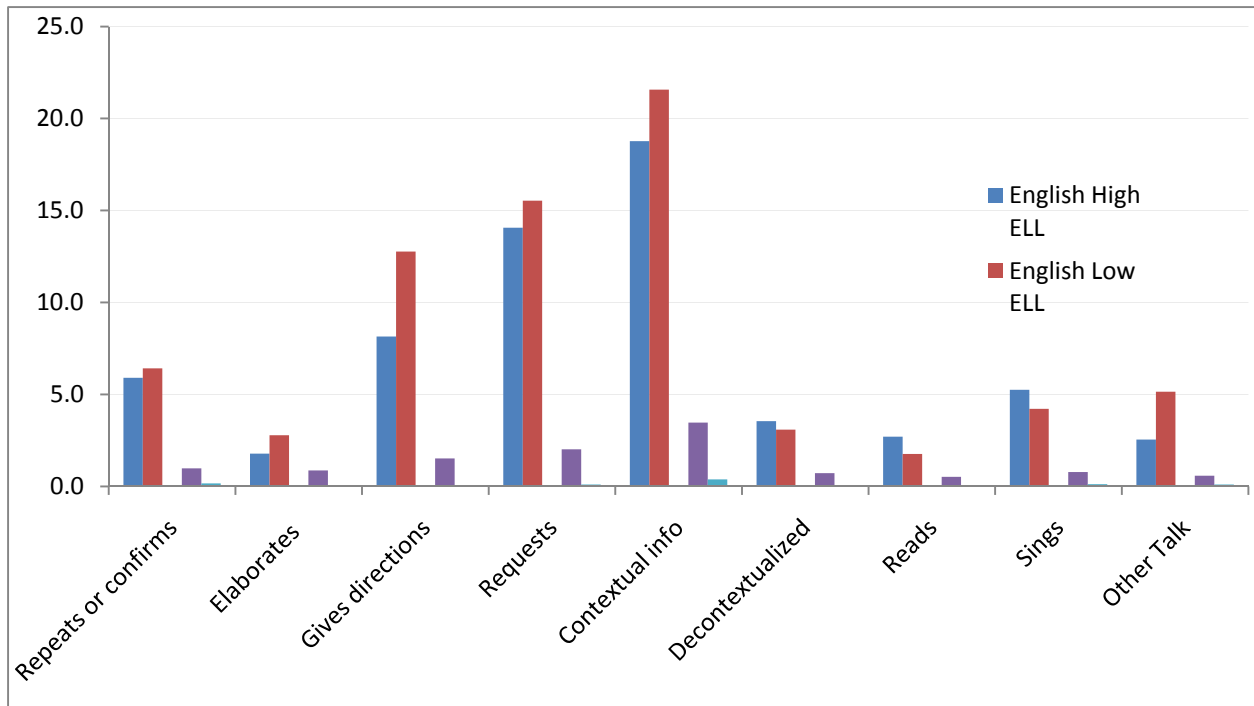


Figure 4.7. Percentage of Timepoints that Teacher Spoke to Child in English and Spanish by Category of Talk in High and Low ELL Classrooms



observed more often in English than Spanish (Tables IV.18 and IV.19), even in high ELL classrooms (Tables IV.22 and IV.23). Decontextualized talk in Spanish, elaboration in Spanish and reading in Spanish were not observed in low concentration ELL classrooms (Table IV.23).

#### 4. Exploratory Factor Analysis on the LISn

We took the mean of the child level data to aggregate the data to the classroom level. We used a principal components analysis and varimax rotation with this classroom level data and identified two factors for teacher or other adult talk in English and in Spanish/other languages. These two factors measure contextualized talk and scaffolded decontextualized talk,<sup>15</sup> although the item loadings for each factor are different for teacher and other adult talk or by language (Table IV.24). The factor structure is different for teacher talk in Spanish/other languages, where we identified an additional factor—elicit/respond child language—in addition to contextualized and scaffolded decontextualized talk (Table IV.24).

Table IV.24 presents the factor loadings of the items for each factor and the internal consistency alpha coefficients for the scales.

##### 1. Teacher talk in English

- Teacher contextualized talk in English. This factor includes four items: requests language, repeats or confirms, provides information (contextualized), and reads ( $\alpha = .74$ ).
- Teacher scaffolded decontextualized talk in English. This factor includes five items: gives directions, elaborates or builds, decontextualized talk, other talk, and repeats or confirms ( $\alpha = .78$ ). Repeats or confirms loads on both teacher contextualized talk and teacher scaffolded decontextualized talk and was retained in both factors.

##### 2. Other adult talk in English

- Other adult contextualized talk in English. This factor includes five items: requests language, gives directions, provides information (contextualized), repeats or confirms, and reads ( $\alpha = .83$ ).
- Other adult scaffolded decontextualized talk in English. This factor includes four items: decontextualized talk, elaborates or builds, repeats or confirms, and other talk ( $\alpha = .65$ ). Again, repeats or confirms loads on both contextualized and scaffolded decontextualized talk and is included in both factors.

##### 3. Teacher talk in Spanish/other language

- Teacher contextualized talk/sings in Spanish/other language. This factor includes four items: requests language, provides information (contextualized), gives directions, and sings ( $\alpha = .89$ ).

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<sup>15</sup> Scaffolded refers to the types of talk that would support children in understanding the decontextualized information or build on discussion of decontextualized information. For example, the teacher confirming what a child says, elaborating on the child's language, using general comments in other talk (such as "wow", "really?" to encourage the child's talk about something not present.



- Teacher scaffolded decontextualized talk/reads in Spanish/other language. This factor includes three items: decontextualized talk, elaborates or builds, and reads ( $\alpha = .90$ ).
  - Teacher elicits/responds child language. This includes four items: repeats or confirms, requests language, other talk, and gives directions ( $\alpha = .92$ ). Requests language and gives directions load on two factors and are included in both.
4. Other adult talk in Spanish/other language
- Other adult contextualized talk in Spanish/other language. This factor includes four items: requests language, provides information (contextualized), repeats or confirms, and other talk ( $\alpha = .90$ ).
  - Other adult scaffolded decontextualized talk in Spanish/other language. This factor includes four items: gives directions, elaborates or builds, reads, and decontextualized talk ( $\alpha = .86$ ).

For the teacher and other adult, we created a “total talk” variable that included all of the talk in a particular language and an “any talk” variable that indicated whether even one kind of talk in that language was evident in a single timepoint.

## 5. LISn Teacher Talk Scales

With six snapshots collected for each child and 10 timepoints per snapshot, the possible range for the any talk variable is 0–60. The potential range for the mean total talk, if it were possible for an adult to use every category of talk within a 30 second period, would be 0–540. Realistically, we would not expect this to go beyond about 180. The actual range for the total talk is 0–145.

In addition to the subscales we also looked at the total talk by teachers and other adults and at the number of timepoints in which there was any talk in English or in Spanish. The mean total talk in English is three times (teacher) to more than five times (other adult) greater than the mean any talk in English. This indicates that when the adult spoke to the child in English, multiple types of talk were used. For Spanish, the mean total talk and the mean for any talk was low ( $< 2$ ) and was three to four times the mean for total talk (Table IV.25)

The mean talk in English included more varied adult talk in FCCs compared with Centers, but the frequency of talk with an individual child in a specific language occurred less frequently. In other words, for a single timepoint, more than one type of talk was indicated more frequently in FCCs than in Centers. Although the total teacher talk in English (indicating the total number of different types of talk across timepoints) was slightly greater in FCCs (42.0) compared with Centers (39.9), the number of timepoints in which there was any teacher talk in English was greater in Centers (11.2 or 19 percent of the timepoint) compared with FCCs (9.1 or 15 percent). A similar pattern was observed with the other adult talk in English (18.1 in Centers and 22.1 in FCCs for total talk; 12 percent of timepoints [mean 7.2 timepoints] in Centers and 7.7 percent of the timepoints [mean 4.6 timepoints] in FCCs for any talk in English [Table IV.26]). For teacher talk in Spanish, although much weaker, the reverse pattern is noted: the mean total Spanish/other talk in Centers was 8.0 while FCCs mean total was 6.5; the mean for any talk in Spanish was 2.0 percent of the timepoints (mean of 1.2 times) in Centers and 3.0 percent of the timepoints (mean of 1.8) in FCCs.

The patterns in types of talk in English are not strong but the use of decontextualized talk relative to contextualized talk is greater in Centers than in FCCs by teachers in both English and Spanish, and by other adults in English. It is most evident in Spanish due to very low mean for decontextualized language in Spanish in FCCs (Table IV.26).

Teachers in high ELL concentration classrooms use more contextualized language relative to decontextualized language in both English and Spanish when compared with teachers in low ELL concentration classrooms. For other adults the ratio of decontextualized to contextualized language was similar across high and low ELL concentration classrooms (Table IV.27).

## C. End of Visit Ratings (EVR)

### 1. Overall Descriptive Results

The **EVR** asks observers to make more qualitative judgments about interactions. The support for the language and literacy development of children was measured with 19 statements about instructional practices that observers rated from 1—“not at all characteristic”—to 4—“extremely characteristic.” Items were rated individually and variance is evident across items. The full range of the item means was 1.9–3.2. Nine items were rated with means above 2.5, indicating strongly to extremely characteristic, and 10 items were rated with means below 2.5, indicating not at all to minimally characteristic (Table IV.28).

The social support for learning was measured by rating 22 statements about the classroom on the same scale. On average, the social support for learning items were at least minimally to strongly characteristic of classrooms (Table IV.29).

### 2. EVR Support for Language and Literacy Development Items

The highest rated items with means indicating behaviors that are strongly to extremely characteristic are: listens attentively to children (mean = 3.0); provides clear instructions for tasks and activities (mean = 3.0); and models correct use of English (mean = 3.2) (Table IV.28). Listening attentively to children was extremely (23.4 percent) or strongly characteristic of classrooms (56.5 percent). Providing clear instructions for tasks and activities was extremely characteristic of 32.3 percent of classrooms and strongly characteristic of 40.2 percent. Modeling correct use of English was extremely characteristic of nearly 40.0 percent of classrooms and strongly characteristic of 42.7 percent of classrooms (Table IV.30). This echoes the findings from the B-TBRS in other classrooms that showed 77.9 percent of classrooms have teachers that often speak clearly and use grammatically correct sentences with medium-high to high quality 77.8 percent of the time.

Items rated on average above 2.5 include:

- Effectively uses gestures and facial expressions to help children understand what is being communicated (mean = 2.8);
- Effectively uses vocal emphasis of key words when communicating (mean = 2.8); asks many questions that can be answered with a single word (mean = 2.7);
- Effectively uses pictures and objects to help children understand what is being said (mean = 2.7);
- Repeats information in simplified sentences (mean = 2.7); and

- Repeats phrases or sentences for children, allowing wait time in between (mean = 2.6) (Table IV.28).

Over half of the classrooms were rated strongly to extremely characteristic of items with means above 2.5 but less than 3.0; however, it is important to note that for at least a third of the classrooms, these behaviors were not at all characteristic to minimally characteristic (Table IV.30).

The following items were strongly to extremely characteristic of at least 60.0 percent of classrooms:

- Teacher asks many questions that can be answered with a single word (67.9 percent);
- Teacher effectively uses gestures and facial expressions to help children understand what is being communicated (66.6 percent);
- Teacher repeats information in simplified sentences (64.6 percent); and
- Teacher effectively uses vocal emphasis of key words when communicating (60.0 percent).

The next two items were strongly to extremely characteristic of at least 56.0 percent of classrooms:

- Teacher repeats phrases or sentences for children, allowing wait time in between (58.1 percent); and
- Teacher effectively uses pictures and objects to help children understand what is being said (56.4 percent) (Table IV.30).

Although using pictures and objects to help children understand what is being said is strongly to extremely characteristic of over half of classrooms observed with the EVR, ratings from the B-TBRS<sup>16</sup> indicated that teachers rarely combined vocabulary words with pictures or objects before or during a read aloud in 88.3 percent of classrooms and the quality was low in 89.0 percent of classrooms. This suggests that the use of pictures and objects may be evident in everyday communication but is not necessarily being used to promote new vocabulary and concepts.

The remaining items on the EVR had means ranging from 1.9–2.5. Items that were the least characteristic of classrooms were related to more intentional and explicit approaches:

- Vocabulary words are taught or reviewed prior to book reading (mean = 1.9);
- Intentionally teaches more sophisticated words to children (mean = 2.0); and
- Engages children in meaningful conversations about a topic (sustained conversations with a child or group of children) (mean = 2.1) (Table IV.28).

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<sup>16</sup> The LISn and the B-TBRS were used in different classrooms. However, the sample was randomly selected to be observed with a LISn or a B-TBRS and the results were weighted for probability of selection.

Almost 70.0 percent or more of classrooms were not at all characteristic to minimally characteristic of items that had means of 2.1 or less:

- Vocabulary words are taught or reviewed prior to book reading (38.1 percent not at all characteristic and 38.8 percent minimally characteristic);
- Teacher engages children in meaningful conversations about a topic (33.8 percent not at all characteristic and 34.7 percent minimally characteristic); and

Teacher intentionally speaks more sophisticated words to children (30.5 percent not at all characteristic and 44.5 percent minimally characteristic) (Table IV.30).

Similar to the EVR findings about teaching vocabulary words prior to book reading (that is, not at all to minimally characteristic of 76.9 percent of classrooms), the B-TBRS showed that in 75.9 percent of classrooms, teachers rarely discussed vocabulary words when preparing to read and/or during read alouds with low quality observed in 67.8 percent of classrooms.

Contradictory ratings about meaningful conversations were noted in the classrooms observed with the B-TBRS. EVR findings indicated that it is not at all to minimally characteristic of 68.5 percent of classrooms for teachers to engage children in meaningful conversations about a topic; findings from the B-TBRS showed that over half of the classrooms have teachers that often engage children in sustained conversations and the quality is medium-high to high in 66.0 percent of classrooms.

### 3. EVR Social Support for Learning Items

Several items on social support for learning were rated highly, with a mean falling between strongly characteristic and extremely characteristic:

- Lead teacher and children have a warm positive relationship (mean = 3.3);
- Assistant teacher(s) and children have a warm positive relationship (mean = 3.3);
- Children are cooperative and attentive (mean = 3.2);
- Children appear familiar with the routines and procedures used (mean = 3.1); and
- Children appear excited by the lesson (mean = 3.1) (Table IV.29).

At least 85 percent of classrooms were strongly characteristic to extremely characteristic of each of the highest rated items. Positive teacher, assistant teacher, and child relationships were strongly to extremely characteristic of over 90 percent of classrooms:

- Lead teacher and children have a warm positive relationship (42.4 percent extremely characteristic and 49.2 percent strongly characteristic);
- Assistant teacher(s) and children have a warm positive relationship (34.3 percent extremely characteristic and 56.2 percent strongly characteristic);
- A child appearing excited by the lesson is extremely characteristic of 20.1 percent of classrooms and strongly characteristic of 66.9 percent of classrooms; and

- Children being cooperative and attentive is extremely characteristic of over a third of classrooms (36.5 percent) and strongly characteristic of over half (51.4 percent) of classrooms (Table IV.31).

On the EVR, observers rated familiarity with the routines and procedures as extremely or strongly characteristic in 86 percent of classrooms (Table IV.31). However, the results from the B-TBRS suggested that appropriate routines are not well-established and the quality was low or medium low in 40 percent of the classrooms. On the B-TBRS, in 60 percent of classrooms, teachers often orient children to the expectations in the classroom through established rules in routines, but the quality is medium-high to high in only 57 percent of classrooms.

Items rated greater than 2.5 on the EVR include:

- Teachers use praise to maintain positive behavior (mean = 3.0);
- Teachers are fluid in the presentation of activities (mean = 3.0);
- Learning continues without disruption from children's problem behaviors (mean = 2.9);
- Children are perfectly behaved (mean = 2.9);
- Children are actively engaged (mean = 2.8);
- Transitions are smooth and children quickly engage in activities (mean = 2.8);
- Teachers have techniques for gaining class attention in less than 10 seconds (mean = 2.8);
- Children are given the opportunity to think and respond (mean = 2.8); and
- Peer-to-peer interaction (including some nonverbal interaction) about activities occurs (mean = 2.7) (Table IV.29).

Over 60 percent of the classrooms were strongly to extremely characteristic of items with means above 2.5 but less than 3.0:

- Teachers use praise to maintain positive behavior (77.8 percent);
- Children are perfectly behaved (77.7 percent);
- Children are actively engaged (76.3 percent);<sup>17</sup>
- Learning continues without disruption from children's problem behaviors (76.0 percent);
- Teachers are fluid in the presentation of activities (74.2 percent);
- Children are given the opportunity to think and respond (69.0 percent);
- Transitions are smooth and children quickly engage in activities (68.3 percent);

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<sup>17</sup> Children perfectly behaved and actively engaged are strongly characteristic of 65.5 percent and 65.6 percent of classrooms, respectively, while only extremely characteristic of 12.2 percent and 10.7 percent of classrooms, respectively.

- Teachers have techniques for gaining class attention in less than 10 seconds (67.1 percent); and
- Peer-to-peer interaction (including some nonverbal interaction) about activities occurs (60.1 percent) (Table IV.31).

Although peer-to-peer interaction that includes nonverbal interactions is rated on the EVR as strongly to extremely characteristic of 60 percent of classrooms, the results from the B-TBRS suggest that the teachers are not supporting the use of peer interaction to facilitate language. The B-TBRS results indicated that in over half of the classrooms (55 percent), teachers rarely coach children on how to interact with peers. Furthermore, the quality of such coaching was only low to medium-low in 70 percent of classrooms.

The only two items that fell on the lower end of minimally characteristic of classrooms are teachers use nonverbal methods to manage behavior (mean = 2.4) and teachers encourage children to help one another (mean = 2.5) (Table IV.29). Teacher encouragement of children to help one another was not at all characteristic to minimally characteristic of 49.3 percent of classrooms. Teachers' use of nonverbal methods to manage behavior also was not at all characteristic to minimally characteristic for an even greater percentage of classrooms (58.5) (Table IV.31). It is possible that the latter is lower in classrooms with many ELLs because teachers are making an effort to provide as much language as possible in every aspect of the instructional day.

Social support for learning was rated positively overall. Items assessing negative aspects were rated as minimally or not characteristic of the majority of the classrooms. Only 9.4 percent of classrooms (mean = 1.6) were strongly characteristic to extremely characteristic of having child behavior that disrupts the classroom. Likewise, teachers spending a lot of time managing behavior is strongly characteristic to extremely characteristic of only 12.2 percent of classrooms (mean = 1.7). Children being off-task was strongly characteristic of only 4.5 percent of classrooms (mean = 1.7) and extremely characteristic of none of the classrooms. Children spending a lot of time waiting was also not extremely characteristic of any classroom and was strongly characteristic only 10.4 percent (mean = 1.8) (Tables IV.29 and IV.31).

#### 4. EVR Items by Subgroups

When we looked at the EVR items by subgroups, there were more differences observed between FCCs and Centers than between high and low concentration ELL programs. Generally, Centers are rated higher than FCCs on the following seven support for language and literacy items:

- Intentionally teach basic concept words
- Repeat phrases or sentences for children
- Repeat information in simplified sentences
- Provide clear instructions for tasks and activities
- Talk meaningfully with children about books that are read,
- Teach about sounds
- Encourage peer interactions.

The only item where FCCs are rated higher is: ask many questions that can be answered with a single word (Table IV.32). The Centers are also rated higher on eight social supports for learning items:

- Learning continues without disruption from children’s problem behaviors
- Use nonverbal methods to manage behavior
- Use praise to maintain positive behavior,
- Peer-to-peer interaction
- Teachers have techniques for getting class attention in less than 10 seconds
- Transitions are smooth
- Teachers are fluid in the presentation of activities
- Children appear familiar with the routines and procedures used (Table IV.33)

Low ELL classrooms are rated higher than high ELL classrooms on only a few items across domains:

- Elicit elaborate responses from children
- Ask many questions that can be answered with a single word (Table IV.34)
- Children are actively engaged
- Peer-to-peer interaction
- Children are given the opportunity to think and respond (Table IV.35)

## 5. Exploratory Factor Analysis on the EVR

The EVR ratings were collected at the classroom level. We again used a principal component analysis and varimax rotation and identified two factors for teacher support of the language and literacy development of children (general language stimulation and intentional/explicit instruction) and another two factors for the classroom social climate (positive climate/behavior management and time use/productivity). Table IV.36 presents the factor loadings of the items for each of these factors and the internal consistency alpha coefficients for the scales.

- **General Language Stimulation.** This factor includes 10 items that measure the strategies teachers use to foster children’s language development. Example items include “elicit elaborate responses from children,” “encourage peer interactions that support language development,” and “ask many questions that can be answered with a single word.” ( $\alpha = .92$ )
- **Intentional/Explicit Instruction.** This factor includes 8 items that tap intentional instruction of vocabulary and literacy practices. Sample items include “intentionally teach more sophisticated words to children,” “vocabulary words are taught or reviewed prior to book reading,” and “read to children at different points throughout the day.” ( $\alpha = .88$ )

- **Positive Climate/Behavior Management.** There are 12 items in this factor, which assesses positive social climate in the classroom and the strategies teachers use to manage children's behaviors. Sample items include "lead teacher and children have a warm positive relationship," "children are cooperative and attentive," "teachers encourage children to help one another," and "teachers used praise to maintain positive behavior." ( $\alpha = .91$ )
- **Time Use/Productivity.** This factor includes 8 items that assess time use and productivity in the classroom. Sample items include "teachers are fluid in the presentation of activities," "children appear familiar with the routines and procedures used," and "children spend a lot of time waiting (reverse coded)." ( $\alpha = .85$ )

## 6. Results by Subgroups

Overall on the EVR, the general language stimulation items were rated more strongly than the intentional/explicit instruction (2.7 and 2.3 respectively) and time use/productivity was rated more positively than Positive Climate/Behavior Management (3.1 and 2.9 respectively) (Table IV.37). This pattern was evident across all the subgroups (Tables IV.38 to IV.39). Little difference was found between the subgroups on ratings, with mean scores typically within 0.2 of each other.



Table IV.1. LISn Codes for Teacher Verbal Communication

Code	Definition
<b>Response to Child Language</b>	
Repeats or confirms	This code is used to represent when the teacher repeats or confirms the focus child talk (for example, when the child says, "milk" and the teacher says "yes, it's milk").
Elaborates or builds	This code is used when the teacher responds to what the focus child says by building on the comment (for example, if the child says, "milk" and the teacher says, "You opened the carton of milk yourself"). <i>Note: This code must be used with one of the four codes below to indicate how the teacher elaborates.</i>
<b>Types of Teacher Language</b>	
Requests language	This code captures the response a teacher elicits from a child about something that is physically present, usually in the form of a question (for example, "What is this called?"; or "Tell me about your picture.>").
Gives directions	This code captures a teacher's statement that prompts the child to do something that does not require a verbal response (for example: "Come over here."; or "Put your crayons away.>").
Provides information (contextualized)	This code is used when a teacher provides the child information that is connected to a physical cue in the environment, a facial expression, or physical movement. In other words, the teacher is providing information about things that are present at that time and giving the child contextual cues about what it is he/she is talking about (for example: "The apple and the banana [in the children's snack] are both fruits."; or "This is a cotton ball. I am gluing it to the construction paper.>").
Provides information (decontextualized)	This code is used when a teacher requests or provides information, the meaning of which is conveyed solely by language. For this code, the child needs to carry the picture in his or her head. This code is most clearly recognized in the form of telling a story, recounting past events (for example, "This weekend I went to McDonalds. First I waited on line. Then I ate a salad" or future events "Next week we go to the zoo.>"). This information might also be about a feeling or preference about something when the object is not present (for example, "I love cold days." without any contextual cues).
<b>Classroom Features</b>	
Reading	This code is used when a teacher is reading a book with the focus child either individually or in a group.
Singing	This code is used when a teacher sings with the focus child either individually or in a group.
Other	This code is used to capture any type of language a teacher might use that falls outside one of the codes already discussed (for example, "please", "thank you", or "wow").

**Table IV.2. Weighted Mean Numbers of Time Periods During Which Each of the Activity Structures are Observed in the Classrooms**

Activity Structure	Mean	SE
Small group	1.43	0.17
Recess or outside	0.65	0.08
Routine	1.05	0.21
Meals or snacks	0.42	0.07
Free play or center time	1.34	0.14
Individual time	0.45	0.10
Whole group	1.99	0.13
<b>Sample Size</b>	<b>64</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.

**Table IV.3. Percentage of Children with Different Number of Time Periods Observed in Each of the Activity Structures**

Activity Structure	Percentage of Children with any Observations in This Structure	Number of Time Periods Observed per Child						
		0	1	2	3	4	5	6
Small group	62.9	69 (37.1)	48 (25.8)	32 (17.2)	17 (9.1)	15 (8.1)	5 (2.7)	0
Recess or outside	48.92	95 (51.1)	68 (36.6)	20 (10.8)	3 (1.6)	0	0	0
Routine	44.62	103 (55.4)	44 (23.7)	16 (8.6)	4 (2.2)	4 (2.2)	13 (7)	2 (1.1)
Meals or snacks	38.71	114 (61.3)	67 (36)	5 (2.7)	0	0	0	0
Free play or center time	70.43	55 (29.6)	52 (28)	49 (26.3)	18 (9.7)	5 (2.7)	5 (2.7)	2 (1.1)
Individual time	26.34	137 (73.7)	30 (16.1)	10 (5.4)	8 (4.3)	0	1 (0.5)	0
Whole group	89.25	20 (10.8)	47 (25.3)	65 (34.9)	32 (17.2)	19 (10.2)	2 (1.1)	1 (0.5)
<b>Sample Size</b>	<b>186</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.4. Weighted Mean Numbers of Time Periods During Which each of the Activity Structures Are Observed in the Classrooms, by Program Type**

Activity Structure	Center		Family Child Care	
	Mean	SE	Mean	SE
Small group	1.56	0.22	1.13	0.25
Recess or outside	0.76	0.10	0.39	0.11
Routine	1.13	0.29	0.86	0.23
Meals or snacks	0.45	0.09	0.36	0.08
Free play or center time	1.32	0.15	1.39	0.30
Individual time	0.50	0.14	0.33	0.13
Whole group	1.87	0.15	2.28	0.26
<b>Sample Size</b>	<b>38</b>		<b>26</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.

**Table IV.5. Percentage of Children with Different Number of Time Periods Observed In Each of the Activity Structures, by Program Type**

Activity Structure	Percentage of Children with any Observations in This Structure	Number of Time Periods Observed per Child						
		0	1	2	3	4	5	6
<b>Center</b>								
Small group	69.91	34 (30.1)	34 (30.1)	19 (16.8)	14 (12.4)	9 (8)	3 (2.7)	
Recess or outside	58.41	47 (41.6)	49 (43.4)	14 (12.4)	3 (2.7)			
Routine	41.59	66 (58.4)	20 (17.7)	9 (8)	2 (1.8)	4 (3.5)	12 (10.6)	
Meals or snacks	41.59	66 (58.4)	43 (38.1)	4 (3.5)				
Free play or center time	75.22	28 (24.8)	35 (31)	34 (30.1)	12 (10.6)	2 (1.8)	2 (1.8)	
Individual time	30.09	79 (69.9)	20 (17.7)	7 (6.2)	7 (6.2)			
Whole group	88.5	13 (11.5)	31 (27.4)	40 (35.4)	22 (19.5)	7 (6.2)		
<b>Sample Size</b>	<b>113</b>							
<b>Family Child Care</b>								
Small group	52.05	35 (47.9)	14 (19.2)	13 (17.8)	3 (4.1)	6 (8.2)	2 (2.7)	
Recess or outside	34.25	48 (65.8)	19 (26)	6 (8.2)				
Routine	49.32	37 (50.7)	24 (32.9)	7 (9.6)	2 (2.7)		1 (1.4)	2 (2.7)
Meals or snacks	34.25	48 (65.8)	24 (32.9)	1 (1.4)				
Free play or center time	63.01	27 (37)	17 (23.3)	15 (20.5)	6 (8.2)	3 (4.1)	3 (4.1)	2 (2.7)
Individual time	20.55	58 (79.5)	10 (13.7)	3 (4.1)	1 (1.4)		1 (1.4)	
Whole group	90.41	7 (9.6)	16 (21.9)	25 (34.2)	10 (13.7)	12 (16.4)	2 (2.7)	1 (1.4)
<b>Sample Size</b>	<b>73</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.6. Weighted Mean Numbers of Time Periods During Which Each of the Activity Structures Are Observed in the Classrooms, by ELL Concentration**

Activity Structure	High ELL Concentration		Low ELL Concentration	
	Mean	SE	Mean	SE
Small group	1.29	0.21	1.59	0.26
Recess or outside	0.67	0.12	0.63	0.11
Routine	1.10	0.28	0.99	0.33
Meals or snacks	0.41	0.09	0.43	0.10
Free play or center time	1.19	0.19	1.52	0.22
Individual time	0.48	0.16	0.42	0.13
Whole group	2.03	0.16	1.96	0.23
<b>Sample Size</b>	<b>31</b>		<b>33</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.

**Table IV.7. Percentage of Children with Different Number of Time Periods Observed in Each of the Activity Structures, by ELL Concentration**

Activity Structure	Percentage of Children with any Observations in this Structure	Number of Time Periods Observed per Child						
		0	1	2	3	4	5	6
<b>High ELL Concentration</b>								
Small group	56.04	40 (44)	20 (22)	13 (14.3)	12 (13.2)	4 (4.4)	2 (2.2)	
Recess or outside	51.65	44 (48.4)	35 (38.5)	11 (12.1)	1 (1.1)			
Routine	45.05	50 (54.9)	17 (18.7)	10 (11)	2 (2.2)	3 (3.3)	7 (7.7)	2 (2.2)
Meals or snacks	40.66	54 (59.3)	35 (38.5)	2 (2.2)				
Free play or center time	68.13	29 (31.9)	26 (28.6)	24 (26.4)	10 (11)	2 (2.2)		
Individual time	28.57	65 (71.4)	16 (17.6)	5 (5.5)	5 (5.5)			
Whole group	95.6	4 (4.4)	27 (29.7)	33 (36.3)	16 (17.6)	10 (11)	1 (1.1)	
<b>Sample Size</b>	<b>91</b>							
<b>Low ELL Concentration</b>								
Small group	69.47	29 (30.5)	28 (29.5)	19 (20)	5 (5.3)	11 (11.6)	3 (3.2)	
Recess or outside	46.32	51 (53.7)	33 (34.7)	9 (9.5)	2 (2.1)	0	0	0
Routine	44.21	53 (55.8)	27 (28.4)	6 (6.3)	2 (2.1)	1 (1.1)	6 (6.3)	
Meals or snacks	36.84	60 (63.2)	32 (33.7)	3 (3.2)				
Free play or center time	72.63	26 (27.4)	26 (27.4)	25 (26.3)	8 (8.4)	3 (3.2)	5 (5.3)	2 (2.1)
Individual time	24.21	72 (75.8)	14 (14.7)	5 (5.3)	3 (3.2)		1 (1.1)	
Whole group	83.16	16 (16.8)	20 (21.1)	32 (33.7)	16 (16.8)	9 (9.5)	1 (1.1)	1 (1.1)
<b>Sample Size</b>	<b>95</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.8. Weighted Mean Numbers of Time Periods During Which Each of the Content Areas Are Observed in the Classrooms**

Activity Structure	Mean	SE
Writing/copying	0.24	0.05
Sounds	0.35	0.09
Not print related	0.20	0.05
Print related content	0.54	0.09
Mathematics, colors, or numbers	0.49	0.08
Singing	0.74	0.09
Aesthetics	0.41	0.09
Science or nature	0.18	0.05
Social studies	0.14	0.04
Fine motor	1.60	0.16
Gross motor	0.93	0.12
Other	1.87	0.25
<b>Sample Size</b>	<b>64</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.



**Table IV.9. Percentage of Children with Different Number of Time Periods Observed In Each of the Content Areas**

Content Area	Percentage of Children with Any Observations in This Content	Number of Children (Percentage) by Number of Time Periods Observed						
		0	1	2	3	4	5	6
Writing/copying	23.12	143 (76.9)	40 (21.5)	3 (1.6)	0	0	0	0
Sounds	22.04	145 (78)	25 (13.4)	14 (7.5)	1 (0.5)	1 (0.5)	0	00
Not Print related	15.05	158 (84.9)	20 (10.8)	7 (3.8)	1 (0.5)	0	0	0
Print related content	39.25	113 (60.8)	51 (27.4)	19 (10.2)	2 (1.1)	1 (0.5)	0	0
Mathematics, colors, or numbers	36.02	119 (64)	47 (25.3)	15 (8.1)	4 (2.2)	1 (0.5)	0	0
Singing	52.69	88 (47.3)	70 (37.6)	23 (12.4)	4 (2.2)	1 (0.5)	0	0
Aesthetics	25.81	138 (74.2)	28 (15.1)	16 (8.6)	4 (2.2)	0	0	0
Science or nature	17.74	153 (82.3)	31 (16.7)	1 (0.5)	1 (0.5)	0	0	0
Social studies	11.83	164 (88.2)	18 (9.7)	4 (2.2)	0	0	0	0
Fine motor	69.89	56 (30.1)	42 (22.6)	39 (21)	31 (16.7)	10 (5.4)	5 (2.7)	3 (1.6)
Gross motor	56.45	81 (43.5)	60 (32.3)	33 (17.7)	9 (4.8)	3 (1.6)	0	0
Other	66.13	63 (33.9)	37 (19.9)	21 (11.3)	21 (11.3)	13 (7)	17 (9.1)	14 (7.5)
<b>Sample Size</b>	<b>186</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.10. Weighted Mean Numbers of Time Periods During Which Each of the Content Areas Are Observed in the Classrooms, by Program Type**

Activity Structure	Center		Family Child Care	
	Mean	SE	Mean	SE
Writing/copying	0.22	0.06	0.28	0.09
Sounds	0.36	0.12	0.33	0.11
Not Print-related	0.19	0.07	0.22	0.08
Print-related content	0.51	0.11	0.61	0.14
Mathematics, colors, or numbers	0.45	0.08	0.57	0.16
Singing	0.80	0.12	0.60	0.15
Aesthetics	0.33	0.10	0.59	0.18
Science or nature	0.11	0.04	0.35	0.12
Social studies	0.13	0.05	0.16	0.06
Fine motor	1.62	0.20	1.56	0.24
Gross motor	1.03	0.17	0.70	0.13
Other	1.99	0.32	1.58	0.33
<b>Sample Size</b>	<b>38</b>		<b>26</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.

**Table IV.11. Percentage of Children with Different Number of Time Periods Observed in Each of the Content Areas, by Program Type**

Content Area	Percentage of Children with any Observations in This Content	Number of Children (Percentage) by Number of Time Periods Observed						
		0	1	2	3	4	5	6
<b>Center</b>								
Writing/copying	23.01	87 (77)	26 (23)					
Sounds	20.35	90 (79.6)	13 (11.5)	8 (7.1)	1 (0.9)	1 (0.9)		
Not Print related	13.27	98 (86.7)	11 (9.7)	3 (2.7)	1 (0.9)			
Print related content	36.28	72 (63.7)	29 (25.7)	11 (9.7)		1 (0.9)		
Mathematics, colors, or numbers	35.4	73 (64.6)	31 (27.4)	7 (6.2)	1 (0.9)	1 (0.9)		
Singing	58.41	47 (41.6)	51 (45.1)	11 (9.7)	4 (3.5)			
Aesthetics	22.12	88 (77.9)	17 (15)	8 (7.1)				
Science or nature	11.5	100 (88.5)	13 (11.5)					
Social studies	9.73	102 (90.3)	8 (7.1)	3 (2.7)				
Fine motor	67.26	37 (32.7)	24 (21.2)	22 (19.5)	17 (15)	9 (8)	2 (1.8)	2 (1.8)
Gross motor	58.41	47 (41.6)	32 (28.3)	24 (21.2)	7 (6.2)	3 (2.7)		
Other	65.49	39 (34.5)	20 (17.7)	11 (9.7)	10 (8.8)	7 (6.2)	14 (12.4)	12 (10.6)
<b>Sample Size</b>	<b>113</b>							
<b>Family Child Care</b>								
Writing/copying	23.29	56 (76.7)	14 (19.2)	3 (4.1)				
Sounds	24.66	55 (75.3)	12 (16.4)	6 (8.2)				
Not Print related	17.81	60 (82.2)	9 (12.3)	4 (5.5)				
Print related content	43.84	41 (56.2)	22 (30.1)	8 (11)	2 (2.7)			
Mathematics, colors, or numbers	36.99	46 (63)	16 (21.9)	8 (11)	3 (4.1)			
Singing	43.84	41 (56.2)	19 (26)	12 (16.4)		1 (1.4)		
Aesthetics	31.51	50 (68.5)	11 (15.1)	8 (11)	4 (5.5)			
Science or nature	27.4	53 (72.6)	18 (24.7)	1 (1.4)	1 (1.4)			
Social studies	15.07	62 (84.9)	10 (13.7)	1 (1.4)				
Fine motor	73.97	19 (26)	18 (24.7)	17 (23.3)	14 (19.2)	1 (1.4)	3 (4.1)	1 (1.4)
Gross motor	53.42	34 (46.6)	28 (38.4)	9 (12.3)	2 (2.7)			
Other	67.12	24 (32.9)	17 (23.3)	10 (13.7)	11 (15.1)	6 (8.2)	3 (4.1)	2 (2.7)
<b>Sample Size</b>	<b>73</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.12. Weighted Mean Numbers of Time Periods During Which Each of the Content Areas Are Observed in the Classrooms, by ELL Concentration**

Activity Structure	High ELL Concentration		Low ELL Concentration	
	Mean	SE	Mean	SE
Writing/copying	0.17	0.06	0.32	0.08
Sounds	0.44	0.15	0.25	0.07
Not Print-related	0.22	0.07	0.18	0.07
Print-related content	0.62	0.13	0.45	0.11
Mathematics, colors, or numbers	0.34	0.09	0.66	0.10
Singing	0.89	0.14	0.56	0.12
Aesthetics	0.46	0.13	0.35	0.11
Science or nature	0.16	0.08	0.21	0.06
Social studies	0.16	0.06	0.11	0.04
Fine motor	1.58	0.19	1.63	0.26
Gross motor	0.94	0.17	0.93	0.17
Other	1.54	0.34	2.24	0.37
<b>Sample Size</b>	<b>31</b>		<b>33</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.

**Table IV.13. Percentage of Children with Different Number of Time Periods Observed in Each of the Content Areas, by ELL Concentration**

Activity Structure	Percentage of Children with Any Observations in This Structure	Number of Children (Percentage) by Number of Time Periods Observed						
		0	1	2	3	4	5	6
<b>High ELL Concentration</b>								
Writing/copying	16.48	76 (83.5)	15 (16.5)					
Sounds	25.27	68 (74.7)	14 (15.4)	7 (7.7)	1 (1.1)	1 (1.1)		
Not print-related	17.58	75 (82.4)	12 (13.2)	3 (3.3)	1 (1.1)			
Print-related content	45.05	50 (54.9)	29 (31.9)	10 (11)	1 (1.1)	1 (1.1)		
Mathematics, colors, or numbers	27.47	66 (72.5)	17 (18.7)	8 (8.8)				
Singing	59.34	37 (40.7)	36 (39.6)	14 (15.4)	4 (4.4)			
Aesthetics	29.67	64 (70.3)	15 (16.5)	11 (12.1)	1 (1.1)			
Science or nature	13.19	79 (86.8)	10 (11)	1 (1.1)	1 (1.1)			
Social studies	12.09	80 (87.9)	8 (8.8)	3 (3.3)				
Fine motor	73.63	24 (26.4)	27 (29.7)	20 (22)	13 (14.3)	6 (6.6)		1 (1.1)
Gross motor	59.34	37 (40.7)	29 (31.9)	20 (22)	3 (3.3)	2 (2.2)		
Other	62.64	34 (37.4)	21 (23.1)	12 (13.2)	10 (11)	3 (3.3)	10 (11)	1 (1.1)
<b>Sample Size</b>	<b>91</b>							
<b>Low ELL Concentration</b>								
Writing/copying	29.47	67 (70.5)	25 (26.3)	3 (3.2)				
Sounds	18.95	77 (81.1)	11 (11.6)	7 (7.4)				
Not print-related	12.63	83 (87.4)	8 (8.4)	4 (4.2)				
Print-related content	33.68	63 (66.3)	22 (23.2)	9 (9.5)	1 (1.1)			
Mathematics, colors, or numbers	44.21	53 (55.8)	30 (31.6)	7 (7.4)	4 (4.2)	1 (1.1)		
Singing	46.32	51 (53.7)	34 (35.8)	9 (9.5)		1 (1.1)		
Aesthetics	22.11	74 (77.9)	13 (13.7)	5 (5.3)	3 (3.2)			
Science or nature	22.11	74 (77.9)	21 (22.1)					
Social studies	11.58	84 (88.4)	10 (10.5)	1 (1.1)				
Fine motor	66.32	32 (33.7)	15 (15.8)	19 (20)	18 (18.9)	4 (4.2)	5 (5.3)	2 (2.1)
Gross motor	53.68	44 (46.3)	31 (32.6)	13 (13.7)	6 (6.3)	1 (1.1)		
Other	69.47	29 (30.5)	16 (16.8)	9 (9.5)	11 (11.6)	10 (10.5)	7 (7.4)	13 (13.7)
<b>Sample Size</b>	<b>95</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation (LISn).

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

Table IV.14. Unweighted Descriptive Statistics for LIS<sub>n</sub> Child Talk

	Mean	Standard Deviation	Cronbach 's Alpha
<b>Talks in English</b>			
<b>Focus Child (FC) Talk</b>			
Total child-to-child talk in English	17.76	11.25	0.67
Total child to teacher talk in English	7.09	6.60	0.60
Total child to other adult talk in English	4.88	5.71	0.60
<b>Talks in Spanish/Other Languages</b>			
<b>Focus Child (FC) Talk</b>			
Total child-to-child talk in English	2.52	4.72	0.73
Total child to teacher talk in English	0.81	2.17	0.58
Total child to other adult talk in English	1.23	3.37	0.67
<b>Sustained Conversation</b>			
Sustained conversations with teacher	1.16	1.87	0.70
Sustained conversations with other adult	1.09	1.95	0.74
Sustained conversations with other children	2.09	2.88	0.78
Total sustained conversations	4.34	5.39	0.72
<b>Sample Size</b>	<b>186</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LIS<sub>n</sub> = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.15. Unweighted Descriptive Statistics for LISn Child Talk, by Program Type**

	Center			Family Child Care		
	Mean	Standard Deviation	Cronbach 's Alpha	Mean	Standard Deviation	Cronbach 's Alpha
<b>Talks in English</b>						
<b>Focus Child (FC) Talk</b>						
Total child-to-child talk in English	17.35	10.87	0.63	18.40	11.86	0.72
Total child to teacher talk in English	5.71	5.63	0.59	9.23	7.40	0.56
Total child to other adult talk in English	4.51	4.91	0.49	5.44	6.76	0.70
<b>Talks in Spanish/Other Languages</b>						
<b>Focus Child (FC) Talk</b>						
Total child-to-child talk in English	2.74	4.75	0.74	2.16	4.68	0.66
Total child to teacher talk in English	0.74	2.15	0.57	0.90	2.22	0.61
Total child to other adult talk in English	1.50	3.86	0.68	0.81	2.39	0.71
<b>Sustained Conversation</b>						
Sustained conversations with teacher	0.94	1.51	0.64	1.49	2.29	0.74
Sustained conversations with other adult	0.82	1.34	0.52	1.51	2.58	0.81
Sustained conversations with other children	1.97	2.54	0.71	2.27	3.34	0.84
Total sustained conversations	3.73	4.30	0.71	5.27	6.67	0.73
<b>Sample Size</b>	<b>113</b>			<b>73</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

Table IV.16. Unweighted Descriptive Statistics for LISn Child Talk, by ELL Concentration

	High ELL Concentration			Low ELL Concentration		
	Mean	Standard Deviation	Cronbach 's Alpha	Mean	Standard Deviation	Cronbach 's Alpha
<b>Talks in English</b>						
<b>Focus Child (FC) Talk</b>						
Total child-to-child talk in English	13.29	9.38	0.62	22.05	11.26	0.60
Total child to teacher talk in English	5.73	6.73	0.70	8.40	6.23	0.43
Total child to other adult talk in English	3.65	4.54	0.56	6.05	6.45	0.60
<b>Talks in Spanish/Other Languages</b>						
<b>Focus Child (FC) Talk</b>						
Total child-to-child talk in English	4.41	5.73	0.66	0.71	2.39	0.79
Total child to teacher talk in English	1.43	2.83	0.52	0.21	0.94	0.65
Total child to other adult talk in English	2.23	4.32	0.65	0.27	1.63	0.60
<b>Sustained Conversation</b>						
Sustained conversations with teacher	1.22	1.93	0.73	1.09	1.82	0.67
Sustained conversations with other adult	0.98	1.51	0.54	1.20	2.29	0.82
Sustained conversations with other children	1.85	2.48	0.70	2.33	3.21	0.82
Total sustained conversations	4.04	4.74	0.72	4.62	5.95	0.73
<b>Sample Size</b>	<b>91</b>			<b>95</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.



**Table IV.17. Unweighted Descriptive Statistics for LISn Child Talk, by Child ELL Status**

	ELL			Non-ELL		
	Mean	Standard Deviation	Cronbach 's Alpha	Mean	Standard Deviation	Cronbach 's Alpha
<b>Talks in English</b>						
<b>Focus Child (FC) Talk</b>						
Total child-to-child talk in English	11.54	8.91	0.65	20.95	11.30	0.62
Total child to teacher talk in English	4.44	4.72	0.54	9.05	7.26	0.57
Total child to other adult talk in English	2.96	4.11	0.53	6.01	6.48	0.62
<b>Talks in Spanish/Other Languages</b>						
<b>Focus Child (FC) Talk</b>						
Total child-to-child talk in English	5.06	5.68	0.62	0.78	3.00	0.76
Total child to teacher talk in English	1.60	2.84	0.43	0.30	1.42	0.68
Total child to other adult talk in English	2.49	4.68	0.65	0.50	2.02	0.73
<b>Sustained Conversation</b>						
Sustained conversations with teacher	0.81	1.48	0.68	1.45	2.16	0.72
Sustained conversations with other adult	0.89	1.54	0.63	1.30	2.29	0.78
Sustained conversations with other children	1.54	2.49	0.76	2.42	3.19	0.81
Total sustained conversations	3.24	4.76	0.83	5.17	6.04	0.69
<b>Sample Size</b>	<b>70</b>			<b>100</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level.

**Table IV.18. Weighted Frequency of Teacher and Other Adult Talk in English**

	Lead Teacher		Other Adult	
	Mean (SE)	Range	Mean (SE)	Range
Repeats or confirms	3.69 (0.51)	0-15.33	1.79 (0.26)	0-9.33
Elaborates or builds (also code one of four below)	1.35 (0.24)	0-7.67	0.63 (0.16)	0-4.67
Gives directions	6.17 (0.68)	0.33-21.33	3.46 (0.51)	0-13.67
Requests language (contextualized)	8.85 (0.88)	0-27.33	4.18 (0.56)	0-19.33
Provides information, names, label (contextualized)	12.03 (1.51)	0-45.33	5.85 (0.83)	0-37.5
Provides/elicits information (decontextualized)	2 (0.39)	0-16	0.64 (0.12)	0-3.33
Reads	1.36 (0.23)	0-5.67	0.6 (0.16)	0-5
Sings	2.86 (0.45)	0-12.67	1.08 (0.25)	0-10.33
Other talk	2.25 (0.57)	0-16.33	1.12 (0.25)	0-12
<b>Sample Size</b>	<b>64</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level. Estimates are at the classroom level. Possible range for each measure is 0-60.

**Table IV.19. Weighted Frequency of Teacher and Other Adult Talk in Spanish/Other Languages**

	Lead Teacher		Other Adult	
	Mean (SE)	Range	Mean (SE)	Range
Repeats or confirms	0.37 (0.21)	0-6	0.5 (0.21)	0-7.67
Elaborates or builds (also code one of four below)	0.28 (0.16)	0-6.33	0.08 (0.04)	0-1.33
Gives directions	0.51 (0.21)	0-7	0.55 (0.19)	0-4.33
Requests language (contextualized)	0.68 (0.29)	0-7.33	0.75 (0.26)	0-8.67
Provides information, names, label (contextualized)	1.22 (0.43)	0-12.67	1.07 (0.34)	0-9.33
Provides/elicits information (decontextualized)	0.23 (0.13)	0-4	0.18 (0.09)	0-2.67
Reads	0.17 (0.11)	0-3	0.2 (0.08)	0-3
Sings	0.29 (0.11)	0-7.67	0.19 (0.06)	0-3
Other talk	0.21 (0.14)	0-4	0.28 (0.14)	0-5
<b>Sample Size</b>	<b>64</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level. Estimates are at the classroom level. Possible range for each measure is 0-60.

Table IV.20. Weighted Frequency of Teacher and Other Adult Talk in English, by Program Type

	Lead Teacher		Other Adult	
	Mean (SE)	Range	Mean (SE)	Range
<b>Center</b>				
Repeats or confirms	3.82 (0.69)	0-15.33	1.94 (0.34)	0-9.33
Elaborates or builds (also code one of four below)	1.31 (0.31)	0-7.67	0.64 (0.21)	0-4.67
Gives directions	6.29 (0.89)	0.33-21.33	3.59 (0.67)	0-13.67
Requests language (contextualized)	8.27 (1.13)	0-19.67	3.97 (0.68)	0-19.33
Provides information, names, label (contextualized)	11.6 (2.03)	0-45.33	4.73 (0.77)	0-17.33
Provides/elicits information (decontextualized)	1.97 (0.52)	0-16	0.61 (0.15)	0-3.33
Reads	1.23 (0.28)	0-5.67	0.54 (0.2)	0-4.67
Sings	3.26 (0.61)	0-12.67	1.03 (0.3)	0-8
Other talk	2.18 (0.75)	0-16.33	1.07 (0.26)	0-9
<b>Sample Size</b>	<b>38</b>			
<b>Family Child Care</b>				
Repeats or confirms	3.38 (0.53)	0-13.67	1.44 (0.35)	0-6.67
Elaborates or builds (also code one of four below)	1.44 (0.34)	0-6	0.59 (0.22)	0-3.67
Gives directions	5.9 (0.9)	0.33-19	3.13 (0.63)	0-12
Requests language (contextualized)	10.2 (1.17)	0.33-27.33	4.66 (0.97)	0-17.5
Provides information, names, label (contextualized)	13.04 (1.63)	0-36	8.47 (2.07)	0-37.5
Provides/elicits information (decontextualized)	2.07 (0.45)	0-10	0.69 (0.17)	0-2.33
Reads	1.65 (0.37)	0-5.33	0.73 (0.29)	0-5
Sings	1.94 (0.55)	0-10.67	1.19 (0.46)	0-10.33
Other talk	2.43 (0.79)	0-14.5	1.23 (0.58)	0-12
<b>Sample Size</b>	<b>26</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level. Estimates are at the classroom level. Possible range for each measure is 0-60.

**Table IV.21. Weighted Frequency of Teacher and Other Adult Talk in Spanish/Other Languages, by Program Type**

	Lead Teacher		Other Adult	
	Mean (SE)	Range	Mean (SE)	Range
<b>Center</b>				
Repeats or confirms	0.42 (0.29)	0-6	0.66 (0.29)	0-7.67
Elaborates or builds (also code one of four below)	0.34 (0.22)	0-6.33	0.08 (0.05)	0-0.67
Gives directions	0.5 (0.27)	0-5	0.6 (0.25)	0-4.33
Requests language (contextualized)	0.58 (0.39)	0-7.33	0.84 (0.36)	0-8.67
Provides information, names, label (contextualized)	1.19 (0.56)	0-12.67	1.16 (0.45)	0-9.33
Provides/elicits information (decontextualized)	0.29 (0.18)	0-4	0.21 (0.13)	0-2.67
Reads	0.24 (0.15)	0-3	0.25 (0.11)	0-3
Sings	0.14 (0.06)	0-1.33	0.15 (0.07)	0-2
Other talk	0.27 (0.2)	0-4	0.35 (0.19)	0-5
<b>Sample Size</b>	<b>38</b>			
<b>Family Child Care</b>				
Repeats or confirms	0.23 (0.12)	0-2.33	0.14 (0.1)	0-2.33
Elaborates or builds (also code one of four below)	0.14 (0.12)	0-3	0.09 (0.07)	0-1.33
Gives directions	0.51 (0.3)	0-7	0.43 (0.21)	0-4
Requests language (contextualized)	0.92 (0.35)	0-5.33	0.53 (0.23)	0-4.33
Provides information, names, label (contextualized)	1.29 (0.6)	0-12	0.88 (0.4)	0-8.67
Provides/elicits information (decontextualized)	0.09 (0.09)	0-2.33	0.1 (0.1)	0-2.67
Reads	0 (0)	0-0	0.08 (0.08)	0-2
Sings	0.62 (0.35)	0-7.67	0.27 (0.14)	0-3
Other talk	0.09 (0.06)	0-1.33	0.12 (0.09)	0-2.33
<b>Sample Size</b>	<b>26</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LIS<sub>n</sub> = Language Interaction Snapshot. Estimates are at the child level. Estimates are at the classroom level. Possible range for each measure is 0-60.

Table IV.22. Weighted Frequency of Teacher and Other Adult Talk in English, by ELL Concentration

	Lead Teacher		Other Adult	
	Mean (SE)	Range	Mean (SE)	Range
<b>High Concentrations of ELLs</b>				
Repeats or confirms	3.54 (0.84)	0-12.67	1.4 (0.37)	0-5.67
Elaborates or builds (also code one of four below)	1.07 (0.34)	0-7.67	0.42 (0.2)	0-4.67
Gives directions	4.89 (0.75)	0.33-17.33	2.82 (0.65)	0-13.33
Requests language (contextualized)	8.44 (1.23)	0.33-21.67	3.77 (0.87)	0-19.33
Provides information, names, label (contextualized)	11.26 (1.84)	0-28	4.46 (0.93)	0-18.5
Provides/elicits information (decontextualized)	2.13 (0.67)	0-16	0.52 (0.17)	0-3.33
Reads	1.62 (0.39)	0-5.67	0.3 (0.2)	0-4.67
Sings	3.15 (0.72)	0-12.67	1.29 (0.42)	0-8
Other talk	1.53 (0.61)	0-11	0.96 (0.38)	0-12
<b>Sample Size</b>	<b>31</b>			
<b>Low Concentrations of ELLs</b>				
Repeats or confirms	3.85 (0.56)	0-15.33	2.25 (0.39)	0-9.33
Elaborates or builds (also code one of four below)	1.67 (0.32)	0-6	0.87 (0.25)	0-3.67
Gives directions	7.66 (1.01)	0.33-21.33	4.19 (0.72)	0-13.67
Requests language (contextualized)	9.32 (1.29)	0-27.33	4.66 (0.66)	0-17.5
Provides information, names, label (contextualized)	12.94 (2.47)	0-45.33	7.48 (1.42)	0-37.5
Provides/elicits information (decontextualized)	1.85 (0.34)	0-10	0.77 (0.14)	0-3.33
Reads	1.06 (0.23)	0-4.67	0.95 (0.26)	0-5
Sings	2.53 (0.53)	0-10.67	0.83 (0.3)	0-10.33
Other talk	3.09 (1.01)	0-16.33	1.32 (0.31)	0-7.67
<b>Sample Size</b>	<b>33</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level. Estimates are at the classroom level. Possible range for each measure is 0-60.

**Table IV.23. Weighted Frequency of Teacher and Other Adult Talk in Spanish/Other Languages, by ELL Concentration**

	Lead Teacher		Other Adult	
	Mean (SE)	Range	Mean (SE)	Range
<b>High Concentrations of ELLs</b>				
Repeats or confirms	0.59 (0.37)	0-6	0.86 (0.35)	0-7.67
Elaborates or builds (also code one of four below)	0.52 (0.28)	0-6.33	0.14 (0.06)	0-1.33
Gives directions	0.91 (0.35)	0-7	0.86 (0.29)	0-4.33
Requests language (contextualized)	1.21 (0.48)	0-7.33	1.23 (0.41)	0-8.67
Provides information, names, label (contextualized)	2.08 (0.71)	0-12.67	1.68 (0.51)	0-9.33
Provides/elicits information (decontextualized)	0.43 (0.22)	0-4	0.32 (0.17)	0-2.67
Reads	0.31 (0.19)	0-3	0.31 (0.13)	0-3
Sings	0.47 (0.2)	0-7.67	0.35 (0.11)	0-3
Other talk	0.35 (0.25)	0-4	0.36 (0.22)	0-5
<b>Sample Size</b>	<b>31</b>			
<b>Low Concentrations of ELLs</b>				
Repeats or confirms	0.1 (0.08)	0-1.33	0.09 (0.09)	0-1.67
Elaborates or builds (also code one of four below)	0 (0)	0-0	0.02 (0.02)	0-0.33
Gives directions	0.04 (0.03)	0-0.67	0.18 (0.16)	0-3
Requests language (contextualized)	0.06 (0.02)	0-0.67	0.2 (0.2)	0-3.67
Provides information, names, label (contextualized)	0.23 (0.11)	0-2.33	0.37 (0.3)	0-5.67
Provides/elicits information (decontextualized)	0 (0)	0-0	0.02 (0.02)	0-0.33
Reads	0 (0)	0-0	0.07 (0.07)	0-1.33
Sings	0.07 (0.04)	0-1	0 (0)	0-0
Other talk	0.06 (0.04)	0-0.67	0.19 (0.15)	0-2.67
<b>Sample Size</b>	<b>33</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the child level. Estimates are at the classroom level. Possible range for each measure is 0-60.

Table IV.24. Factor Loadings for LISn Scales

Factor	Factor Loading	Cronbach's Alpha
<b>Talk in English</b>		
<b>Teacher Scaffolded Decontextualized Talk in English</b>		<b>0.78</b>
Gives directions	0.77	
Elaborates or builds	0.77	
Decontextualized talk	0.71	
Other talk	0.71	
Repeats or confirms	0.69	
<b>Teacher Contextualized Talk in English</b>		<b>0.74</b>
Requests language	0.91	
Repeats or confirms	0.77	
Provides information (contextualized)	0.75	
Reads	0.55	
<b>Other Adult Scaffolded Decontextualized Talk in English</b>		<b>0.65</b>
Decontextualized talk	0.82	
Elaborates or builds	0.79	
Repeats or confirms	0.68	
Other talk	0.49	
<b>Other Adult Contextualized Talk in English</b>		<b>0.83</b>
Requests language	0.94	
Gives directions	0.82	
Provides information (contextualized)	0.82	
Repeats or confirms	0.65	
Reads	0.63	
<b>Talk in Spanish/Other Languages</b>		
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group (3 factors)</b>		
<b>Teacher Scaffolded Decontextualized Talk/Read in Spanish/Other</b>		<b>0.90</b>
Decontextualized talk	0.95	
Reads	0.94	
Elaborates or builds	0.85	
<b>Teacher Contextualized Talk/Sing in Spanish/Other</b>		<b>0.89</b>
Requests language	0.93	
Provides information (contextualized)	0.90	
Gives directions	0.83	
Sings	0.81	
<b>Teacher Elicit/Respond Child Language</b>		<b>0.92</b>
Repeats or confirms	0.95	
Requests language	0.92	
Other talk	0.87	
Gives directions	0.85	
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group (2 factors)</b>		
<b>Teacher Scaffolded Decontextualized Talk in Spanish/Other</b>		<b>0.89</b>
Reads	0.88	
Other talk	0.88	
Decontextualized talk	0.80	
Gives directions	0.77	
<b>Teacher Contextualized Talk in Spanish/Other</b>		<b>0.89</b>
Provides information (contextualized)	0.92	
Requests language	0.90	
Gives directions	0.85	
Elaborates or builds	0.76	
Sings	0.74	

Table IV.24 (continued)

Factor	Factor Loading	Cronbach's Alpha
<b>Other Adult Verbal Communication Directed to FC/FC with Group</b>		
<b>Other Adult Scaffolded Decontextualized Talk in Spanish/Other</b>		<b>0.86</b>
Gives directions	0.91	
Elaborates or builds	0.91	
Reads	0.78	
Decontextualized talk	0.77	
<b>Other Adult Contextualized Talk in Spanish/Other</b>		<b>0.90</b>
Requests language	0.97	
Provides information (contextualized)	0.93	
Repeats or confirms	0.92	
Other talk	0.69	
<b>Sample Size</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LIS<sub>n</sub> = Language Interaction Snapshot. Estimates are at the classroom level.



Table IV.25. Weighted Descriptive Statistics for LISn Scales

	Mean	Standard Deviation	Cronbach's Alpha
<b>Talks in English</b>			
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group</b>			
Teacher scaffolded decontextualized talk in English	15.46	1.83	0.78
Teacher contextualized talk in English	25.93	2.67	0.74
Total teacher talk in English	40.57	4.08	0.81
Teacher any talk in English across time points	10.55	1.64	0.82
<b>other adult verbal communication directed to fc/fc with group</b>			
Other adult scaffolded decontextualized talk in English	4.18	0.56	0.65
Other adult contextualized talk in English	15.88	1.91	0.83
Total other adult talk in English	19.34	2.14	0.78
Other adult any talk in English across time points	6.37	1.01	0.75
<b>Talks in Spanish/Other Languages</b>			
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group (3 factors)</b>			
Teacher scaffolded decontextualized talk/read in Spanish/other	0.68	0.39	0.90
Teacher contextualized talk/sing in Spanish/other	2.69	0.94	0.89
Teacher elicit/respond child language	1.77	0.80	0.92
Total teacher talk in Spanish/other	7.55	2.57	0.92
Teacher any talk in Spanish/other language across time points	1.36	0.48	0.80
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group (2 factors)</b>			
Teacher scaffolded decontextualized talk in Spanish/other	1.48	0.73	0.89
Teacher contextualized talk in Spanish/other	2.97	1.07	0.89
<b>Other Adult Verbal Communication Directed to FC/FC with Group</b>			
Other Adult scaffolded decontextualized talk in Spanish/other	1.01	0.36	0.86
Other Adult contextualized talk in Spanish/other	2.61	0.89	0.90
Total other adult talk in Spanish/other	3.81	1.25	0.91
Other adult any talk in Spanish/other language across time points	1.19	0.39	0.88
<b>Sample Size</b>	<b>64</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot. Estimates are at the classroom level.

**Table IV.26. Weighted Descriptive Statistics for LISn Dcores, by Program Type**

	Center			Family Child Care		
	Mean	Standard Deviation	Cronbach's Alpha	Mean	Standard Deviation	Cronbach's Alpha
<b>Talks in English</b>						
Lead Teacher verbal communication directed to FC/FC with group						
Teacher scaffolded decontextualized talk in English	15.57	2.44	0.78	15.21	2.21	0.78
Teacher contextualized talk in English	24.92	3.57	0.75	28.27	2.83	0.73
Total teacher talk in English	39.93	5.55	0.83	42.04	3.98	0.76
Teacher any talk in English across time points	11.16	2.23	0.87	9.14	1.67	0.71
<b>Other Adult Verbal Communication Directed to FC/FC with Group</b>						
Other Adult scaffolded decontextualized talk in English	4.27	0.66	0.50	3.96	1.03	0.79
Other adult contextualized talk in English	14.78	2.14	0.76	18.43	3.94	0.89
Total other adult talk in English	18.14	2.41	0.68	22.14	4.37	0.84
Other adult any talk in English across time points	7.15	1.36	0.76	4.55	1.05	0.65
<b>Talks in Spanish/Other Languages</b>						
Lead teacher verbal communication directed to FC/FC with group (3 factors)						
Teacher Scaffolded decontextualized talk/read in Spanish/other	0.87	0.54	0.91	0.23	0.22	0.74
Teacher contextualized talk/sing in Spanish/other	2.41	1.21	0.92	3.34	1.42	0.91
Teacher elicit/respond child language	1.77	1.10	0.94	1.75	0.76	0.93
Total teacher talk in Spanish/other	8.02	3.51	0.95	6.46	2.28	0.82
Teacher any talk in Spanish/other language across time points	1.18	0.62	0.88	1.80	0.76	0.74
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group (2 factors)</b>						
Teacher scaffolded decontextualized talk in Spanish/other	1.72	1.01	0.92	0.93	0.48	0.62
Teacher contextualized talk in Spanish/other	2.76	1.40	0.94	3.48	1.49	0.89
<b>Other Adult Verbal Communication Directed to FC/FC with Group</b>						
Other adult scaffolded decontextualized talk in Spanish/other	1.14	0.48	0.84	0.70	0.41	0.93
Other adult contextualized talk in Spanish/other	3.01	1.20	0.92	1.68	0.74	0.89
Total other adult talk in Spanish/other	4.31	1.68	0.91	2.65	1.16	0.94
Other adult any talk in Spanish/other language across time points	1.23	0.50	0.86	1.12	0.61	0.91
<b>Sample Size</b>	<b>38</b>			<b>26</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot.

**Table IV.27. Weighted Descriptive Statistics for LISn Scores, by ELL Concentration**

	High ELL Concentration			Low ELL Concentration		
	Mean	Standard Deviation	Cronbach's Alpha	Mean	Standard Deviation	Cronbach's Alpha
<b>Talks in English</b>						
Lead Teacher verbal communication directed to FC/FC with group						
Teacher scaffolded decontextualized talk in English	13.17	2.40	0.74	18.13	2.59	0.80
Teacher contextualized talk in English	24.86	3.60	0.72	27.17	3.99	0.76
Total Teacher talk in English	37.64	5.46	0.81	43.98	5.96	0.81
Teacher any talk in English across time points	8.40	1.82	0.77	13.06	2.77	0.85
Other adult verbal communication directed to FC/FC with group						
Other adult scaffolded decontextualized talk In English	3.30	0.85	0.62	5.20	0.69	0.69
Other adult contextualized talk in English	12.74	2.62	0.87	19.52	2.62	0.79
Total other adult talk in English	15.94	3.07	0.85	23.31	2.72	0.69
Other adult any talk in English across time points	5.24	1.37	0.82	7.68	1.48	0.68
<b>Talks in Spanish/Other languages</b>						
Lead Teacher verbal communication directed to FC/FC with group (3 factors)						
Teacher scaffolded decontextualized talk/read in Spanish/other	1.26	0.68	0.90	0.00	0.00	0.0
Teacher contextualized talk/sing in Spanish/other	4.67	1.55	0.88	0.39	0.12	0.44
Teacher elicit/respond child language	3.06	1.38	0.91	0.26	0.11	0.27
Total teacher talk in spanish/Other	12.64	4.18	0.91	1.62	1.02	0.42
Teacher any talk in Spanish/other language across time points	2.27	0.81	0.78	0.31	0.11	0.59
<b>Lead Teacher Verbal Communication Directed to FC/FC with Group (2 factors)</b>						
Teacher scaffolded decontextualized talk in Spanish/other	2.59	1.26	0.88	0.20	0.11	0.17
Teacher Contextualized talk in Spanish/other	5.19	1.77	0.88	0.39	0.12	0.31
Other Adult verbal communication directed to FC/FC with group						
Other adult scaffolded decontextualized talk in Spanish/other	1.63	0.58	0.84	0.29	0.27	1.00
Other adult contextualized talk in Spanish/other	4.13	1.37	0.88	0.84	0.72	0.98
Total other adult talk in Spanish/other	6.12	1.93	0.88	1.13	0.99	0.90
Other adult any talk in Spanish/other language across time points	1.82	0.59	0.88	0.47	0.39	0.90
<b>Sample Size</b>	<b>31</b>			<b>33</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot.

**Table IV.28. Weighted Means of Teacher Supports of Language and Literacy Development**

Items	Mean	SE
Effectively use pictures and objects to help children understand what is being said	2.68	0.09
Effectively use gestures and facial expressions to help children understand what is being communicated (gestures and expressions match the meaning)	2.81	0.10
Intentionally teach more sophisticated words to children	2.02	0.10
Intentionally teach basic concept words to children (top, bottom, under, between)	2.28	0.09
Repeat phrases or sentences for children (allowing a wait time in between)	2.64	0.12
Repeat information in simplified sentences	2.67	0.11
Effectively use vocal emphasis of key words when communicating	2.80	0.12
Elicit elaborate responses from children (for example, frequently asks open-ended questions like "How did that happen?" "Tell me more about that," "And then what happened?")	2.32	0.14
Ask many questions that can be answered with a single word	2.72	0.10
Engage children in meaningful conversations about a topic (sustained conversations with a child or group of children)	2.06	0.12
Model correct use of English	3.22	0.11
Use routines and picture schedules to support children in knowing what to do	2.41	0.11
Provide clear instructions for tasks and activities	2.98	0.12
Read to children at different points throughout the day	2.19	0.10
Talk meaningfully with children about books that are read	2.29	0.12
Teach or review vocabulary words prior to book reading	1.88	0.12
Listen attentively to children	3.03	0.08
Help children learn to read by teaching them about sounds (i.e., by rhyming, teaching the sounds that each letter makes, and modeling how to put sounds together)	2.49	0.11
Encourage peer interactions that support language development	2.34	0.12
<b>Sample Size</b>	<b>53-64</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: Data collected based on the End of Visit Ratings (EVR).

**Table IV.29. Weighted Means of EVR Socio-Emotional Scale Items**

Items	Mean	SE
Children are cooperative and attentive	3.23	0.08
Teachers spend a lot of time managing behavior <sup>a</sup>	1.69	0.10
Child behavior disrupts the classroom <sup>a</sup>	1.60	0.09
Learning continues without disruption from children's problem behaviors	2.87	0.12
Children are perfectly behaved	2.87	0.08
Teachers use nonverbal methods to manage behavior	2.38	0.11
Teachers used praise to maintain positive behavior	2.98	0.10
Children are off-task <sup>a</sup>	1.72	0.07
Children are passively engaged (watching and listening, but not doing or talking) <sup>a</sup>	2.42	0.10
Children are actively engaged (asking questions, responding, working with materials)	2.79	0.10
Children appear excited by the lesson	3.07	0.07
Lead teacher and children have a warm positive relationship	3.34	0.08
Assistant teacher(s) and children have a warm positive relationship	3.25	0.08
Teachers encourage children to help one another	2.48	0.13
Peer to peer interaction (including some non-verbal interaction) about activities occurs	2.65	0.12
Teachers have techniques for gaining class attention in less than 10 seconds	2.75	0.09
Children spend a lot of time waiting <sup>a</sup>	1.80	0.08
Transitions are smooth and children quickly engage in activities	2.79	0.09
Teachers spend a lot of time giving directions (routine/daily activities) <sup>a</sup>	1.97	0.09
Teachers are fluid in the presentation of activities	2.95	0.09
Children appear familiar with the routines and procedures used	3.14	0.10
Children are given the opportunity to think and respond (wait time)	2.81	0.11
<b>Sample Size</b>	<b>61-64</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

<sup>a</sup>Reverse-coded in scale construction.

**Table IV.30. Weighted Frequencies of Teacher Supports of Language and Literacy Development**

Items	Not at All	Minimally	Strongly	Extremely
Effectively use pictures and objects to help children understand what is being said	3.65	39.96	41.09	15.30
Effectively use gestures and facial expressions to help children understand what is being communicated (gestures and expressions match the meaning)	3.68	29.77	48.41	18.14
Intentionally teach more sophisticated words to children	30.52	44.52	17.43	7.52
Intentionally teach basic concept words to children (top, bottom, under, between)	14.01	49.40	31.01	5.58
Repeat phrases or sentences for children (allowing a wait time in between)	8.19	33.74	44.33	13.74
Repeat information in simplified sentences	10.81	24.56	51.76	12.87
Effectively use vocal emphasis of key words when communicating	2.72	37.24	37.49	22.55
Elicit elaborate responses from children (for example, frequently asks open-ended questions like "How did that happen?" "Tell me more about that," "And then what happened?")	26.36	27.86	32.96	12.83
Ask many questions that can be answered with a single word	11.58	20.54	51.89	15.99
Engage children in meaningful conversations about a topic (sustained conversations with a child or group of children)	33.75	34.71	23.27	8.26
Model correct use of English	0.0	17.59	42.65	39.76
Use routines and picture schedules to support children in knowing what to do	19.67	31.99	35.53	12.81
Provide clear instructions for tasks and activities	6.29	21.26	40.19	32.26
Read to children at different points throughout the day	19.23	47.44	28.71	4.62
Talk meaningfully with children about books that are read	21.74	35.35	34.86	8.05
Teach or review vocabulary words prior to book reading	38.06	38.83	19.71	3.40
Listen attentively to children	0.0	20.08	56.50	23.42
Help children learn to read by teaching them about sounds (i.e., by rhyming, teaching the sounds that each letter makes, and modeling how to put sounds together)	13.87	36.42	36.71	13.00
Encourage peer interactions that support language development	20.51	39.71	25.18	14.60
<b>Sample Size</b>	<b>53-64</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: Data collected based on the End of Visit Ratings (EVR).

**Table IV.31. Weighted Frequencies of EVR Socio-Emotional Scale Items**

Items	Not at All	Minimally	Strongly	Extremely
Children are cooperative and attentive	1.25	10.79	51.41	36.54
Teachers spend a lot of time managing behavior <sup>a</sup>	44.32	43.44	11.01	1.23
Child behavior disrupts the classroom <sup>a</sup>	50.78	39.78	8.20	1.23
Learning continues without disruption from children's problem behaviors	10.87	13.18	53.67	22.28
Children are perfectly behaved	2.44	19.89	65.45	12.22
Teachers use nonverbal methods to manage behavior	16.49	42.04	28.03	13.44
Teachers used praise to maintain positive behavior	1.17	21.00	56.20	21.64
Children are off-task <sup>a</sup>	32.99	62.51	4.50	.
Children are passively engaged (watching and listening, but not doing or talking) <sup>a</sup>	5.92	58.62	23.28	12.18
Children are actively engaged (asking questions, responding, working with materials)	8.22	15.52	65.57	10.70
Children appear excited by the lesson	0.0	12.96	66.92	20.11
Lead teacher and children have a warm positive relationship	0.0	8.59	49.19	42.23
Assistant teacher(s) and children have a warm positive relationship	0.0	9.52	56.15	34.33
Teachers encourage children to help one another	15.41	33.85	37.65	13.09
Peer to peer interaction (including some non-verbal interaction) about activities occurs	17.40	22.50	37.57	22.52
Teachers have techniques for gaining class attention in less than 10 seconds	9.65	23.27	49.03	18.05
Children spend a lot of time waiting <sup>a</sup>	30.87	58.73	10.40	0.0
Transitions are smooth and children quickly engage in activities	3.45	28.27	54.56	13.72
Teachers spend a lot of time giving directions (routine/daily activities) <sup>a</sup>	21.50	59.86	18.65	0.0
Teachers are fluid in the presentation of activities	1.22	24.57	52.63	21.58
Children appear familiar with the routines and procedures used	3.66	10.11	54.95	31.28
Children are given the opportunity to think and respond (wait time)	4.72	26.25	52.83	16.20
<b>Sample Size</b>	<b>61-64</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

<sup>a</sup>Reverse-coded in scale construction.

**Table IV.32. Weighted Means of Teacher Supports of Language and Literacy Development, by Program Type**

Items	Center		Family Child Care	
	Mean	SE	Mean	SE
Effectively use pictures and objects to help children understand what is being said	2.74	0.11	2.54	0.18
Effectively use gestures and facial expressions to help children understand what is being communicated (gestures and expressions match the meaning)	2.83	0.11	2.76	0.18
Intentionally teach more sophisticated words to children	2.06	0.12	1.92	0.19
Intentionally teach basic concept words to children (top, bottom, under, between)	2.39	0.09	2.04	0.18
Repeat phrases or sentences for children (allowing a wait time in between)	2.76	0.15	2.36	0.16
Repeat information in simplified sentences	2.76	0.14	2.44	0.16
Effectively use vocal emphasis of key words when communicating	2.84	0.16	2.70	0.15
Elicit elaborate responses from children (for example, frequently asks open-ended questions like "How did that happen?" "Tell me more about that," "And then what happened?")	2.38	0.17	2.20	0.22
Ask many questions that can be answered with a single word	2.66	0.13	2.88	0.16
Engage children in meaningful conversations about a topic (sustained conversations with a child or group of children)	2.11	0.14	1.94	0.19
Model correct use of English	3.19	0.15	3.28	0.15
Use routines and picture schedules to support children in knowing what to do	2.45	0.14	2.33	0.19
Provide clear instructions for tasks and activities	3.16	0.15	2.58	0.14
Read to children at different points throughout the day	2.18	0.12	2.20	0.17
Talk meaningfully with children about books that are read	2.38	0.16	2.10	0.19
Teach or review vocabulary words prior to book reading	1.91	0.15	1.82	0.19
Listen attentively to children	3.08	0.10	2.92	0.12
Help children learn to read by teaching them about sounds (i.e., by rhyming, teaching the sounds that each letter makes, and modeling how to put sounds together)	2.57	0.15	2.30	0.16
Encourage peer interactions that support language development	2.41	0.16	2.18	0.18
<b>Sample Size</b>	<b>31-38</b>		<b>22-26</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: Data collected based on the End of Visit Ratings (EVR).



**Table IV.33. Weighted Means of EVR Socio-Emotional Scale Items, by Program Type**

Items	Center		Family Child Care	
	Mean	SE	Mean	SE
Children are cooperative and attentive	3.25	0.11	3.20	0.12
Teachers spend a lot of time managing behavior <sup>a</sup>	1.73	0.14	1.59	0.10
Child behavior disrupts the classroom <sup>a</sup>	1.63	0.12	1.52	0.12
Learning continues without disruption from children's problem behaviors	2.95	0.15	2.70	0.18
Children are perfectly behaved	2.93	0.10	2.74	0.12
Teachers use nonverbal methods to manage behavior	2.55	0.13	2.00	0.14
Teachers used praise to maintain positive behavior	3.06	0.13	2.81	0.10
Children are off-task <sup>a</sup>	1.77	0.10	1.58	0.10
Children are passively engaged (watching and listening, but not doing or talking) <sup>a</sup>	2.39	0.13	2.48	0.15
Children are actively engaged (asking questions, responding, working with materials)	2.82	0.12	2.72	0.16
Children appear excited by the lesson	3.12	0.09	2.96	0.11
Lead teacher and children have a warm positive relationship	3.30	0.10	3.43	0.12
Assistant teacher(s) and children have a warm positive relationship	3.24	0.10	3.27	0.13
Teachers encourage children to help one another	2.48	0.17	2.48	0.18
Peer to peer interaction (including some non-verbal interaction) about activities occurs	2.73	0.14	2.46	0.23
Teachers have techniques for gaining class attention in less than 10 seconds	2.95	0.11	2.30	0.17
Children spend a lot of time waiting <sup>a</sup>	1.75	0.10	1.90	0.14
Transitions are smooth and children quickly engage in activities	2.86	0.11	2.62	0.15
Teachers spend a lot of time giving directions (routine/daily activities) <sup>a</sup>	1.95	0.11	2.02	0.13
Teachers are fluid in the presentation of activities	3.06	0.11	2.68	0.14
Children appear familiar with the routines and procedures used	3.23	0.11	2.92	0.17
Children are given the opportunity to think and respond (wait time)	2.77	0.14	2.88	0.14
<b>Sample Size</b>	<b>37-38</b>		<b>23-26</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

<sup>a</sup>Reverse-coded in scale construction.

**Table IV.34. Weighted Means of Teacher Supports of Language and Literacy Development, by ELL Concentration**

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	Mean	SE	Mean	SE
Effectively use pictures and objects to help children understand what is being said	2.63	0.12	2.74	0.14
Effectively use gestures and facial expressions to help children understand what is being communicated (gestures and expressions match the meaning)	2.72	0.14	2.92	0.13
Intentionally teach more sophisticated words to children	1.98	0.14	2.07	0.14
Intentionally teach basic concept words to children (top, bottom, under, between)	2.21	0.12	2.37	0.12
Repeat phrases or sentences for children (allowing a wait time in between)	2.70	0.16	2.56	0.17
Repeat information in simplified sentences	2.75	0.16	2.57	0.15
Effectively use vocal emphasis of key words when communicating	2.79	0.18	2.81	0.15
Elicit elaborate responses from children (for example, frequently asks open-ended questions like "How did that happen?" "Tell me more about that," "And then what happened?")	2.17	0.17	2.51	0.22
Ask many questions that can be answered with a single word	2.55	0.19	2.92	0.07
Engage children in meaningful conversations about a topic (sustained conversations with a child or group of children)	2.11	0.17	2.01	0.16
Model correct use of English	3.13	0.20	3.30	0.11
Use routines and picture schedules to support children in knowing what to do	2.43	0.15	2.39	0.17
Provide clear instructions for tasks and activities	3.04	0.18	2.92	0.15
Read to children at different points throughout the day	2.12	0.14	2.26	0.14
Talk meaningfully with children about books that are read	2.29	0.18	2.29	0.16
Teach or review vocabulary words prior to book reading	1.80	0.17	1.99	0.17
Listen attentively to children	3.03	0.11	3.04	0.10
Help children learn to read by teaching them about sounds (i.e., by rhyming, teaching the sounds that each letter makes, and modeling how to put sounds together)	2.57	0.15	2.38	0.18
Encourage peer interactions that support language development	2.38	0.17	2.29	0.17
<b>Sample Size</b>	<b>23-31</b>		<b>30-33</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: Data collected based on the End of Visit Ratings (EVR).

**Table IV.35. Weighted Means of EVR Socio-Emotional Scale Items, by ELL Concentration**

Items	High Concentrations of ELLs		Low Concentrations of ELLs	
	Mean	SE	Mean	SE
Children are cooperative and attentive	3.26	0.13	3.20	0.11
Teachers spend a lot of time managing behavior <sup>a</sup>	1.67	0.15	1.72	0.14
Child behavior disrupts the classroom <sup>a</sup>	1.59	0.14	1.61	0.12
Learning continues without disruption from children's problem behaviors	2.85	0.18	2.89	0.15
Children are perfectly behaved	2.87	0.12	2.88	0.11
Teachers use nonverbal methods to manage behavior	2.41	0.17	2.35	0.13
Teachers used praise to maintain positive behavior	3.02	0.15	2.94	0.12
Children are off-task <sup>a</sup>	1.74	0.12	1.68	0.08
Children are passively engaged (watching and listening, but not doing or talking) <sup>a</sup>	2.39	0.15	2.45	0.13
Children are actively engaged (asking questions, responding, working with materials)	2.64	0.16	2.95	0.10
Children appear excited by the lesson	3.03	0.10	3.12	0.11
Lead teacher and children have a warm positive relationship	3.35	0.11	3.32	0.11
Assistant teacher(s) and children have a warm positive relationship	3.24	0.13	3.26	0.11
Teachers encourage children to help one another	2.41	0.17	2.57	0.19
Peer to peer interaction (including some non-verbal interaction) about activities occurs	2.53	0.19	2.80	0.14
Teachers have techniques for gaining class attention in less than 10 seconds	2.71	0.15	2.81	0.11
Children spend a lot of time waiting <sup>a</sup>	1.85	0.13	1.73	0.11
Transitions are smooth and children quickly engage in activities	2.77	0.13	2.81	0.12
Teachers spend a lot of time giving directions (routine/daily activities) <sup>a</sup>	2.02	0.14	1.92	0.09
Teachers are fluid in the presentation of activities	2.98	0.14	2.90	0.11
Children appear familiar with the routines and procedures used	3.22	0.14	3.04	0.12
Children are given the opportunity to think and respond (wait time)	2.66	0.18	2.97	0.10
<b>Sample Size</b>	<b>30-31</b>		<b>31-33</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

Table IV.36. Factor Loadings for EVR Scales

Scale	Factor Loading	Cronbach Alpha
<b>General Language Stimulation</b>		<b>0.917</b>
Repeat information in simplified sentences	.854	
Elicit elaborate responses from children	.823	
Effectively use vocal emphasis of key words when communicating	.804	
Repeat phrases or sentences for children (allowing a wait time in between)	.799	
Effectively use gestures and facial expressions to help children understand what is being communicated	.799	
Encourage peer interactions that support language development	.764	
Listen attentively to children	.751	
Engage children in meaningful conversations about a topic	.747	
Provide clear instructions for tasks and activities	.626	
Ask many questions that can be answered with a single word	.565	
<b>Intentional/Explicit Instruction</b>		<b>0.875</b>
Vocabulary words are taught or reviewed prior to book reading	.817	
Intentionally teach more sophisticated words to children	.785	
Talk meaningfully with children about books that are read	.771	
Effectively use pictures and objects to help children understand what is being said	.761	
Intentionally teach basic concept words to children (top, bottom, under, between)	.745	
Help children learn to read by teaching them about sounds	.732	
Read to children at different points throughout the day	.668	
Use routines and picture schedules to support children in knowing what to do	.559	
<b>Positive Climate and Behavior Management</b>		<b>0.910</b>
Lead Teacher and children have a warm positive relationship	.802	
Children appear excited by the lesson	.775	
Children are actively engaged (asking question, responding, working with materials)	.771	
Children are perfectly behaved	.756	
Children are cooperative and attentive	.741	
Teachers have techniques for gaining class attention in less than 10 seconds	.724	
Assistant Teacher(s) and children have a warm positive relationship	.715	
Children are given the opportunity to think and respond (wait time)	.697	
Teachers used praise to maintain positive behavior	.687	
Teachers use nonverbal methods to manage behavior	.660	
Peer to peer interaction (including some non-verbal interaction) about activities occurs	.651	
Teachers encourage children to help one another	.644	
<b>Time Use/Productivity</b>		<b>0.852</b>
Transitions are smooth and children quickly engage in activities	.806	
Teachers are fluid in the presentation of activities	.756	
Children appear familiar with the routines and procedures used	.743	
Children spend a lot of time waiting <sup>a</sup>	.715	
Children are off-task <sup>a</sup>	.700	
Teachers spend a lot of time managing behavior <sup>a</sup>	.684	
Child behavior disrupts the classroom <sup>a</sup>	.631	
Teachers spend a lot of time giving directions (routine/daily activities) <sup>a</sup>	.606	
<b>Sample Size</b>	<b>62</b>	

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

**Table IV.37. Weighted Descriptive Statistics for EVR Scale Scores**

	Mean	Standard Error	Cronbach Alpha
General language stimulation	2.68	0.08	0.92
Intentional/explicit instruction	2.28	0.07	0.87
Positive climate/behavior management	2.88	0.07	0.91
Time use/productivity	3.14	0.06	0.85
<b>Sample Size</b>	<b>64</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

**Table IV.38. Weighted Descriptive Statistics for LISn Scores, by Program Type**

	Center			Family Child Care		
	Mean	Standard Error	Cronbach alpha	Mean	Standard Error	Cronbach alpha
General language stimulation	2.74	0.10	0.92	2.55	0.12	0.91
Intentional/explicit instruction	2.34	0.09	0.86	2.16	0.14	0.90
Positive climate/behavior management	2.93	0.09	0.92	2.77	0.09	0.90
Time use/productivity	3.16	0.08	0.87	3.07	0.09	0.83
<b>Sample Size</b>	<b>38</b>			<b>26</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.

**Table IV.39. Weighted Descriptive Statistics for LISn Scores, by ELL Concentration**

	Center			Family Child Care		
	Mean	Standard Error	Cronbach alpha	Mean	Standard Error	Cronbach alpha
General language stimulation	2.66	0.12	0.92	2.71	0.11	0.92
Intentional/explicit instruction	2.26	0.11	0.91	2.32	0.10	0.83
Positive climate/behavior management	2.84	0.11	0.91	2.93	0.08	0.91
Time use/productivity	3.14	0.10	0.81	3.13	0.08	0.88
<b>Sample Size</b>	<b>31</b>			<b>33</b>		

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings.



## V. INSTRUCTIONAL PRACTICES QUESTIONNAIRES

One key element of Phase 3 is providing information about the instructional practices currently being used by teachers and providers in LAUP to support the development of English language learners (ELLs). One source of our data about this is the Instructional Practices self-administered questionnaires (IP-SAQs). We developed these questionnaires in collaboration with First 5 LA and LAUP.

The IP-SAQ content built upon the literature related to supportive practices for ELLs (Aikens, Duffy, and Love 2010), as well as focus group and cognitive interview data gathered from coaches, teachers, and family child care (FCC) providers. All LAUP coaches participated in one of two focus groups held in summer 2009. The coaches provided information about the instructional practices they observe in programs, the practices that they try to foster, and the available resources about instructional practices that they consult. In fall 2009, LAUP teachers and FCC providers from a variety of geographic areas participated in focus groups about the instructional practices currently being used in programs with children with a home language other than English. The focus group discussions included themes such as the types of practices staff use with ELLs, the challenges to using these strategies, and the supports available for using them. Discussions also focused on teachers' and providers' beliefs about working with ELLs.

The coaches, teachers, and FCC providers discussed the following topics:

- Use of pictures and visual cues
- Use of sign language, gestures, body language, and facial expression
- Use of repetition
- Use of translation
- Hands on experiences
- Differences in philosophies about using English or another language—between families and providers, and among providers
- Continuum of proportional use of English and home language
- Use of home language for comfort versus instruction
- Challenge of parent involvement or engagement when the parents don't speak English.
- Different ways of assessing success of strategies in supporting ELLs including using parents' English usage, decreased signs of child confusion as measure of success in acquiring English
- Peer strategies, such as the use of a partner or grouping patterns to help children learn English
- Embedding counting activities throughout the day
- Use of supplementary curricular materials for supporting ELLs (including curriculum-specific materials such as DLM Express; use of websites with strategies such as Colorin Colorado)

- Use of computer programs (like Starfall) and websites that name or describe pictures
- Use of singing and music (songs sung in multiple languages, songs used to teach concepts—Dr. Jean and Charlotte Diamond were both mentioned by name)
- Ongoing child assessment
- Establishing rules and routines—some participants noted cultural and gender differences in how easily children follow rules and routines
- Celebrating cultural differences
- Use of literacy opportunities (books in different languages; simple books in English, child dictation and journals)
- Information about strategies from trial and error and a variety of sources

We developed two forms (A and B) of the IP-SAQ and tested them for potential problems using cognitive interviewing with teachers and FCC providers in fall 2009. The use of two forms allowed us to obtain more information about practices without over-burdening teachers/providers. The first set of questions was included in both forms and provided information about the frequency of implementation of instructional practices including those outlined in the California Department of Education Guide for ELLs (“Preschool English Learners: Principles and Practices to Promote Language, Literacy, and Learning” 2009). The remaining items about practices and beliefs differed across the two forms often asking about similar content in a different way, for example, Form A asked about beliefs about the importance of different practices for ELLs while Form B asked about the frequency of use of practices in the beginning of the year. Thus, except for the first set of items, the remaining questions about practices were analyzed separately. Programs (centers and FCCs) were randomly assigned to receive Form A or Form B, and all teachers or providers within a center received the same form. In January 2010, the IP-SAQs were mailed to all center-based and FCC programs in LAUP, including those not in the UPCOS sample (total N=1,075).

This chapter discusses findings from analysis of the IP-SAQs. We begin with a discussion of the sample that returned the questionnaires, followed by discussion of item level results. We then discuss the results of the analysis of scales: our exploratory factor analysis and the reliability analyses of the proposed scales. The mean ratings for each scale for the overall sample and for the subgroups (that is, center-based versus FCC and high versus low ELL concentration) are reported.

## A. Sample Characteristics

Teachers and providers returned 376 completed questionnaires, a response rate of 35 percent. This low response rate may be related to burden. Teachers/providers had requests to complete other questionnaires at the same time and some of the teachers/providers had just completed child assessments a month earlier. Alternatively, teachers/providers may not have considered the content of the survey to be relevant to them this year. With one exception, teachers/providers who did not have any experience with children who are ELLs did not complete the form. About 200 teachers/providers completed each form (Form A N=206 and Form B N=171).

Of those who completed Form A, 78.6 percent were center-based providers while 21.4 percent were FCC providers. In comparison, 87.1 percent of those who completed Form B were center-based providers while only 12.9 percent were FCC providers. About 42 percent of the combined sample of respondents (from both Form A and Form B) identified themselves as the lead teacher.



Almost 30 percent of Form A respondents were assistant teachers and about 21 percent were teachers. Assistant teachers account for 37.1 percent of Form B respondents, and teachers account for 12.4 percent. Both Form A and Form B have about 7 percent of respondents who list their job title as Other (including, for example, site supervisor, program director, and associate teacher). On average, Form A respondents had a range of experience teaching preschool, ranging from 1 to 35 years and 49.8 percent of respondents having at least 7 years of experience. Likewise, respondents have between 0 and 35 years experience teaching children who come from homes where a language other than English is spoken, with 50.3 percent of respondents having at least 8 years of experience, and only 1 teacher reporting no experience with ELLs. Form B respondents have been teaching preschoolers and ELLs between 0 and 45 years. Fifty-four percent have 7 or more years of experience in preschool, and a similar percentage have 7 or more years experience teaching ELLs. Only 1 respondent reported no experience with ELLs.

Form A respondents report a range of 1 to 96 children in their classrooms, with two teachers/providers reporting 1 child and two reporting 96 children. Respondents reported for all the classes that they taught or assisted. On average, teachers and providers completing Form A report were working with a mean of 26 children, with 48.5 percent reporting 23 or fewer children. Fifty-two percent serve 9 or more ELLs, with two cases of 95 ELLs. Form B teachers and providers report serving a range of 7 to 48 children, with one teacher reporting 74 children. The majority of respondents (39.8 percent) reported serving 24 children, and 34.5 percent of teachers report serving 23 children or fewer. More than half of Form B respondents (51.2 percent) teach 13 or more ELLs, with one case of 65 ELLs.

Teachers reported all of the languages spoken by the children with whom they worked. When Form A teachers and providers were asked to report the languages children in their classrooms speak, English and Spanish yielded the highest percentages, with 99.5 percent and 94.1 percent of teachers reporting that children in their classes speak those languages respectively. The remaining additional languages spoken by children in at least 4 percent of classes included Tagalog, Filipino, or other dialects (22.0 percent), Armenian (10.2 percent), Korean (12.2 percent), Vietnamese (6.8 percent), Mandarin (5.9 percent), Cantonese (5.4 percent), and Russian (4.4 percent). Finally, an additional 22 languages were reported by fewer than 4 percent of teachers.

Most teachers and providers who responded reported being fluent in English (95.1 percent).<sup>18</sup> Of the respondents on Form A with any children in their class speaking Spanish, the majority reported being fluent in Spanish (52.1 percent) or the ability to speak some Spanish (20.3 percent). For the other languages, some teachers reported fluency in Tagalog, Filipino, or other dialects (N=7), Armenian (N=6), Russian (N=5), or Korean (N=3). English and Spanish were the language of instruction reported most frequently (100 percent and 89.3 percent respectively). More than 5 percent of the respondents reported using Filipino or other dialects (N=15) for instruction. Ten or fewer teachers and providers reported the following languages used for instruction in the classroom: Korean, Armenian, Farsi, Japanese, American Sign Language, Cantonese, Mandarin, Cambodian (Khmer), Russian, Vietnamese, Farsi, French, German, Portuguese, Swedish, and Jamaican. For Vietnamese, only volunteer/non staff used the language for instruction.

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<sup>18</sup> On Form A, three teachers did not respond to the question about fluency in English.

When Form B teachers and providers were asked to report the languages children in their classrooms speak, English and Spanish also yielded the highest percentages, with 97.7 percent and 94.2 percent of teachers reporting that children in their classes speak those languages respectively. The remaining languages spoken by children in at least 5 percent of the classrooms include Tagalog, Filipino, or other dialects (15.2 percent), Vietnamese (13.5 percent), Korean (12.3 percent), Armenian (9.9 percent), Japanese (8.9 percent), Russian (5.3 percent), Mandarin (10.7 percent), and Cantonese or other Chinese (5.9 percent). Finally, 3 percent or fewer of teachers reported 15 additional languages spoken by the children in their classrooms.

Most teachers and providers who responded reported that they were fluent in English (96.4 percent).<sup>19</sup> Of the respondents on Form B with children in their class speaking Spanish, the majority reported fluency in Spanish (59.2 percent) or ability to speak some Spanish (16.6 percent). For the other languages, some teachers reported fluency in Armenian (N=10), Russian (N=5), Tagalog, Filipino or other dialects (N=5) Mandarin (N=1), or Korean (N=1)<sup>20</sup>. English and Spanish were the language of instruction reported most frequently (98.8 and 88.7 respectively). More than 5 percent of the respondents reported using Armenian (N=14), Tagalog, Filipino, or other dialects (N=11) for instruction. Ten or fewer teachers and providers also reported the following languages used for instruction in the classroom: Farsi, Mandarin, Japanese, Russian, Vietnamese, Cantonese, Korean, French, Sign Language, Cham, or Hebrew. For Vietnamese, only volunteer/non staff used the language for instruction.

Looking across the characteristics of Form A and B respondents, only a few notable differences emerge. In particular, Form A respondents were more likely to be from FCCs and less likely to be in center-based programs; were less likely to be assistant teachers; had fewer ELLs in their classes/homes (although this may relate in part to the slightly higher percentage of respondents to Form A from FCCs); and were slightly less likely to be fluent in Spanish. In light of the few differences between respondents to Form A and B we report findings separately for the two forms where questions overlapped; however, we do not believe the differences substantially affect our conclusions about the instructional practices LAUP teachers and providers report.

## B. Item-Level Responses

We first discuss the item level means on items across all teachers and providers by form and question, describing the question groupings and item sets on both forms and then turning to a discussion of those in Form A, followed by those on Form B. More FCC providers responded to Form A than to Form B. The unique questions in Form B were more specific and had a higher cognitive demand than the questions in Form A.<sup>21</sup> For each theoretical grouping of items, we identify the items with the highest and lowest means. We summarize any differences noted by type and nature of setting, that is, center-based versus FCC and high versus low ELL concentration.

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<sup>19</sup> On Form B, six teachers did not respond to the question about fluency in English.

<sup>20</sup> Two additional teachers reported speaking “some” Korean.

<sup>21</sup> Respondents to the cognitive interviews indicated that it took more time and effort to consider how frequently they implemented specific practices particularly at the beginning of the year or to consider how many resources they had for supporting language.

We present the frequencies for all items across forms, organized in conceptual or theoretical groupings (for example, items related to home language use, phonics instruction, or peer strategies) in Tables 1 to 56 in the Appendix. We present this information by program type and by ELL concentration. The internal consistency of scales derived from the conceptual/theoretical groupings, along with the mean and standard deviation, is also indicated in the Appendix tables. Some of the proposed items did not perform as expected and were excluded from the scales. Tables 27 and 28 list items that do not reach acceptable reliability but are grouped together to present teacher beliefs about parent engagement for ELLs and the use of culturally focused approaches.

## 1. Frequency of Instructional Practices

The first set of questions on both forms A and B asked teachers and providers about the frequency with which they implemented different instructional practices in English and in the home languages of ELLs. The response scale ranged from 1 (“never”) to 7 (“10 or more times a day”). The top five activities that respondents did the most frequently were repeating words and phrases to help ELLs learn English (Form A mean = 5.83, Form B mean = 5.99), talk about things happening here and now in English to ELLs (Form A mean = 5.74, Form B mean = 5.93), use gestures or body language to help children understand (Form A mean = 5.61, Form B mean = 5.84), repeat what the ELLs say in English (Form A mean = 5.60, Form B mean = 5.79), and have children (including ELLs) respond together as a group in English (Form A mean = 5.73, Form B mean = 5.74). On average, teachers and providers reported implementing the practices that used English at least daily (mean > 5). The mean for all of the items was greater than 4 (several times a week), but more than 10 percent of the teachers/providers reported never having extended conversations with ELLs in their home language (18 percent), repeating what ELLs say in their home language (11 percent), and talking with ELLs in their home language about things that are happening here and now (18 percent) or at home or on another day (16 percent).

## 2. Teacher/Provider Beliefs

The respondents reported how strongly they agreed with different statements about teaching, from 1 (“strongly disagree”) to 4 (“strongly agree”). Agreement was strongest with the following statements:

- Parents can best support ELLs’ learning by interacting and providing a loving and consistent home environment (mean = 3.93).
- It’s important to always speak clearly in English and frequently repeat words and/or phrases (mean = 3.91).
- It is very important to establish classroom rules, clearly making sure children understand them (mean = 3.88).
- Parents can best support ELLs’ learning by valuing their child’s education and learning (mean = 3.86).
- It is very important to use structured routines at the beginning of the year especially and have visual cues to help ELLs move through those routines successfully (mean = 3.84).

More than 85 percent of the respondents strongly agreed with each of these statements. The two most frequently endorsed items (that is, about the importance of a loving home environment and repeating words and phrases in English) were endorsed strongly in both centers and FCCs—the range in FCCs was 3 to 4. The other items had stronger mean ratings in centers (mean > 3.85) than

in FCCs (mean > 3.75). Both FCCs and centers also endorsed—with mean ratings greater than 3.75—additional items about the importance of supporting ELLs by establishing classroom rules, using visual cues, emphasizing basic sentence patterns in English, and using songs to teach English.

On average, teachers and providers in both centers and FCCs disagreed with the following statements (mean  $\leq$  2.5):

- It is very important to teach new concepts in English only (mean = 2.37).
- It is important to only use an ELLs' home language for more academic instruction (mean = 2.28).
- All academic words should be taught only in English (mean = 2.39).
- It is important to teach math concepts only in English (mean = 2.37).
- I spend more of my classroom time with ELLs than with English proficient children (mean = 2.12).
- Parents in my class want their children to speak their home language at preschool (mean = 2.44).

In addition, teachers in centers disagreed with the statement that parents want their children to speak only English at preschool (mean = 2.49).

### 3. Endorsement of Instructional Practices/Activities

Next, when asked about their own practices, using a scale from 1 (“never true”) to 5 (“always true”), teachers and providers endorsed the following statements most strongly:

- I use songs in English to teach concepts, for example, using songs about the names of body parts or days of the week (mean = 4.55).
- I ask ELLs lots of open-ended questions like “what did you like best about this activity” or “tell me about your picture” (mean = 4.42).
- I accept answers to questions in both English and the ELLs' home language (mean = 4.28).
- I say almost everything more than once in English to give ELLs the opportunity to understand (mean = 4.20).

On average, these items were “usually true” or “always true” (mean > 4) for teachers and providers in both centers and FCCs. Teachers in centers also reported as usually or always true that they assess children’s English language development and that one teacher in the classroom speaks English while at least one other teacher speaks the predominant ELL home language. The providers in FCCs reported as usually or always true the statement that they devote time each day to instruction in English for ELLs.

### 4. Frequency of Instructional Practices/Activities at the Beginning of Preschool

The teachers and providers reported the frequency of different activities in the classroom in the beginning of the preschool year on a scale from 1 (“never”) to 7 (“several times a day or more”).

The most common activities teachers and providers reported using with ELLs in the beginning of the preschool year involved the use of English. In fact, responding teachers and providers reported that at least daily they:

- Counted with the children in English (mean = 6.33)
- Read books in English (mean = 6.21)
- Used songs in English to teach concepts (mean = 6.20),
- Read messages and labels in English (mean = 6.03)

At least 85 percent of respondents completed the above activities every day or at least several times a day in both center-based classrooms and FCCs. Center-based teachers also reported use of parallel language in English (that is, describing in English what ELLs were doing when they were playing) on a daily or more frequent basis. On average, the teachers/providers in FCCs reported the use of decontextualized language in English (for example, talking about things that happen outside of preschool) and teaching math vocabulary in English daily or more frequently (mean > 6).

On average, teachers and providers in both settings reported conducting most activities at least once a month with a few exceptions. The mean for both center-based classrooms and FCCs indicated that teachers' use of technology (computer programs or Internet) is infrequent for helping ELLs to learn words in their home language. The mean for FCCs was less than 3 times a month for items about the use of computer programs or the Internet to help ELLs learn home language (mean = 2.3). For centers, the mean was less than 3 for the item about using the Internet to increase vocabulary in the home of ELLs (mean = 2.1). For both centers and FCCs, families were coming to the classroom to read in the home language of the ELLs less than once a month (mean = 2.4 and 2.9, respectively)

## 5. Resources in English and Home Languages

Next, teachers and providers reported the use of resources in their classroom or in teaching on a scale from 1 ("not at all") to 5 ("more than 15"). The items used most frequently by teachers and providers again emphasized English, but also included books that reflected the cultural backgrounds of children:

- Signs and objects labeled in English (mean = 4.65, 79.8 percent used more than 15)
- Songs in English to teach concepts (mean = 4.37, 65.5 percent used more than 15)
- Phrases in English taught to ELLs like "I like [singing, blocks, milk, ...]," "I want to [play, paint, eat]" (mean = 4.10, 49.7 percent used more than 15)
- Number of new words that you directly teach ELLs in English each week (mean = 3.83, 41.4 percent use more than 15)
- Books about families that reflect the cultural and ethnic background of the ELLs in the classroom (mean = 3.78, 43.3 percent use more than 15)

The respondents also reported about materials and activities in ELLs' home language. For all of these items, the mean for center-based classrooms was less than 3, indicating that on average, the classrooms use fewer than 6 of each of these items (that is, phrases, words, songs, and notes to parents each month in home language). For FCCs, the mean was greater than 3 for all of the items

in this section except labels in the home languages of ELLs, new words directly taught to ELLs in their home language, and notes to parents each month in the home language.

### C. Exploratory Factor Analyses and Empirically Derived Scales

We conducted exploratory factor analyses (EFA) of item sets in Forms A and B to examine the empirical factor structure—that is, the solution or grouping of items that best describes the variance in the data. The item sets in each of the forms had different response categories and so we analyzed them separately. The minimum sample size for identifying a stable factor solution is 50 to 60 cases (Arrindell and van der Ende 1985; MacCallum et al. 1999). However, obtaining a stable factor structure with this small number of cases requires that the level of communalities is high and that few factors are retained with multiple items loading on them (MacCallum et al. 1999; Preacher and MacCallum 2002). For each EFA we used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett’s Test of Sphericity to evaluate whether the sample was sufficient for analysis. In all cases the KMO was greater than .80 and Bartlett’s Test was significant ( $p < .001$ ), suggesting adequate sample sizes. We conducted principal component analyses using the Kaiser criterion (eigenvalues greater than 1.0) and a varimax rotation. We examined the scree plots to look for breaks and discontinuities in the pattern of eigenvalues that suggest that a smaller number of factors is more optimal for explaining the data (Ford, MacCallum, and Tait 1986).<sup>22</sup> In some cases (described below), we limited the number of factors based on the scree and the interpretability of the factors.

In this section we describe the empirically derived scales that emerged from these analyses. We first describe those derived from the common items on both Forms A and B (that is, frequency of instructional practices), followed by those from the unique items on Form A (respondent beliefs and endorsement of instructional practices/activities) and those from the unique items on Form B (early instructional practices and resources in English and home languages). We conclude by describing differences in the scales derived from the forms by type and nature of setting (that is, center-based versus family child care and high versus low ELL concentration). Tables 57 to 59 present the means, standard deviations, and Cronbach alphas for each scale for the total sample and by program type and ELL concentration.

#### 1. Frequency of Instructional Practices/Activities

On both forms the first question grouping or item set (question 3) focused on the frequency with which teachers and providers engaged in instructional practices and activities to support ELLs. The EFA resulted in a 5-factor solution, with the following scales: use of cues and sheltered immersion strategies (mean = 5.54,  $\alpha=0.91$ ), use of home language (mean = 4.66,  $\alpha=0.94$ ), phonics activities (mean = 4.83,  $\alpha=0.86$ ), general language support (mean = 5.60,  $\alpha=0.88$ ), and peer strategies (mean = 4.92,  $\alpha=0.74$ ). Thus, responding teachers and providers most frequently reported engaging in general language support activities and the use of cues and sheltered immersion strategies, engaging in these activities nearly 5 to 9 times a day. Tables 60 through 64 present the items and the item-to-total correlations for each of the scales, highlighting the practices and activities within each scale that are most highly endorsed by respondents.

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<sup>22</sup> A scree plot is a plot, in descending order of magnitude, of the eigenvalues of a correlation matrix. In the context of factor analysis or principal components analysis a scree plot helps the analyst visualize the relative importance of the factors—a sharp drop in the plot signals that subsequent factors are ignorable.

## 2. Teacher/Provider Beliefs

For the question that asked teachers and providers whether they agreed or disagreed with statements about the importance of different practices when working with ELLs, the EFA identified 8 factors using the Kaiser criterion, but some of those factors had only one or two items. Examination of the scree plot indicated five factors. When forced into the five factors, the analysis indicated the following scales: beliefs about basic English (mean = 3.81,  $\alpha=0.80$ ), beliefs about academic English (mean = 2.37,  $\alpha=0.84$ ), common beliefs and myths about supporting ELLs (mean = 3.42,  $\alpha=0.72$ ),<sup>23</sup> beliefs about sophisticated language development (mean = 3.19,  $\alpha=0.67$ ), and beliefs about providing cues for meaning (mean = 3.83,  $\alpha=0.80$ ). Tables 65 through 69 present the items and the item-to-total correlations for these scales. Notably, responding teachers and providers commonly disagreed with statements about the importance of teaching academic English.

## 3. Endorsement of Instructional Practices/Activities

Teachers and providers reported whether engagement in various instructional practices and activities was characteristic of them. The EFA analysis indicated the following scales: literacy emphasis (mean = 3.36,  $\alpha= 0.85$ ), emphasis on English (mean = 4.12,  $\alpha= 0.83$ ), emphasis on home language (mean = 3.09,  $\alpha= 0.87$ ), and assessment and instruction in home language (mean = 3.65,  $\alpha= 0.84$ ). We present the items and the item-to-total correlations for each of these scales in Tables 69 to 72. Respondents were most likely to indicate that use of English was characteristic of their behavior, with it being “usually true” of their practice. Although it was still “somewhat true” of their practice, they were least likely to report use of home languages as characteristic.

## 4. Frequency of Instructional Practices/Activities at the Beginning of the Year

We asked teachers and providers about practices used at the beginning (first half) of the preschool year. Teachers/providers reported on a scale from 1 (“never”) to 7 (“several times a day or more”). The exploratory factor analysis identified five scales: early use of English (mean = 4.78,  $\alpha= 0.71$ ), early use of home language (mean = 3.83,  $\alpha= 0.94$ ), early use of dual languages (mean = 4.99,  $\alpha= 0.77$ ), early academic focus (mean = 4.30,  $\alpha= 0.79$ ), and early use of multiple supports for language (mean = 3.68,  $\alpha=0.87$ ). Tables 73 through 76 present the items and the item-to-total correlations for each of these scales. Most commonly, teachers and providers reported using both English and the home language, or English only, at the beginning of the preschool year. They were less likely to report using the home language alone at the beginning of the preschool year.

## 5. Resources in English and Home Languages

Finally, we asked about the number of classroom resources available in English and children’s home languages. The EFA identified 3 factors, only one of which had adequate reliability: the availability of materials in the home language (mean = 2.74,  $\alpha=0.87$  (see Table 77)). Responding teachers and providers reported having nearly 6 to 10 materials available in children’s home language, such as labels in classroom, newsletters, songs, phrases used.

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<sup>23</sup> This scale includes both items reflecting effective practice for supporting ELLs and those that reflect common myths about supporting ELLs. Thus, high endorsement of items in this scale does not necessarily reflect appropriate practice.

## D. Results of Empirical Scales by Setting

Next, we examined whether differences in the scales based on these empirically derived factors existed by program type and ELL concentration (see Tables 58 through 59). Patterns of responses on the scales asking about beliefs, endorsement of practices, availability of resources, and practices in the beginning of the year were generally similar for respondents in center-based and FCC settings. That is, respondents in centers and FCCs on average reported similar endorsement of statements, with relatively similar variation in endorsements for those in both settings. The small sample of respondents in FCCs ( $N = 20$ ) were more likely to report frequently using the home language (mean = 4.34 versus 3.75), a dual language approach (mean = 5.27 versus 4.95), and English (mean = 5.06 versus 4.73) at the beginning of the preschool year. They also reported greater endorsement of early emphasis on academics (mean = 4.64 versus 4.26). In addition, alphas for the sophisticated language scale was lower for respondents in FCCs. Responses on the scales followed similar patterns. For example, respondents in FCCs more frequently reported using phonics-based approaches (mean = 5.09 versus 4.78) and peer strategies (mean = 5.41 versus 4.83) to support ELLs. Otherwise, means and variability in scale responses were similar across program type. With so few FCC providers responding, the differences between the FCC and center-based likely reflect differences in these samples rather than differences between setting types.

When looking at the empirically derived scales by ELL concentration, there are differences in the scale means and reliability estimates (alphas) for respondents in high and low ELL concentration classrooms/FCCs. Although the group of respondents with a low ELL concentration was larger than the high ELL concentration classrooms on Form A ( $N=114$ ), the Cronbach alpha was lower in the low ELL concentration than the high ELL concentration group for the beliefs about basic English ( $\alpha=0.68$  and  $0.88$  respectively), beliefs about sophisticated language development ( $\alpha= 0.64$  and  $0.70$  respectively), and beliefs about providing cues for meaning ( $\alpha=0.51$  and  $0.90$  respectively), early transition to English ( $\alpha= 0.70$  and  $0.75$  respectively), and the literacy emphasis ( $\alpha= 0.79$  and  $0.89$  respectively). The low ELL concentration group had lower scores than the high ELL concentration group on the empirical scales associated with question 5 on Form A which asked teachers and parents to report how true each statement was of their own practices: literacy emphasis (3.1 and 3.7, respectively), emphasis on home language (2.9 and 3.3 respectively), emphasis on English (4.0 and 4.3 respectively), and assessment of home language (3.5 and 3.9 respectively).

On Form B the sample size and scale reliabilities for the form specific questions were more similar between groups than was found on Form A. Form B asks about the frequency of practices at the beginning of the year and the number of available resources in the classroom. The reliability was weaker for early emphasis on English in the high ELL concentration classrooms compared with the low ELL concentration classrooms ( $\alpha= 0.66$  and  $0.70$  respectively), and stronger for the use of dual languages for the high compared to low ( $\alpha= 0.84$  and  $0.75$  respectively). The means were greater for the high ELL concentration classroom for all of the scales derived from the questions asking about practices at the beginning of the year and resources available in the classroom.

## E. Summary

Responding teachers and providers reported frequent use of many different practices and materials to support the development of ELLs. Most frequently, responding teachers and providers reported engaging in general language support activities and using visual and verbal cues to support meaning—with respondents reporting that they engage in these activities several times a day. For example, teachers and providers most frequently report repeating words and phrases to help ELLs learn English, talking about things happening here and now in English to ELLs, using gestures or



body language to help children understand, repeating what ELLs say in English, and having children (including ELLs) respond together as a group in English. Notably, responding teachers and providers reported implementing the practices that use English at least daily. They reported using the home language alone at the beginning of the preschool year less frequently, and more commonly used mixed or dual languages (or English only) in the classroom or FCC setting. On average, teachers and providers reported having nearly 6 to 10 materials (such as labels in classroom, newsletters, songs, phrases used) available in children's home languages.

In terms of their reported beliefs, when indicating the extent to which specific practices and activities are true or reflective of their behavior, teachers and providers were most likely to indicate that use of English is characteristic of their behavior, and least likely to report use of home languages as characteristic. Although teachers and providers agree with statements about the importance of teaching basic English, using often-heard ELL-specific practices, supporting sophisticated language development, and providing children with cues for meaning, they typically disagree with statements about the importance of teaching academic English. Endorsement of items reflecting often-heard myths about ELLs suggests that responding teachers and providers may be using strategies that may not be reflective of effective practice for supporting ELLs. Some teachers and providers may require greater support in understanding how to support ELLs most appropriately.

We found few differences in beliefs, activities, and practices by program type, but differences by ELL concentration existed. For example, classrooms/FCCs with high ELL concentrations reported a greater emphasis on home language and assessment of home language, and less emphasis on English.

**Table V.1. Center, Use of Home Language—Combined Form**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I have extended conversations with ELLs in their home language	303	18.8	1.3	5.3	13.9	24.4	22.8	13.5
I repeat what the ELLs say in their home language	301	10.6	4.7	8.0	14.6	24.6	18.6	18.9
Using their home language, I ask questions about and talk with ELLs about things that happened at home or on another day	305	17.4	3.6	6.6	12.8	25.3	21.3	13.1
I talk about things happening here and now in the ELLs' home language(s)	297	18.5	4.0	3.4	13.5	24.2	22.2	14.1
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>300</b>	<b>4.50</b>	<b>1.80</b>	<b>0.93</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.2. FCC, Use of Home Language—Combined Form**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I have extended conversations with ELLs in their home language	60	15.0	6.7	.	10.0	23.3	20.0	25.0
I repeat what the ELLs say in their home language	59	11.9	1.7	6.8	20.3	20.3	15.3	23.7
Using their home language, I ask questions about and talk with ELLs about things that happened at home or on another day	61	11.5	1.6	.	19.7	29.5	21.3	16.4
I talk about things happening here and now in the ELLs' home language(s)	62	12.9	.	4.8	14.5	22.6	19.4	25.8
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>61</b>	<b>4.83</b>	<b>1.79</b>	<b>0.95</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.3. Center, Use of Home Language—FORM A**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach ELLs concepts in science and social studies in the ELLs home language	157	22.9	9.6	8.3	21.0	19.8	11.5	7.0
I read books in ELLs' home language	160	22.5	13.1	12.5	19.4	21.3	6.3	5.0
		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree			
It is very important to introduce more sophisticated words in the ELLs' home language so that their language skills increase	155	9.7	18.1	31.0	41.3			
Parents can best support ELLs' learning by strengthening their children's home language	155	3.9	9.7	28.4	58.1			
When teaching new words, I emphasize words that are similar in English and the children's home languages	154	7.8	8.4	42.9	40.9			
		Not At All	1-5	6-10	11-15	More Than 15		
During group instructional time, everything is said in both English and ELLs' home languages	162	9.9	13.6	38.3	25.3	13.0		
In my classroom, one teacher speaks English and at least one other teacher speaks the predominant ELL home language	161	4.4	5.0	15.5	22.4	52.8		
I lend books to ELL children in their home language to read with their parents	156	17.3	11.5	19.2	23.7	28.2		
I make sure that the ELLs know the alphabet of their home language as well as the English alphabet	160	26.9	27.5	18.1	9.4	18.1		
I send parent materials in the ELLs' home language	157	12.1	10.8	18.5	13.4	45.2		
I assess ELLs' home language development (whether formal or informal)	156	16.7	10.9	25.6	20.5	26.3		
I accept answers to questions in both English and the ELLs' home language	157	3.8	0.6	11.5	24.8	59.2		
I read or talk about the picture in a book in the language that they are most comfortable with when reading to ELLs	160	11.3	9.4	32.5	19.4	27.5		
				Alpha				
<b>Mean Score Scale</b>				<b>0.85</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.4. FCC, Use of Home Language—FORM A**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach ELLs concepts in science and social studies in the ELLs home language	43	18.6	4.7	11.6	18.6	16.3	9.3	20.9
I read books in ELLs' home language	41	14.6	12.2	9.8	31.7	24.4	7.3	.
		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree			
It is very important to introduce more sophisticated words in the ELLs' home language so that their language skills increase	43	7.0	32.6	32.6	27.9			
Parents can best support ELLs' learning by strengthening their children's home language	41	14.6	9.8	29.3	46.3			
When teaching new words, I emphasize words that are similar in English and the children's home languages	42	2.4	11.9	35.7	50.0			
		Not At All	1-5	6-10	11-15	More Than 15		
During group instructional time, everything is said in both English and ELLs' home languages	44	4.6	9.1	38.6	20.5	27.3		
In my classroom, one teacher speaks English and at least one other teacher speaks the predominant ELL home language	42	19.1	7.1	7.1	21.4	45.2		
I lend books to ELL children in their home language to read with their parents	44	22.7	20.5	27.3	9.1	20.5		
I make sure that the ELLs know the alphabet of their home language as well as the English alphabet	44	27.3	22.7	15.9	18.2	15.9		
I send parent materials in the ELLs' home language	44	13.6	18.2	25.0	20.5	22.7		
I assess ELLs' home language development (whether formal or informal)	43	20.9	16.3	20.9	16.3	25.6		
I accept answers to questions in both English and the ELLs' home language	44	2.3	9.1	15.9	27.3	45.5		
I read or talk about the picture in a book in the language that they are most comfortable with when reading to ELLs	44	13.6	4.6	22.7	31.8	27.3		
					Alpha			
<b>Mean Score Scale</b>					<b>0.89</b>			

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items, so mean score was not computed.

**Table V.5. Center, Use of Home Language—Form B**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in ELLs' home language(s)	146	26.0	15.1	11.0	18.5	9.6	9.6	10.3
I sang songs in ELLs' home language(s)	145	18.6	5.5	14.5	16.6	9.7	21.4	13.8
I talked with ELLs in their home language about things that happen outside of preschool	146	21.2	4.1	5.5	12.3	11.0	37.0	8.9
I used key words from the ELLs' home language for daily activities, like "eat," "bathroom," and "Mama"	146	3.4	4.1	6.9	7.5	16.4	48.0	13.7
I encouraged ELLs to write words and stories in their home language	140	32.9	8.6	16.4	15.0	10.7	11.4	5.0
I counted with the children in ELLs' home language(s)	146	11.0	7.5	15.8	10.3	15.1	27.4	13.0
I read messages and labels in ELLs' home language(s)	143	21.7	10.5	12.6	11.2	14.0	17.5	12.6
ELLs dictated stories in their home language	146	24.0	4.1	10.3	21.2	12.3	22.6	5.5
I described what ELLs were doing when they are playing, narrating what they were doing in their home language	140	23.6	7.1	2.1	15.0	12.9	30.0	9.3
I said part of a sentence in English and the other part in the ELLs' home language	146	34.3	6.2	4.1	12.3	9.6	24.0	9.6
I taught math vocabulary in the ELLs' home language	142	30.3	6.3	8.5	12.7	19.7	15.5	7.0
Parents or other volunteers led activities in the home languages of the ELLs	142	31.0	11.3	14.1	14.8	8.5	16.2	4.2
I used programs on the Internet to help ELLs learn words in their home language	143	60.1	8.4	6.3	10.5	2.8	4.2	7.7
I used computer programs to help ELLs increase home language	143	41.3	7.7	5.6	12.6	3.5	18.2	11.2
Families came to the classroom to read in the home language of the ELLs	146	43.8	19.2	13.0	14.4	3.4	3.4	2.7
I taught ELLs concepts in science and social studies in the ELLs' home language	141	34.0	9.9	11.4	16.3	14.9	9.2	4.3
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>144</b>	<b>3.63</b>	<b>1.48</b>	<b>0.95</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (Several Times a Day).

**Table V.6. FCC, Use of Home Language—Form B**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in ELLs' home language(s)	20	15.0	5.0	10.0	20.0	15.0	20.0	15.0
I sang songs in ELLs' home language(s)	18	5.6	5.6	11.1	11.1	11.1	33.3	22.2
I talked with ELLs in their home language about things that happen outside of preschool	20	15.0	0.0	10.0	5.0	5.0	45.0	20.0
I used key words from the ELLs' home language for daily activities, like "eat," "bathroom," and "Mama"	20	10.0	5.0	0.0	5.0	10.0	55.0	15.0
I encouraged ELLs to write words and stories in their home language	20	15.0	20.0	10.0	15.0	25.0	15.0	0.0
I counted with the children in ELLs' home language(s)	20	10.0	5.0	0.0	20.0	5.0	50.0	10.0
I read messages and labels in ELLs' home language(s)	20	30.0	0.0	5.0	10.0	15.0	25.0	15.0
ELLs dictated stories in their home language	19	10.5	5.3	5.3	10.5	31.6	36.8	.
I described what ELLs were doing when they are playing, narrating what they were doing in their home language	20	10.0	0.0	5.0	25.0	15.0	40.0	5.0
I said part of a sentence in English and the other part in the ELLs' home language	20	20.0	5.0	0.0	10.0	15.0	40.0	10.0
I taught math vocabulary in the ELLs' home language	19	10.5	0.0	10.5	31.6	15.8	26.3	5.3
Parents or other volunteers led activities in the home languages of the ELLs	20	15.0	20.0	30.0	15.0	5.0	10.0	5.0
I used programs on the Internet to help ELLs learn words in their home language	20	45.0	15.0	15.0	20.0	5.0	0.0	0.0.
I used computer programs to help ELLs increase home language	20	45.0	25.0	0.0	20.0	5.0	5.0	0.0
Families came to the classroom to read in the home language of the ELLs	20	35.0	10.0	10.0	35.0	0.0	10.0	0.0
I taught ELLs concepts in science and social studies in the ELLs' home language	20	10.0	15.0	5.0	30.0	10.0	30.0	0.0
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>20</b>	<b>4.08</b>	<b>1.27</b>	<b>0.94</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (Several Times a Day).

**Table V.7. Center, English Language Use**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	147	0.0	0.0	0.7	2.7	4.1	61.2	31.3
I used songs in English to teach concepts	143	0.0	0.0	0.7	4.2	11.9	45.5	37.8
I talked with ELLs in English about the pictures in books before or instead of reading	146	4.8	1.4	6.2	17.1	16.4	34.9	19.2
I talked with ELLs in English about things that happen outside of preschool	148	1.4	0.7	2.0	14.9	15.5	46.6	18.9
I encouraged ELLs to write words and/or stories in English	145	11.7	6.2	10.3	9.7	21.4	30.3	10.3
I encouraged ELLs to write words and stories in their home language	140	32.9	8.6	16.4	15.0	10.7	11.4	5.0
I counted with the children in English	142	0.0	0.0	0.7	0.7	3.5	54.9	40.1
I read messages and labels in English	148	0.0	1.4	2.0	2.7	7.4	61.5	25.0
ELLs dictated stories in English (told stories in English for me to write down)	143	7.7	6.3	11.2	19.6	18.9	27.3	9.1
I described what ELLs were doing when they were playing, saying in English what they were doing	144	1.4	0.7	4.2	9.0	14.6	50.0	20.1
I re-read stories to ELLs in English	145	4.8	4.8	6.9	11.7	17.2	39.3	15.2
I taught math vocabulary in English	141	.	0.0	2.8	7.8	19.2	53.2	17.0
I used programs on the Internet to help ELLs learn words in English	142	45.8	7.8	8.5	8.5	6.3	13.4	9.9
I used computer programs (for example, games, programs that read aloud to children) to help ELLs learn English	141	14.2	4.3	6.4	18.4	8.5	33.3	14.9
I designed activities for English speakers and ELLs to work on together	141	9.2	5.0	3.6	13.5	9.9	40.4	18.4
I provided intensive small group work specifically to help ELLs learn English	141	12.8	6.4	13.5	15.6	13.5	32.6	5.7
I taught ELLs concepts in science and social studies in English	144	5.6	2.1	12.5	18.1	26.4	25.7	9.7
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>144</b>	<b>5.07</b>	<b>0.84</b>	<b>0.88</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week). Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.8. FCC, English Language Use**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	22	0.0	0.0	0.0	4.6	0.0	54.6	40.9
I used songs in English to teach concepts	19	.	0.0	0.0	0.0	5.3	36.8	57.9
I talked with ELLs in English about the pictures in books before or instead of reading	20	5.0	.	5.0	15.0	10.0	45.0	20.0
I talked with ELLs in English about things that happen outside of preschool	22	0.0	0.0	0.0	4.6	9.1	63.6	22.7
I encouraged ELLs to write words and/or stories in English	20	10.0	5.0	5.0	20.0	15.0	40.0	5.0
I encouraged ELLs to write words and stories in their home language	20	15.0	20.0	10.0	15.0	25.0	15.0	0.0
I counted with the children in English	22	0.0	0.0	0.0	0.0	4.6	59.1	36.4
I read messages and labels in English	22	0.0	0.0	0.0	4.6	9.1	50.0	36.4
ELLs dictated stories in English (told stories in English for me to write down)	20	5.0	10.0	5.0	15.0	35.0	30.0	0.0
I described what ELLs were doing when they were playing, saying in English what they were doing	22	0.0	0.0	4.6	4.6	18.2	45.5	27.3
I re-read stories to ELLs in English	22	4.6	0.0	4.6	9.1	9.1	59.1	13.6
I taught math vocabulary in English	22	0.0	0.0	0.0	9.1	9.1	50.0	31.8
I used programs on the Internet to help ELLs learn words in English	22	31.8	9.1	4.6	22.7	13.6	9.1	9.1
I used computer programs (for example, games, programs that read aloud to children) to help ELLs learn English	22	22.7	9.1	9.1	13.6	18.2	18.2	9.1
I designed activities for English speakers and ELLs to work on together	22	4.6	0.0	9.1	13.6	22.7	27.3	22.7
I provided intensive small group work specifically to help ELLs learn English	22	9.1	4.6	9.1	9.1	18.2	27.3	22.7
I taught ELLs concepts in science and social studies in English	22	4.6	0.0	4.6	22.7	18.2	31.8	18.2
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>22</b>	<b>5.31</b>	<b>0.92</b>	<b>0.88</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week). Possible range of 1 (Never) to 7 (10 or More Times a Day).



**Table V.9. Center, Focused Instruction in English**

Item	N	Not at All	1-5	6-10	11-15	More Than 15
I devote time each day to instruction in English for ELLs	158	6.3	7.6	14.6	27.2	44.3
I provide intensive small group work specifically to help ELLs learn English	159	11.3	6.9	30.2	22.0	29.6
I say almost everything more than once in English to give ELLs the opportunity to understand	160	1.9	3.1	10.6	41.3	43.1
I ask ELLs lots of open-ended questions like "what did you like best about this activity?" or "tell me about your picture"	162	0.6	0.0	11.7	30.3	57.4
I teach ELLs in their home language for most of the day	162	29.0	29.0	24.7	11.1	6.2
	N	Mean	Standard Deviation	Alpha		
<b>Mean Score Scale</b>	<b>161</b>	<b>3.69</b>	<b>0.77</b>	<b>0.76</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.10. FCC, Focused Instruction in English**

Item	N	Not at All	1-5	6-10	11-15	More Than 15
I devote time each day to instruction in English for ELLs	44	4.6	2.3	11.4	38.6	43.2
I provide intensive small group work specifically to help ELLs learn English	44	6.8	15.9	20.5	20.5	36.4
I say almost everything more than once in English to give ELLs the opportunity to understand	44	4.6	0.0	15.9	34.1	45.5
I ask ELLs lots of open-ended questions like "what did you like best about this activity?" or "tell me about your picture"	44	2.3	0.0	6.8	40.9	50.0
I teach ELLs in their home language for most of the day	43	44.2	18.6	18.6	7.0	11.6
	N	Mean	Standard Deviation	Alpha		
<b>Mean Score Scale</b>	<b>44</b>	<b>3.72</b>	<b>0.89</b>	<b>0.85</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.11. Center, Reading and Sharing Books with Children**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	147	0.0	0.0	0.7	2.7	4.1	61.2	31.3
I read books in ELLs' home language(s)	146	26.0	15.1	11.0	18.5	9.6	9.6	10.3
I talked with ELLs in English about the pictures in books before or instead of reading	146	4.8	1.4	6.2	17.1	16.4	34.9	19.2
I read messages and labels in English	148	0.0	1.4	2.0	2.7	7.4	61.5	25.0
I read messages and labels in ELLs' home language(s)	143	21.7	10.5	12.6	11.2	14.0	17.5	12.6
I re-read stories to ELLs in English	145	4.8	4.8	6.9	11.7	17.2	39.3	15.2
ELLs dictated stories in English (told stories in English for me to write down)	143	7.7	6.3	11.2	19.6	18.9	27.3	9.1
ELLs dictated stories in their home language	146	24.0	4.1	10.3	21.2	12.3	22.6	5.5
I encouraged ELLs to write words and/or stories in English	145	11.7	6.2	10.3	9.7	21.4	30.3	10.3
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>148</b>	<b>4.75</b>	<b>1.02</b>	<b>0.82</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to 7.

**Table V.12. FCC, Reading and Sharing Books with Children**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	22	0.0	0.0	0.0	4.6	0.0	54.6	40.9
I read books in ELLs' home language(s)	20	15.0	5.0	10.0	20.0	15.0	20.0	15.0
I talked with ELLs in English about the pictures in books before or instead of reading	20	5.0	0.0	5.0	15.0	10.0	45.0	20.0
I read messages and labels in English	22	0.0	0.0	0.0	4.6	9.1	50.0	36.4
I read messages and labels in ELLs' home language(s)	20	30.0	0.0	5.0	10.0	15.0	25.0	15.0
I re-read stories to ELLs in English	22	4.6	0.0	4.6	9.1	9.1	59.1	13.6
ELLs dictated stories in English (told stories in English for me to write down)	20	5.0	10.0	5.0	15.0	35.0	30.0	0.0
ELLs dictated stories in their home language	19	10.5	5.3	5.3	10.5	31.6	36.8	0.0
I encouraged ELLs to write words and/or stories in English	20	10.0	5.0	5.0	20.0	15.0	40.0	5.0
	N	Mean	Standard Deviation					
<b>Mean Score Scale</b>	<b>20</b>	<b>5.05</b>	<b>1.04</b>	<b>0.83</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to 7.

**Table V.13. Center, Explicit and Intentional Phonics Instruction**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach the individual sounds of letters	307	0.7	0.7	3.3	18.2	34.5	16.3	26.4
I teach children to put individual sounds together to make words (c - a - t)	307	2.6	6.8	12.4	25.1	28.0	11.4	13.7
I teach children to count the number of syllables in words (like clapping out the parts of their name [Ja - mil - a])	306	3.6	6.9	14.4	27.5	24.8	10.8	12.1
I teach rhyming words in English	303	0.3	4.6	14.5	28.4	25.1	14.2	12.9
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>308</b>	<b>4.77</b>	<b>1.17</b>	<b>0.85</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to 7.

**Table V.14. FCC, Explicit and Intentional Phonics Instruction**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach the individual sounds of letters	64	0.0	1.6	4.7	15.6	14.1	23.4	40.6
I teach children to put individual sounds together to make words (c - a - t)	65	1.5	6.2	9.2	13.9	21.5	13.9	33.9
I teach children to count the number of syllables in words (like clapping out the parts of their name [Ja - mil - a])	63	4.8	4.8	12.7	22.2	23.8	6.4	25.4
I teach rhyming words in English	65	4.6	4.6	6.2	23.1	24.6	9.2	27.7
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>64</b>	<b>5.20</b>	<b>1.40</b>	<b>0.89</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to 7.

**Table V.15. Center, Explicit and Intentional Vocabulary Instruction Form A**

Item	N	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
It's important to always speak clearly in English and frequently repeat words and/or phrases	158	0.6	0.0	5.1	94.3
It is very important to emphasize basic sentence patterns to help ELLs learn to speak English (for example: "I have a crayon," "I like to play")	162	1.9	0.6	17.3	80.3
It is very important to introduce more sophisticated words in English (for example: "disappointed" instead of "sad;" "exquisite" instead of "pretty;" "ambled" instead of "walked")	158	5.1	16.5	36.1	42.4
ELLs learn English by hearing adults describe what they are doing in an activity	160	1.3	4.4	16.3	78.1
Songs are one of the best ways to teach English	159	1.3	1.3	18.2	79.3
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	160	0.63	0.63	5.0	93.75
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>160</b>	<b>3.71</b>	<b>0.35</b>	<b>0.75</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1(Strongly Disagree) to 4 (Strongly Agree).

**Table V.16. FCC, Explicit and Intentional Vocabulary Instruction Form A**

Item	N	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
It's important to always speak clearly in English and frequently repeat words and/or phrases	44	0.0	0.0	18.2	81.8
It is very important to emphasize basic sentence patterns to help ELLs learn to speak English (for example: "I have a crayon," "I like to play")	43	2.3	4.7	4.7	88.4
It is very important to introduce more sophisticated words in English (for example: "disappointed" instead of "sad;" "exquisite" instead of "pretty;" "ambled" instead of "walked")	42	7.1	19.1	33.3	40.5
ELLs learn English by hearing adults describe what they are doing in an activity	42	2.4	2.4	16.7	78.6
Songs are one of the best ways to teach English	44	0.0	4.6	15.9	79.6
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment					
	N	Mean	Standard Deviation	Alpha	
<b>Mean Score Scale</b>	<b>43</b>	<b>3.69</b>	<b>0.36</b>	<b>0.69</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1(Strongly Disagree) to 4 (Strongly Agree).

**Table V.17. Center, Explicit and Intentional Vocabulary Instruction form B**

Item	N	Never	Less Than Once a Month	1-3 Times a Week	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I provided intensive small group work specifically to help ELLs learn English	141	12.8	6.4	13.5	15.6	13.5	32.6	5.7
I taught ELLs concepts in science and social studies in English	144	5.6	2.1	12.5	18.1	26.4	25.7	9.7
I used programs on the Internet to help ELLs learn words in English	142	45.8	7.8	8.5	8.5	6.3	13.4	9.9
I taught math vocabulary in English	141	0.0	0.0	2.8	7.8	19.2	53.2	17.0
I re-read stories to ELLs in English	145	4.8	4.8	6.9	11.7	17.2	39.3	15.2
I talked with ELLs in English about the pictures in books before or instead of reading	146	4.8	1.4	6.2	17.1	16.4	34.9	19.2
I read messages and labels in English	148	.	1.4	2.0	2.7	7.4	61.5	25.0
I described what ELLs were doing when they were playing, saying in English what they were doing	144	1.4	0.7	4.2	9.0	14.6	50.0	20.1
		Not at All	1-5	6-10	11-15	More than 15		
Signs and objects labeled in English	146	2.1	2.7	4.1	11.6	79.5		
Phrases in English taught to ELLs like "I like [singing, blocks, milk,...]," "I want to [play, paint, eat]"	142	0.7	14.1	14.8	21.1	49.3		
Number of new words that you directly teach ELLs in English each week	143	0.0	20.3	23.8	12.6	43.4		
Signs and objects labeled in the home languages of the children	142	36.6	14.1	16.2	4.9	28.2		
Phrases from the ELLs' home language for comfort	142	28.2	23.2	14.8	14.8	19.0		
Phrases from the ELLs' home language in order to help them follow the classroom routine and rules	140	24.3	30.0	12.1	10.7	22.9		
Songs in the ELLs' home languages to teach concepts	142	19.7	35.2	19.0	7.8	18.3		
Number of new words that you directly teach ELLs in their home language each week	139	27.3	36.0	14.4	5.8	16.6		
					Alpha			
<b>Mean Score Scale<sup>o</sup></b>					<b>0.87</b>			

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items, so mean score was not computed.

**Table V.18. FCC, Explicit and Intentional Vocabulary Instruction form B**

Item	N	Never	Less Than Once a Month	1-3 Times a Week	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I provided intensive small group work specifically to help ELLs learn English	22	9.1	4.6	9.1	9.1	18.2	27.3	22.7
I taught ELLs concepts in science and social studies in English	22	4.6	0.0	4.6	22.7	18.2	31.8	18.2
I used programs on the Internet to help ELLs learn words in English	22	31.8	9.1	4.6	22.7	13.6	9.1	9.1
I taught math vocabulary in English	22	0.0	0.0	0.0	9.1	9.1	50.0	31.8
I re-read stories to ELLs in English	22	4.6	0.0	4.6	9.1	9.1	59.1	13.6
I talked with ELLs in English about the pictures in books before or instead of reading	20	5.0	0.0	5.0	15.0	10.0	45.0	20.0
I read messages and labels in English	22	0.0	0.0	0.0	4.6	9.1	50.0	36.4
I described what ELLs were doing when they were playing, saying in English what they were doing	22	0.0	0.0	4.6	4.6	18.2	45.5	27.3
		Not at All	1-5	6-10	11-15	More than 15		
Signs and objects labeled in English	22	0.0	.	9.1	9.1	81.8		
Phrases in English taught to ELLs like "I like [singing, blocks, milk,...]," "I want to [play, paint, eat]"	22	0.0	4.6	13.6	13.6	68.2		
Number of new words that you directly teach ELLs in English each week	22	0.0	13.6	18.2	13.6	54.6		
Signs and objects labeled in the home languages of the children	20	25.0	30.0	20.0	20.0	5.0		
Phrases from the ELLs' home language for comfort	20	25.0	25.0	10.0	0.0	40.0		
Phrases from the ELLs' home language in order to help them follow the classroom routine and rules	19	21.1	15.8	15.8	5.3	42.1		
Songs in the ELLs' home languages to teach concepts	20	5.0	30.0	15.0	20.0	30.0		
Number of new words that you directly teach ELLs in their home language each week	20	10.0	45.0	10.0	15.0	20.0		
					Alpha			
<b>Mean Score Scale <sup>b</sup></b>					<b>0.87</b>			

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.



**Table V.19. Center, Peer Strategies**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I pair talkers and non-talkers in activities	303	4.6	5.9	6.9	29.7	24.1	15.2	13.5
I pair children who are more fluent in English with children who primarily speak another language	300	8.7	2.7	10.3	24.3	24.7	17.0	12.3
I encourage English-speaking children to talk with ELLs	305	2.0	2.3	4.3	15.7	26.6	23.3	25.9
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>292</b>	<b>4.83</b>	<b>1.24</b>	<b>0.74</b>	--	--	--	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week).

**Table V.20. FCC, Peer Strategies**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I pair talkers and non-talkers in activities	62	4.8	1.6	4.8	19.4	16.1	22.6	30.7
I pair children who are more fluent in English with children who primarily speak another language	60	6.7	0.0	5.0	25.0	18.3	18.3	26.7
I encourage English-speaking children to talk with ELLs	63	3.2	1.6		11.1	23.8	20.6	39.7
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>58</b>	<b>5.41</b>	<b>1.23</b>	<b>0.69</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week).

**Table V.21. Center, Instructional and Visual Supports**

Item	N	Strongly Agree	Somewhat Disagree	Somewhat Agree	Strongly Agree
It is very important to translate everything that is said during instruction into the ELLs' home language(s)	158	8.2	12.7	27.9	51.3
It is very important to use structured routines, especially at the beginning of the year, and have visual cues to help ELLs move through those routines successfully	159	0.6	0.6	10.1	88.7
It is very important to establish classroom rules, clearly making sure children understand them	160	0.6	0.0	6.9	92.5
It is very important to have visual cues (e.g., posters, visual cue cards) to help ELLs successfully understand and follow classroom rules	160	1.3	0.6	10.0	88.1
When teaching new words, I emphasize words that are similar in English and the children's home languages	154	7.8	8.4	42.9	40.9
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>158</b>	<b>3.61</b>	<b>0.41</b>	<b>0.69</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week).

**Table V.22. FCC, Instructional and Visual Supports**

Item	N	Strongly Agree	Somewhat disagree	Somewhat Agree	Strongly Agree
It is very important to translate everything that is said during instruction into the ELLs' home language(s)	44	11.4	18.2	27.3	43.2
It is very important to use structured routines, especially at the beginning of the year, and have visual cues to help ELLs move through those routines successfully	44	4.6	4.6	2.3	88.6
It is very important to establish classroom rules, clearly making sure children understand them	44	4.6	0.0	9.1	86.4
It is very important to have visual cues (e.g., posters, visual cue cards) to help ELLs successfully understand and follow classroom rules	43	4.7	0.0	7.0	88.4
When teaching new words, I emphasize words that are similar in English and the children's home languages	42	2.4	11.9	35.7	50.0
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>44</b>	<b>3.53</b>	<b>0.57</b>	<b>0.82</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

**Table V.23. Center, Screening and Assessment Form A**

Item	N	Never True	Rarely True	Sometimes True	Usually True	Always True
I assess ELLs' home language development (whether formal or informal)	156	16.7	10.9	25.6	20.5	26.3
I assess children's English language development (whether formal or informal)	155	5.2	1.3	21.3	27.7	44.5
	N	Mean	Standard Deviation	Alpha		
<b>Number of Types of Participation<sup>b</sup></b>	<b>154</b>	<b>3.68</b>	<b>1.07</b>	<b>0.64</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never True) to 5 (Always True).

**Table V.24. FCC, Screening and Assessment Form A**

Item	N	Never True	Rarely True	Sometimes True	Usually True	Always True
I assess ELLs' home language development (whether formal or informal)	43	20.9	16.3	20.9	16.3	25.6
I assess children's English language development (whether formal or informal)	44	4.6	0.0	22.7	38.6	34.1
	N	Mean	Standard Deviation	Alpha		
<b>Mean Scale Score</b>	<b>43</b>	<b>3.55</b>	<b>1.12</b>	<b>0.75</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never True) to 5 (Always True).

**Table V.25. Center, Screening and Assessment Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I observe and keep track of children’s English	141	1.4	5.7	12.1	20.6	24.8	19.2	16.3
I observe and keep track of ELLs’ home language development	139	13.7	9.4	13.7	14.4	18.7	13.7	16.6
I formally assess children’s English language development	141	6.4	19.9	17.7	12.8	14.9	12.1	16.3
I formally assess ELLs’ home language development	141	21.3	20.6	13.5	9.9	17.0	5.7	12.1
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>138</b>	<b>4.17</b>	<b>1.59</b>	<b>0.87</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: Mean score computed if 75% valid scores.  
Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.26. FCC, Screening and Assessment Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I observe and keep track of children’s English	20	0.0	10.0	5.0	15.0	25.0	20.0	25.0
I observe and keep track of ELLs’ home language development	19	10.5	10.5	5.3	10.5	10.5	21.1	31.6
I formally assess children’s English language development	22	27.3	9.1	4.6	13.6	9.1	9.1	27.3
I formally assess ELLs’ home language development	20	40.0	5.0	5.0	10.0	10.0	20.0	10.0
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>20</b>	<b>4.30</b>	<b>1.89</b>	<b>0.92</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: Mean score computed if 75% valid scores.  
Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.27a. Center, Teacher Beliefs About ELL Parent Engagement, Form A**

Item	N	Strongly Agree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Parents can best support ELLs' learning by teaching their children English	151	9.93	16.56	31.79	41.72
Parents can best support ELLs' learning by strengthening their children's home language	155	3.87	9.68	28.39	58.06
Parents can best support ELLs' learning by valuing their child's education and learning	160	1.88	0.0	8.13	90
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	160	0.63	0.63	5	93.75
Parents in my class want their children to speak only English at preschool	134	20.9	24.63	39.55	14.93
Parents in my class want their children to speak their home language at preschool	132	16.67	28.03	43.18	12.12
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>159</b>	<b>3.57</b>	<b>0.43</b>	<b>0.56</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Mean computed without last 2 items due to low correlations with other items.

**Table V.27b. FCC, Teacher Beliefs about ELL Parent Engagement, Form A**

Item	N	Strongly Agree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Parents can best support ELLs' learning by teaching their children English	43	11.63	13.95	37.21	37.21
Parents can best support ELLs' learning by strengthening their children's home language	41	14.63	9.76	29.27	46.34
Parents can best support ELLs' learning by valuing their child's education and learning	42	0.0	0.0	14.29	85.71
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	42	0.0	0.0	2.38	97.62
Parents in my class want their children to speak only English at preschool	43	18.6	23.26	37.21	20.93
Parents in my class want their children to speak their home language at preschool	41	26.83	34.15	29.27	9.76
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>42</b>	<b>3.47</b>	<b>0.46</b>	<b>0.51</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Mean computed without last 2 items due to low correlations with other items.

**Table V.28a. Center, Culturally Focused Approaches, Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
Children participated in activities that celebrated the culture of the different families in my program (e.g., trying foods, showing traditional clothing, singing songs)	145	2.76	13.79	28.97	15.17	10.34	20.00	8.97
		Not at All	1-5	6-10	11-15	More than 15		
Books about families that reflect the cultural and ethnic background of the ELLs in the classroom	147	1.36	19.05	24.49	12.93	42.18		
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score <sup>a</sup></b>				<b>0.28</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.28b. FCC, Culturally Focused Approaches, Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
Children participated in activities that celebrated the culture of the different families in my program (e.g., trying foods, showing traditional clothing, singing songs)	22			31.82	13.64	18.18	18.18	18.18
	N	Not at All	1-5	6-10	11-15	More than 15		
Books about families that reflect the cultural and ethnic background of the ELLs in the classroom	22		4.52	31.82	27.27	36.36		
				Alpha				
<b>Mean Scale Score <sup>a</sup></b>				<b>0.71</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.29. High ELL, Use of Home Language—Combined Form**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I have extended conversations with ELLs in their home language	183	11.5	1.6	3.8	9.3	24.6	27.3	21.9
I repeat what the ELLs say in their home language	181	5.0	3.9	7.2	11.1	26.0	19.3	27.6
Using their home language, I ask questions about and talk with ELLs about things that happened at home or on another day	183	9.8	2.2	5.5	11.5	23.0	24.6	23.5
I talk about things happening here and now in the ELLs' home language(s)	178	8.4	3.9	4.5	10.7	22.5	25.8	24.2
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>181</b>	<b>5.08</b>	<b>1.63</b>	<b>0.93</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.30. Low ELL, Use of Home Language—Combined Form**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I have extended conversations with ELLs in their home language	180	25.0	2.8	5.0	17.2	23.9	17.2	8.9
I repeat what the ELLs say in their home language	179	16.8	4.5	8.4	20.1	21.8	16.8	11.7
Using their home language, I ask questions about and talk with ELLs about things that happened at home or on another day	183	23.0	4.4	5.5	16.4	29.0	18.0	3.8
I talk about things happening here and now in the ELLs' home language(s)	181	26.5	2.8	2.8	16.6	25.4	17.7	8.3
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>180</b>	<b>4.03</b>	<b>1.81</b>	<b>0.93</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.31. High ELL, Use of Home Language—Form A**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach ELLs concepts in science and social studies in the ELLs home language	90	14.4	10.0	8.9	20.0	16.7	14.4	15.6
I read books in ELLs' home language	89	15.7	9.0	11.2	27.0	23.6	4.5	9.0
		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree			
It is very important to introduce more sophisticated words in the ELLs' home language so that their language skills increase	87	4.6	13.8	36.8	44.8			
Parents can best support ELLs' learning by strengthening their children's home language	89	3.4	7.9	25.8	62.9			
When teaching new words, I emphasize words that are similar in English and the children's home languages	87	5.8	12.6	35.6	46.0			
		Not at All	1-5	6-10	11-15	More Than 15		
During group instructional time, everything is said in both English and ELLs' home languages	91	5.5	12.1	33.0	27.5	22.0		
In my classroom, one teacher speaks English and at least one other teacher speaks the predominant ELL home language	90	4.4	4.4	13.3	22.2	55.6		
I lend books to ELL children in their home language to read with their parents	90	16.7	6.7	18.9	22.2	35.6		
I make sure that the ELLs know the alphabet of their home language as well as the English alphabet	91	26.4	24.2	16.5	7.7	25.3		
I send parent materials in the ELLs' home language	90	11.1	12.2	13.3	15.6	47.8		
I assess ELLs' home language development (whether formal or informal)	89	13.5	7.9	21.4	20.2	37.1		
I accept answers to questions in both English and the ELLs' home language	89	2.3	0.0	6.7	23.6	67.4		
I read or talk about the picture in a book in the language that they are most comfortable with when reading to ELLs	90	8.9	6.7	34.4	18.9	31.1		
				Alpha				
<b>Mean Score Scale</b>				<b>0.84</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.



**Table V.32. Low ELL, Use of Home Language—Form A**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach ELLs concepts in science and social studies in the ELLs home language	110	28.2	7.3	9.1	20.9	20.9	8.2	5.5
I read books in ELLs' home language	112	25.0	16.1	12.5	17.9	20.5	8.0	.
		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree			
It is very important to introduce more sophisticated words in the ELLs' home language so that their language skills increase	111	12.6	27.0	27.0	33.3			
Parents can best support ELLs' learning by strengthening their children's home language	107	8.4	11.2	30.8	49.5			
When teaching new words, I emphasize words that are similar in English and the children's home languages	109	7.3	6.4	45.9	40.4			
		Not at All	1-5	6-10	11-15	More Than 15		
During group instructional time, everything is said in both English and ELLs' home languages	115	11.3	13.0	42.6	21.7	11.3		
In my classroom, one teacher speaks English and at least one other teacher speaks the predominant ELL home language	113	9.7	6.2	14.2	22.1	47.8		
I lend books to ELL children in their home language to read with their parents	110	20.0	19.1	22.7	19.1	19.1		
I make sure that the ELLs know the alphabet of their home language as well as the English alphabet	113	27.4	28.3	18.6	14.2	11.5		
I send parent materials in the ELLs' home language	111	13.5	12.6	25.2	14.4	34.2		
I assess ELLs' home language development (whether formal or informal)	110	20.9	15.5	27.3	19.1	17.3		
I accept answers to questions in both English and the ELLs' home language	112	4.5	4.5	17.0	26.8	47.3		
I read or talk about the picture in a book in the language that they are most comfortable with when reading to ELLs	114	14.0	9.7	27.2	24.6	24.6		
					Alpha			
<b>Mean Score Scale</b>					<b>0.85</b>			

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.33. High ELL, Use of Home Language—Form B**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in ELLs' home language(s)	94	14.9	16.0	12.8	20.2	12.8	10.6	12.8
I sang songs in ELLs' home language(s)	93	12.9	6.5	18.3	15.1	8.6	20.4	18.3
I talked with ELLs in their home language about things that happen outside of preschool	95	9.5	2.1	7.4	11.6	10.5	45.3	13.7
I used key words from the ELLs' home language for daily activities, like "eat," "bathroom," and "Mama"	94	2.1	3.2	5.3	6.4	12.8	52.1	18.1
I encouraged ELLs to write words and stories in their home language	91	26.4	9.9	22.0	13.2	12.1	8.8	7.7
I counted with the children in ELLs' home language(s)	93	10.8	6.5	17.2	7.5	15.1	22.6	20.4
I read messages and labels in ELLs' home language(s)	94	14.9	8.5	11.7	11.7	18.1	14.9	20.2
ELLs dictated stories in their home language	92	16.3	4.4	7.6	25.0	14.1	25.0	7.6
I described what ELLs were doing when they are playing, narrating what they were doing in their home language	90	13.3	6.7	3.3	15.6	17.8	30.0	13.3
I said part of a sentence in English and the other part in the ELLs' home language	93	28.0	7.5	4.3	8.6	8.6	29.0	14.0
I taught math vocabulary in the ELLs' home language	90	17.8	7.8	8.9	15.6	18.9	20.0	11.1
Parents or other volunteers led activities in the home languages of the ELLs	90	24.4	12.2	23.3	11.1	10.0	12.2	6.7
I used programs on the Internet to help ELLs learn words in their home language	93	55.9	8.6	9.7	10.8	3.2	5.4	6.5
I used computer programs to help ELLs increase home language	92	40.2	10.9	3.3	14.1	4.4	17.4	9.8
Families came to the classroom to read in the home language of the ELLs	94	34.0	20.2	12.8	21.3	4.3	3.2	4.3
I taught ELLs concepts in science and social studies in the ELLs' home language	92	23.9	10.9	10.9	20.7	14.1	13.0	6.5
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>91</b>	<b>3.96</b>	<b>1.40</b>	<b>0.94</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (Several Times a Day).

**Table V.34. Low ELL, Use of Home Language—Form B**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in ELLs' home language(s)	72	37.5	11.1	8.3	16.7	6.9	11.1	8.3
I sang songs in ELLs' home language(s)	70	22.9	4.3	8.6	17.1	11.4	25.7	10.0
I talked with ELLs in their home language about things that happen outside of preschool	71	35.2	5.6	4.2	11.3	9.9	28.2	5.6
I used key words from the ELLs' home language for daily activities, like "eat," "bathroom," and "Mama"	72	6.9	5.6	6.9	8.3	19.4	44.4	8.3
I encouraged ELLs to write words and stories in their home language	69	36.2	10.1	7.3	17.4	13.0	15.9	0.0
I counted with the children in ELLs' home language(s)	73	11.0	8.2	9.6	16.4	12.3	39.7	2.7
I read messages and labels in ELLs' home language(s)	69	33.3	10.1	11.6	10.1	8.7	23.2	2.9
ELLs dictated stories in their home language	73	30.1	4.1	12.3	13.7	15.1	23.3	1.4
I described what ELLs were doing when they are playing, narrating what they were doing in their home language	70	32.9	5.7	1.4	17.1	7.1	32.9	2.9
I said part of a sentence in English and the other part in the ELLs' home language	73	38.4	4.1	2.7	16.4	12.3	21.9	4.1
I taught math vocabulary in the ELLs' home language	71	40.9	2.8	8.5	14.1	19.7	12.7	1.4
Parents or other volunteers led activities in the home languages of the ELLs	72	34.7	12.5	6.9	19.4	5.6	19.4	1.4
I used programs on the Internet to help ELLs learn words in their home language	70	61.4	10.0	4.3	12.9	2.9	1.4	7.1
I used computer programs to help ELLs increase home language	71	43.7	8.5	7.0	12.7	2.8	15.5	9.9
Families came to the classroom to read in the home language of the ELLs	72	54.2	15.3	12.5	11.1	1.4	5.6	0.0
I taught ELLs concepts in science and social studies in the ELLs' home language	69	40.6	10.1	10.1	14.5	14.5	10.1	0.0
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>70</b>	<b>3.36</b>	<b>1.49</b>	<b>0.95</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never) to 7 (Several Times a Day).

**Table V.35. High ELL, English Language Use**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	94	0.0	0.0	1.1	2.1	5.3	60.6	30.9
I used songs in English to teach concepts	93	0.0	0.0	0.0	5.4	12.9	46.2	35.5
I talked with ELLs in English about the pictures in books before or instead of reading	94	4.3	1.1	7.5	10.6	19.2	37.2	20.2
I talked with ELLs in English about things that happen outside of preschool	95	0.0	1.1	3.2	10.5	13.7	52.6	19.0
I encouraged ELLs to write words and/or stories in English	93	14.0	5.4	9.7	11.8	18.3	29.0	11.8
I encouraged ELLs to write words and stories in their home language	91	26.4	9.9	22.0	13.2	12.1	8.8	7.7
I counted with the children in English	92	0.0	0.0	0.0	0.0	3.3	51.1	45.7
I read messages and labels in English	95	0.0	0.0	1.1	2.1	10.5	51.6	34.7
ELLs dictated stories in English (told stories in English for me to write down)	92	7.6	0.0	8.7	22.8	23.9	27.2	9.8
I described what ELLs were doing when they were playing, saying in English what they were doing	93	0.0	1.1	3.2	7.5	17.2	48.4	22.6
I re-read stories to ELLs in English	92	4.4	4.4	6.5	9.8	16.3	44.6	14.1
I taught math vocabulary in English	90	0.0	0.0	3.3	3.3	22.2	50.0	21.1
I used programs on the Internet to help ELLs learn words in English	93	40.9	4.3	6.5	10.8	9.7	19.4	8.6
I used computer programs (for example, games, programs that read aloud to children) to help ELLs learn English	93	15.1	5.4	7.5	14.0	10.8	34.4	12.9
I designed activities for English speakers and ELLs to work on together	92	5.4	4.4	4.4	13.0	8.7	41.3	22.8
I provided intensive small group work specifically to help ELLs learn English	90	6.7	5.6	10.0	16.7	15.6	34.4	11.1
I taught ELLs concepts in science and social studies in English	93	5.4	2.2	9.7	19.4	26.9	26.9	9.7
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>92</b>	<b>5.19</b>	<b>0.81</b>	<b>0.88</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week). Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.36. Low ELL, English Language Use**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	75	0.0	0.0	0.0	4.0	1.3	60.0	34.7
I used songs in English to teach concepts	69	0.0	0.0	1.5	1.5	8.7	42.0	46.4
I talked with ELLs in English about the pictures in books before or instead of reading	72	5.6	1.4	4.2	25.0	11.1	34.7	18.1
I talked with ELLs in English about things that happen outside of preschool	75	2.7	0.0	0.0	17.3	16.0	44.0	20.0
I encouraged ELLs to write words and/or stories in English	72	8.3	6.9	9.7	9.7	23.6	34.7	6.9
I encouraged ELLs to write words and stories in their home language	69	36.2	10.1	7.3	17.4	13.0	15.9	0.0
I counted with the children in English	72	0.0	0.0	1.4	1.4	4.2	61.1	31.9
I read messages and labels in English	75	0.0	2.7	2.7	4.0	4.0	70.7	16.0
ELLs dictated stories in English (told stories in English for me to write down)	71	7.0	15.5	12.7	14.1	16.9	28.2	5.6
I described what ELLs were doing when they were playing, saying in English what they were doing	73	2.7	0.0	5.5	9.6	12.3	50.7	19.2
I re-read stories to ELLs in English	75	5.3	4.0	6.7	13.3	16.0	38.7	16.0
I taught math vocabulary in English	73	0.0	0.0	1.4	13.7	12.3	56.2	16.4
I used programs on the Internet to help ELLs learn words in English	71	47.9	12.7	9.9	9.9	4.2	4.2	11.3
I used computer programs (for example, games, programs that read aloud to children) to help ELLs learn English	70	15.7	4.3	5.7	22.9	8.6	27.1	15.7
I designed activities for English speakers and ELLs to work on together	71	12.7	4.2	4.2	14.1	15.5	35.2	14.1
I provided intensive small group work specifically to help ELLs learn English	73	19.2	6.9	16.4	12.3	12.3	28.8	4.1
I taught ELLs concepts in science and social studies in English	73	5.5	1.4	13.7	17.8	23.3	26.0	12.3
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>74</b>	<b>4.99</b>	<b>0.91</b>	<b>0.88</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least Once a Week). Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.37. High ELL, Focused Instruction in English**

Item	N	Not at All	1-5	6-10	11-15	More Than 15
I devote time each day to instruction in English for ELLs	90	4.4	1.1	15.6	28.9	50.0
I provide intensive small group work specifically to help ELLs learn English	90	6.7	4.4	27.8	21.1	40.0
I say almost everything more than once in English to give ELLs the opportunity to understand	90	2.2	2.2	7.8	27.8	60.0
I ask ELLs lots of open-ended questions like "what did you like best about this activity?" or "tell me about your picture"	91	1.1	0.0	6.6	27.5	64.8
I teach ELLs in their home language for most of the day	90	20.0	33.3	21.1	12.2	13.3
	N	Mean	Standard Deviation	Alpha		
<b>Mean Score Scale</b>	<b>91</b>	<b>3.93</b>	<b>0.76</b>	<b>0.78</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.38. Low ELL, Focused Instruction in English**

Item	N	Not at All	1-5	6-10	11-15	More Than 15
I devote time each day to instruction in English for ELLs	112	7.1	10.7	12.5	30.4	39.3
I provide intensive small group work specifically to help ELLs learn English	113	13.3	12.4	28.3	22.1	23.9
I say almost everything more than once in English to give ELLs the opportunity to understand	114	2.6	2.6	14.9	49.1	30.7
I ask ELLs lots of open-ended questions like "what did you like best about this activity?" or "tell me about your picture"	115	0.9	0.0	13.9	36.5	48.7
I teach ELLs in their home language for most of the day	115	41.7	21.7	25.2	8.7	2.6
	N	Mean	Standard Deviation	Alpha		
<b>Mean Score Scale</b>	<b>114</b>	<b>3.50</b>	<b>0.78</b>	<b>0.77</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.39. High ELL, Reading and Sharing Books with Children**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	94	0.0	0.0	1.1	2.1	5.3	60.6	30.9
I read books in ELLs' home language(s)	94	14.9	16.0	12.8	20.2	12.8	10.6	12.8
I talked with ELLs in English about the pictures in books before or instead of reading	94	4.3	1.1	7.5	10.6	19.2	37.2	20.2
I read messages and labels in English	95	0.0	0.0	1.1	2.1	10.5	51.6	34.7
I read messages and labels in ELLs' home language(s)	94	14.9	8.5	11.7	11.7	18.1	14.9	20.2
I re-read stories to ELLs in English	92	4.4	4.4	6.5	9.8	16.3	44.6	14.1
ELLs dictated stories in English (told stories in English for me to write down)	92	7.6	0.0	8.7	22.8	23.9	27.2	9.8
ELLs dictated stories in their home language	92	16.3	4.4	7.6	25.0	14.1	25.0	7.6
I encouraged ELLs to write words and/or stories in English	93	14.0	5.4	9.7	11.8	18.3	29.0	11.8
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>95</b>	<b>4.94</b>	<b>1.01</b>	<b>0.83</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.40. Low ELL, Reading and Sharing Books with Children**

Item	N	Never	Less Than Once a Month	1-3 Times a Month	1-2 Times a Week	3-4 Times a Week	Everyday	Several Times a Day or More
I read books in English	75	0.0	0.0	0.0	4.0	1.3	60.0	34.7
I read books in ELLs' home language(s)	72	37.5	11.1	8.3	16.7	6.9	11.1	8.3
I talked with ELLs in English about the pictures in books before or instead of reading	72	5.6	1.4	4.2	25.0	11.1	34.7	18.1
I read messages and labels in English	75	0.0	2.7	2.7	4.0	4.0	70.7	16.0
I read messages and labels in ELLs' home language(s)	69	33.3	10.1	11.6	10.1	8.7	23.2	2.9
I re-read stories to ELLs in English	75	5.3	4.0	6.7	13.3	16.0	38.7	16.0
ELLs dictated stories in English (told stories in English for me to write down)	71	7.0	15.5	12.7	14.1	16.9	28.2	5.6
ELLs dictated stories in their home language	73	30.1	4.1	12.3	13.7	15.1	23.3	1.4
I encouraged ELLs to write words and/or stories in English	72	8.3	6.9	9.7	9.7	23.6	34.7	6.9
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>73</b>	<b>4.58</b>	<b>1.03</b>	<b>0.82</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.



**Table V.41. High ELL, Explicit and Intentional Phonics Instruction**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach the individual sounds of letters	184	1.1	0.0	2.7	14.1	28.8	19.6	33.7
I teach children to put individual sounds together to make words (c - a - t)	184	4.4	6.5	13.0	24.5	21.2	13.6	16.9
I teach children to count the number of syllables in words (like clapping out the parts of their name [Ja - mil - a])	184	4.4	4.4	12.5	29.9	22.3	10.3	16.3
I teach rhyming words in English	185	2.2	3.2	12.4	29.2	20.5	14.1	18.4
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>184</b>	<b>4.90</b>	<b>1.20</b>	<b>0.82</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.42. Low ELL, Explicit and Intentional Phonics Instruction**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I teach the individual sounds of letters	187	.	1.6	4.3	21.4	33.2	15.5	24.1
I teach children to put individual sounds together to make words (c - a - t)	188	0.5	6.9	10.6	21.8	32.5	10.1	17.6
I teach children to count the number of syllables in words (like clapping out the parts of their name [Ja - mil - a])	185	3.2	8.7	15.7	23.2	27.0	9.7	12.4
I teach rhyming words in English	183	0.0	6.0	13.7	25.7	29.5	12.6	12.6
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>188</b>	<b>4.79</b>	<b>1.23</b>	<b>0.90</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 to V.

**Table V.43. High ELL, Explicit and Intentional Vocabulary Instruction Form A**

Item	N	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
It's important to always speak clearly in English and frequently repeat words and/or phrases	90	1.1	0.0	6.7	92.2
It is very important to emphasize basic sentence patterns to help ELLs learn to speak English (for example: "I have a crayon," "I like to play")	90	2.2	1.1	10.0	86.7
It is very important to introduce more sophisticated words in English (for example: "disappointed" instead of "sad;" "exquisite" instead of "pretty;" "ambled" instead of "walked")	90	5.6	14.4	36.7	43.3
ELLs learn English by hearing adults describe what they are doing in an activity	89	1.1	4.5	15.7	78.7
Songs are one of the best ways to teach English	89	1.1	1.1	20.2	77.5
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	91	1.1	1.1	4.4	93.4
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>91</b>	<b>3.71</b>	<b>0.39</b>	<b>0.82</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1(Strongly Disagree) to 4 (Strongly Agree).

**Table V.44. Low ELL, Explicit and Intentional Vocabulary Instruction Form A**

Item	N	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
It's important to always speak clearly in English and frequently repeat words and/or phrases	112	0.0	0.0	8.9	91.1
It is very important to emphasize basic sentence patterns to help ELLs learn to speak English (for example: "I have a crayon," "I like to play")	115	1.7	1.7	18.3	78.3
It is very important to introduce more sophisticated words in English (for example: "disappointed" instead of "sad;" "exquisite" instead of "pretty;" "ambled" instead of "walked")	110	5.5	19.1	34.6	40.9
ELLs learn English by hearing adults describe what they are doing in an activity	113	1.8	3.5	16.8	77.9
Songs are one of the best ways to teach English	114	0.9	2.6	15.8	80.7
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	111	0.0	0.0	4.5	95.5
	N	Mean	Standard Deviation	Alpha	
<b>Mean Score Scale</b>	<b>112</b>	<b>3.70</b>	<b>0.31</b>	<b>0.57</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1(Strongly Disagree) to 4 (Strongly Agree).

**Table V.45. High ELL, Explicit and Intentional Vocabulary Instruction form B**

Item	N	Never	Less than once a month	1-3 Times a week	1-2 Times a Week	3-4 Times a week	Everyday	Several Times a Day or More
I provided intensive small group work specifically to help ELLs learn English	90	6.7	5.6	10.0	16.7	15.6	34.4	11.1
I taught ELLs concepts in science and social studies in English	93	5.4	2.2	9.7	19.4	26.9	26.9	9.7
I used programs on the Internet to help ELLs learn words in English	93	40.9	4.3	6.5	10.8	9.7	19.4	8.6
I taught math vocabulary in English	90	0.0	0.0	3.3	3.3	22.2	50.0	21.1
I re-read stories to ELLs in English	92	4.4	4.4	6.5	9.8	16.3	44.6	14.1
I talked with ELLs in English about the pictures in books before or instead of reading	94	4.3	1.1	7.5	10.6	19.2	37.2	20.2
I read messages and labels in English	95	0.0	0.0	1.1	2.1	10.5	51.6	34.7
I described what ELLs were doing when they were playing, saying in English what they were doing	93	0.0	1.1	3.2	7.5	17.2	48.4	22.6
		Not at All	1-5	6-10	11-15	More than 15		
Signs and objects labeled in English								
Phrases in English taught to ELLs like "I like [singing, blocks, milk,...]," "I want to [play, paint, eat]"	95	0.0	2.1	6.3	8.4	83.2	95	0.0
Number of new words that you directly teach ELLs in English each week	93	0.0	8.6	5.4	22.6	63.4	93	0.0
Signs and objects labeled in the home languages of the children	92	0.0	13.0	21.7	9.8	55.4	92	0.0
Phrases from the ELLs' home language for comfort	94	27.7	20.2	17.0	6.4	28.7	94	27.7
Phrases from the ELLs' home language in order to help them follow the classroom routine and rules	92	22.8	21.7	15.2	14.1	26.1	92	22.8
Songs in the ELLs' home languages to teach concepts	91	17.6	27.5	15.4	9.9	29.7	91	17.6
Number of new words that you directly teach ELLs in their home language each week	91	12.1	33.0	16.5	12.1	26.4	91	12.1
					Alpha			
<b>Mean Score Scale</b>					<b>0.85</b>			

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.46. Low ELL, Explicit and Intentional Vocabulary Instruction form B**

Item	N	Never	Less than Once a Month	1-3 Times a week	1-2 Times a Week	3-4 Times a week	Everyday	Several Times a Day or More
I provided intensive small group work specifically to help ELLs learn English	73	19.2	6.9	16.4	12.3	12.3	28.8	4.1
I taught ELLs concepts in science and social studies in English	73	5.5	1.4	13.7	17.8	23.3	26.0	12.3
I used programs on the Internet to help ELLs learn words in English	71	47.9	12.7	9.9	9.9	4.2	4.2	11.3
I taught math vocabulary in English	73	0.0	0.0	1.4	13.7	12.3	56.2	16.4
I re-read stories to ELLs in English	75	5.3	4.0	6.7	13.3	16.0	38.7	16.0
I talked with ELLs in English about the pictures in books before or instead of reading	72	5.6	1.4	4.2	25.0	11.1	34.7	18.1
I read messages and labels in English	75	.	2.7	2.7	4.0	4.0	70.7	16.0
I described what ELLs were doing when they were playing, saying in English what they were doing	73	2.7	.	5.5	9.6	12.3	50.7	19.2
		Not at All	1-5	6-10	11-15	More than 15		
Signs and objects labeled in English	73	4.1	2.7	2.7	15.1	75.3		
Phrases in English taught to ELLs like "I like [singing, blocks, milk,...]," "I want to [play, paint, eat]"	71	1.4	18.3	26.8	16.9	36.6		
Number of new words that you directly teach ELLs in English each week	73	0.0	27.4	24.7	16.4	31.5		
Signs and objects labeled in the home languages of the children	68	45.6	10.3	16.2	7.4	20.6		
Phrases from the ELLs' home language for comfort	70	34.3	25.7	12.9	11.4	15.7		
Phrases from the ELLs' home language in order to help them follow the classroom routine and rules	68	32.4	29.4	8.8	10.3	19.1		
Songs in the ELLs' home languages to teach concepts	71	25.4	36.6	21.1	5.6	11.3		
Number of new words that you directly teach ELLs in their home language each week	68	27.9	45.6	8.8	8.8	8.8		
					Alpha			
<b>Mean Score Scale</b>					<b>0.87</b>			

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.47. High ELL, Peer Strategies**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I pair talkers and non-talkers in activities	182	5.0	3.9	3.3	25.3	24.2	19.2	19.2
I pair children who are more fluent in English with children who primarily speak another language	183	4.4	2.2	8.7	23.0	25.7	18.6	17.5
I encourage English-speaking children to talk with ELLs	183	1.6	0.6	3.3	12.6	20.8	24.6	36.6
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>177</b>	<b>5.15</b>	<b>1.19</b>	<b>0.72</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

**Table V.48. Low ELL, Peer Strategies**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I pair talkers and non-talkers in activities	183	4.4	6.6	9.8	30.6	21.3	13.7	13.7
I pair children who are more fluent in English with children who primarily speak another language	177	12.4	2.3	10.2	26.0	21.5	15.8	11.9
I encourage English-speaking children to talk with ELLs	185	2.7	3.8	3.8	17.3	31.4	21.1	20.0
	N	Mean	Standard Deviation	Alpha				
<b>Mean Score Scale</b>	<b>173</b>	<b>4.69</b>	<b>1.28</b>	<b>0.74</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

**Table V.49. High ELL, Instructional and Visual Supports**

Item	N	Strongly Agree	Somewhat disagree	Somewhat Agree	Strongly Agree
It is very important to translate everything that is said during instruction into the ELLs' home language(s)	90	8.9	10.0	27.8	53.3
It is very important to use structured routines at the beginning of the year especially and have visual cues to help ELLs move through those routines successfully	89	3.4	2.3	3.4	91.0
It is very important to establish classroom rules, clearly making sure children understand them	90	3.3	0.0	4.4	92.2
It is very important to have visual cues (e.g., posters, visual cue cards) to help ELLs successfully understand and follow classroom rules	90	3.3	0.0	8.9	87.8
When teaching new words, I emphasize words that are similar in English and the children's home languages	87	5.8	12.6	35.6	46.0
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>90</b>	<b>3.60</b>	<b>0.56</b>	<b>0.81</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: For the mean calculation, all reports of "not applicable" are excluded. Category values range from 1 (Not Yet) to 5 (At least once a week).

**Table V.50. Low ELL, Instructional and Visual Supports**

Item	N	Strongly Agree	Somewhat disagree	Somewhat Agree	Strongly Agree
It is very important to translate everything that is said during instruction into the ELLs' home language(s)	112	8.9	17.0	27.7	46.4
It is very important to use structured routines at the beginning of the year especially and have visual cues to help ELLs move through those routines successfully	114	0.0	0.9	12.3	86.8
It is very important to establish classroom rules, clearly making sure children understand them	114	0.0	0.0	9.7	90.4
It is very important to have visual cues (e.g., posters, visual cue cards) to help ELLs successfully understand and follow classroom rules	113	0.9	0.9	9.7	88.5
When teaching new words, I emphasize words that are similar in English and the children's home languages	109	7.3	6.4	45.9	40.4
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>112</b>	<b>3.59</b>	<b>0.34</b>	<b>0.41</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

**Table V.51. High ELL, Screening and Assessment Form A**

Item	N	Never True	Rarely True	Sometimes True	Usually True	Always True
I assess ELLs' home language development (whether formal or informal)	89	13.5	7.9	21.4	20.2	37.1
I assess children's English language development (whether formal or informal)	90	2.2	1.1	17.8	21.1	57.8
	N	Mean	Standard Deviation	Alpha		
<b>Number of Types of Participation<sup>b</sup></b>	<b>88</b>	<b>3.96</b>	<b>1.01</b>	<b>0.62</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never True) to 5 (Always True).



**Table V.52. Low ELL, Screening and Assessment Form A**

Item	N	Never True	Rarely True	Sometimes True	Usually True	Always True
I assess ELLs' home language development (whether formal or informal)	110	20.9	15.5	27.3	19.1	17.3
I assess children's English language development (whether formal or informal)	109	7.3	0.9	24.8	37.6	29.4
	N	Mean	Standard Deviation	Alpha		
<b>Mean Scale Score</b>	<b>109</b>	<b>3.39</b>	<b>1.07</b>	<b>0.66</b>		

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Possible range of 1 (Never True) to 5 (Always True).

**Table V.53. High ELL, Screening and Assessment Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I observe and keep track of children's English	92	1.1	5.4	7.6	18.5	21.7	19.6	26.1
I observe and keep track of ELLs' home language development	91	11.0	7.7	11.0	9.9	16.5	15.4	28.6
I formally assess children's English language development	91	8.8	13.2	16.5	8.8	12.1	14.3	26.4
I formally assess ELLs' home language development	91	20.9	12.1	12.1	12.1	14.3	11.0	17.6
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>90</b>	<b>4.58</b>	<b>1.70</b>	<b>0.89</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: Mean score computed if 75% valid scores.

Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.54. Low ELL, Screening and Assessment Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
I observe and keep track of children’s English	69	1.5	7.3	15.9	21.7	29.0	18.8	5.8
I observe and keep track of ELLs’ home language development	67	16.4	11.9	14.9	19.4	19.4	13.4	4.5
I formally assess children’s English language development	72	9.7	25.0	15.3	18.1	16.7	8.3	6.9
I formally assess ELLs’ home language development	70	27.1	27.1	12.9	7.1	18.6	2.9	4.3
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score</b>	<b>68</b>	<b>3.67</b>	<b>1.35</b>	<b>0.83</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Notes: Mean score computed if 75% valid scores.

Possible range of 1 (Never) to 7 (10 or More Times a Day).

**Table V.55a. High ELL, Teacher Beliefs about ELL Parent Engagement, Form A**

Item	N	Strongly Agree	Somewhat disagree	Somewhat Agree	Strongly Agree
Parents can best support ELLs' learning by teaching their children English	87	13.79	17.24	27.59	41.38
Parents can best support ELLs' learning by strengthening their children's home language	89	3.37	7.87	25.84	62.92
Parents can best support ELLs' learning by valuing their child's education and learning	89	2.25	0.0	6.74	91.01
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	91	1.1	1.1	4.4	93.41
Parents in my class want their children to speak only English at preschool	80	20.0	25.0	42.5	12.5
Parents in my class want their children to speak their home language at preschool	78	12.82	28.21	43.59	15.38
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>90</b>	<b>3.56</b>	<b>0.47</b>	<b>0.60</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Mean computed without last 2 items due to correlation with other items.

**Table V.55b. Low ELL, Teacher Beliefs about ELL Parent Engagement, Form A**

Item	N	Strongly Agree	Somewhat disagree	Somewhat Agree	Strongly Agree
Parents can best support ELLs' learning by teaching their children English	107	7.48	14.95	37.38	40.19
Parents can best support ELLs' learning by strengthening their children's home language	107	8.41	11.21	30.84	49.53
Parents can best support ELLs' learning by valuing their child's education and learning	113	0.88	0.0	11.5	87.61
Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	111	0.0	0.0	4.5	95.5
Parents in my class want their children to speak only English at preschool	97	20.62	23.71	36.08	19.59
Parents in my class want their children to speak their home language at preschool	95	24.21	30.53	36.84	8.42
	N	Mean	Standard Deviation	Alpha	
<b>Mean Scale Score</b>	<b>111</b>	<b>3.54</b>	<b>0.42</b>	<b>0.53</b>	

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Mean computed without last 2 items due to correlation with other items.

**Table V.56a. High ELL, Culturally Focused Approaches, Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
Children participated in activities that celebrated the culture of the different families in my program (e.g., trying foods, showing traditional clothing, singing songs)	93	0.0	10.75	31.18	18.28	11.83	15.05	12.9
		Not at All	1-5	6-10	11-15	More than 15		
Books about families that reflect the cultural and ethnic background of the ELLs in the classroom	95	1.05	15.79	24.21	13.68	45.26		
	N	Mean	Standard Deviation	Alpha				
<b>Mean Scale Score <sup>b</sup></b>				<b>0.35</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.56b. Low ELL, Culturally Focused Approaches, Form B**

Item	N	Never	Once a Month or Less	Several Times a Month	Several Times a Week	1-4 Times a Day	5-9 Times a Day	10 or More Times a Day
Children participated in activities that celebrated the culture of the different families in my program (e.g., trying foods, showing traditional clothing, singing songs)	74	5.41	13.51	27.03	10.81	10.81	25.68	6.76
		Not at All	1-5	6-10	11-15	More than 15		
Books about families that reflect the cultural and ethnic background of the ELLs in the classroom	74	1.35	18.92	27.03	16.22	36.49		
				Alpha				
<b>Mean Scale Score <sup>b</sup></b>				<b>0.36</b>				

Source: UPCOS-3 Winter 2010 Instructional Practices Questionnaires

Note: Different response scales used for items so mean score was not computed.

**Table V.60. Use of Cues for Meaning**

Question A3/B3 – Use of Cues for Meaning $\alpha = .905$	Item-to-Total Correlation
a. I repeat words and phrases to help English Language Learners (ELLs) learn English	.743
b. I use pictures and visual cues to help ELLs understand what is said in English	.778
c. I use objects to help ELLs understand	.791
d. I use gestures or body language to help children understand	.739
e. I describe what the ELL is doing in English during activities	.720
h. I repeat what the ELLs say in English (for example, “yes, that’s milk”)	.659

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.61. Frequent Use of Home Language**

Question A3/B3 – Use of Home Language $\alpha = .942$	Item-to-Total Correlation
g. I have extended conversations with ELLs in their home language (with more than 2 turns in conversation)	.855
i. I repeat what the ELLs say in their home language	.841
l. I translate what the ELLs say into English	.802
n. Using their home language, I ask questions about and talk with ELLs about things that happened at home or on another day	.893
q. I talk about things happening here and now in the ELLs’ home language(s)	.830

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.62. Sounds and Letters**

Question A3/B3 – Phonics Activities $\alpha = .860$	Item-to-Total Correlation
r. I teach the individual sounds of letters	.626
s. I teach children to put individual sounds together to make words (c - a - t)	.749
t. I teach children to count the number of syllables in words (like clapping out the parts of their name [Ja - mil - a])	.697
u. I teach rhyming words in English	.750

Source: Winter 2010 Instructional Practices Questionnaire.

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**Table V.63. General Language Support**

Question A3/B3 - General Language Support $\alpha = .878$	Item-to-Total Correlation
f. I have extended conversations in English with ELLs (with more than 2 turns in conversation)	.675
k. I build on what an ELL says by adding information to what they said, (for example, "drinking milk is healthy")	.709
m. Using English, I ask questions and talk with ELLs about things that happened at home or on another day	.672
o. I have children (including ELLs) respond together as a group in English (for example, naming pictures, repeating words and phrases)	.710
p. I talk about things happening here and now in English to ELLs	.778

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.64. Peer Strategies**

Question A3/B3 - Peer Strategies $\alpha = 0.737$	Item-to-Total Correlation
j. I pair children who are more fluent in English with children who primarily speak another language	.523
a3x./b3v. I pair talkers and non-talkers in activities	.657
a3y./b3w. I encourage English-speaking children to talk with ELLs	.508

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.65. Beliefs about Basic English**

Question A4- Beliefs about Basic English $\alpha = .780$	Item-to-Total Correlation
e. It is very important to emphasize basic sentence patterns to help ELLs learn to speak English (for example: "I have a crayon," "I like to play")	.491
h. It is very important to have ELLs repeat words in English	.534
i. ELLs learn English by hearing adults describe what they are doing in an activity	.548
j. Songs are one of the best ways to teach English	.462
p. Parents can best support ELLs' learning by valuing their child's education and learning	.506
q. Parents can best support ELLs' learning by interacting and providing a loving and consistent home environment	.564
r. It's important to always speak clearly in English and frequently repeat words and/or phrases	.591

Source: Winter 2010 Instructional Practices Questionnaire.



**Table V.66. Beliefs about Academic English**

Question A4- Beliefs about Academic English $\alpha = .838$	Item-to-Total Correlation
b. It is very important to teach new concepts only in English	.611
y. All academic words (like science concepts and mathematics words) should be taught only in English	.739
bb. It is important to teach math concepts only in English	.760

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.67. Beliefs/Myths about Supporting ELLs**

Question A4- Beliefs/Myths about Supporting ELLs $\alpha = .693$	Item-to-Total Correlation
a. It is very important to translate everything that is said during instruction into the ELLs' home language(s)	.330
c. It is very important to read books slowly when reading in English	.385
d. It is very important that all ELLs are speaking English by the end of the year	.464
e. It is very important to emphasize basic sentence patterns to help ELLs learn to speak English (for example: "I have a crayon," "I like to play")	.516
h. It is very important to have ELLs repeat words in English	.495
n. Parents can best support ELLs' learning by teaching their children English	.495

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.68. Beliefs About Sophisticated Language Development**

Question A4- Beliefs about Sophisticated Language Development $\alpha = .674$	Item-to-Total Correlation
aa. When teaching new words, I emphasize words that are similar in English and the children's home languages	.359
z. When talking with ELLs, it is very important to use a variety of sentence types including some longer sentences	.343
o. Parents can best support ELLs' learning by strengthening their children's home language	.353
f. It is very important to introduce more sophisticated words in English (for example: "disappointed" instead of "sad;" "exquisite" instead of "pretty;" "ambled" instead of "walked")	.465
g. It is very important to introduce more sophisticated words in the ELLs' home language so that their language skills increase	.628

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.69. Beliefs about Providing Cues for Meaning**

Question A4 Beliefs about Providing Cues for Meaning $\alpha = .791$	Item-to-Total Correlation
h. It is very important to have ELLs repeat words in English	.363
u. It is very important to use structured routines at the beginning of the year especially and have visual cues to help ELLs move through those routines successfully	.711
v. It is very important to establish classroom rules, clearly making sure children understand them	.724
w. It is very important to have visual cues (e.g., posters, visual cue cards) to help ELLs successfully understand and follow classroom rules	.668

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.70. Emphasis on Home Language**

Question A5 – Emphasis on Home Language $\alpha = .87$	Item-to-Total Correlation
a. During group instructional time, everything is said in both English and ELLs' home languages	.525
h. I make sure that the ELLs know the alphabet of their home language as well as the English alphabet	.636
j. I assess ELLs' home language development (whether formal or informal)	.700
m. I use a curriculum designed for ELLs	.520
n. I read or talk about the picture in a book in the language that they are most comfortable with when reading to ELLs	.734
o. I devote time each day to instruction in English for ELLs	.563
p. I provide intensive small group work specifically to help ELLs learn English	.538
s. I teach ELLs in their home language for most of the day	.711
t. I teach ELLs in a separate group in their home language for part of the day	.544

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.71. Assessment and Instruction in Home Language**

Question A5- Assessment and Instruction in Home Language $\alpha = .833$	Item-to-Total Correlation
d. In my classroom, one teacher speaks English and at least one other teacher speaks the predominant ELL home language	.549
a. During group instructional time, everything is said in both English and ELLs' home languages	.455
f. I lend books to ELL children in their home language to read with their parents	.527
i. I send parent materials in the ELLs' home language	.522
j. I assess ELLs' home language development (whether formal or informal)	.751
k. I assess children's English language development (whether formal or informal)	.483
l. I accept answers to questions in both English and the ELLs' home language	.623
n. I read or talk about the picture in a book in the language that they are most comfortable with when reading to ELLs	.604

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.72. Literacy Emphasis**

Question A5 – Literacy Emphasis $\alpha = .852$	Item-to-Total Correlation
e. I lend books in English for ELL children to read with their parents	.751
f. I lend books to ELL children in their home language to read with their parents	.744
g. I teach parents who do not speak English how to talk about the pictures in books with their ELLs	.674

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.73. Early Academic Focus**

Question B4- Early Academic Focus $\alpha = .785$	Item-to-Total Correlation
i. I encouraged ELLs to write words and/or stories in English	.381
t. I re-read stories to ELLs in English	.478
u. I taught math vocabulary in English	.477
cc. Children participated in activities that celebrated the culture of the different families in my program (e.g., trying foods, showing traditional clothing, singing songs)	.520
dd. Families came to the classroom to read in the home language of the ELLs	.569
ee. I provided intensive small group work specifically to help ELLs learn English	.630
ff. I taught ELLs concepts in science and social studies in English	.399
gg. I taught ELLs concepts in science and social studies in the ELLs' home language	.529

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.74. Early Use of Multiple Supports**

Question B4 – Early Use of Multiple Supports $\alpha = .872$	Item-to-Total Correlation
o. ELLs dictated stories in English (told stories in English for me to write down)	.500
w. Parents or other volunteers led activities in the home languages of the ELLs	.585
x. I used programs on the Internet to help ELLs learn words in English	.575
y. I used programs on the Internet to help ELLs learn words in their home language	.734
z. I used computer programs (for example, games, programs that read aloud to children) to help ELLs learn English	.538
aa. I used computer programs to help ELLs increase home language	.648
bb. I designed activities for English speakers and ELLs to work on together	.540
cc. Children participated in activities that celebrated the culture of the different families in my program (e.g., trying foods, showing traditional clothing, singing songs)	.591
dd. Families came to the classroom to read in the home language of the ELLs	.722
ee. I provided intensive small group work specifically to help ELLs learn English	.518

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.75. Early Use of Dual Languages**

Question B4- Early Use of Dual Languages $\alpha = .773$	Item-to-Total Correlation
a. I read books in English	.483
c. I used songs in English to teach concepts	.448
e. I talked with ELLs in English about the pictures in books before or instead of reading	.526
f. I talked with ELLs in English about things that happen outside of preschool	.534
j. I encouraged ELLs to write words and stories in their home language	.544
l. I counted with the children in ELLs' home language(s)	.537
p. ELLs dictated stories in their home language	.525
z. I used computer programs (for example, games, programs that read aloud to children) to help ELLs learn English	.310
bb. I designed activities for English speakers and ELLs to work on together	.471

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.76. Early Use of Home Language**

Question B4- Early Use of Home Language $\alpha = .944$	Item-to-Total Correlation
b. I read books in ELLs' home language(s)	.816
d. I sang songs in ELLs' home language(s)	.709
f. I talked with ELLs in English about things that happen outside of preschool	.451
g. I talked with ELLs in their home language about things that happen outside of preschool	.795
h. I used key words from the ELLs' home language for daily activities, like "eat," "bathroom," and "Mama"	.601
j. I encouraged ELLs to write words and stories in their home language	.705
l. I counted with the children in ELLs' home language(s)	.696
n. I read messages and labels in ELLs' home language(s)	.745
p. ELLs dictated stories in their home language	.744
r. I described what ELLs were doing when they are playing, narrating what they were doing in their home language	.843
s. I said part of a sentence in English and the other part in the ELLs' home language	.662
v. I taught math vocabulary in the ELLs' home language	.869
w. Parents or other volunteers led activities in the home languages of the ELLs	.544
dd. Families came to the classroom to read in the home language of the ELLs	.579
gg. I taught ELLs concepts in science and social studies in the ELLs' home language	.800

Source: Winter 2010 Instructional Practices Questionnaire.

**Table V.77. Materials in Home Language**

Question B5 – Materials in Home Language $\alpha = .865$	Item-to-Total Correlation
b. Signs and objects labeled in the home languages of the children	.619
c. Phrases from the ELLs' home language for comfort	.756
d. Phrases from the ELLs' home language in order to help them follow the classroom routine and rules	.750
f. Songs in the ELLs' home languages to teach concepts	.757
h. Notes and newsletters to parents in their home language each month	.406
k. Number of new words that you directly teach ELLs in their home language each week	.691

Source: Winter 2010 Instructional Practices Questionnaire.



## VI. RELATIONSHIP BETWEEN MEASURES

Relationships Between Measures and Summary of Results This study was designed to provide information about instructional practices used to support ELLs in LAUP. As part of the study, teachers reported their beliefs about the use of instructional practices with ELLs via the Instructional Practices Self-Administered Questionnaire (IP-SAQ). Mathematica also conducted classroom observations of a stratified random sample of classrooms in LAUP using four different tools: CLASS, ELLE, LISn†EVR, and the B-TBRS.

The IP-SAQ was mailed to all teachers and assistant teachers in LAUP—both Centers and FCC—but the response rate was low (overall 35 percent), with a greater percentage of respondents from Centers (79 percent). On average, an experienced group of teachers responded to the IP-SAQ, including a greater proportion of teachers in classrooms with high concentrations of ELLs, as compared to randomly sampled classrooms. Each randomly sampled classroom was observed using three of four observation measures—the LISn†EVR, or the B-TBRS was used in combination with the CLASS and the ELLE, with half of the classrooms randomly assigned to each combination. The response rate for the classroom observations was 87 percent. These results from the classroom observations were weighted to account for probability of selection and nonresponse.

### A. Bivariate Relationships Between Measures

Each source of data provided unique as well as some overlapping information about classrooms and practices in LAUP. The B-TBRS carefully examined language and literacy instruction in classrooms that served children who speak English and/or Spanish. The LISn†EVR provided information about the frequency of talk by children, teachers, and other adults in the classroom, the type of talk used by adults, classroom structures and content, social supports provided for learning, and specific instructional practices used to support language development. The ELLE provided information about literacy resources and activities available in the classrooms in English and other languages. The CLASS provided information about the Emotional Support, Classroom Organization, and Instructional Support for learning using a measure used throughout California and the nation. Examinations of correlations among measures indicated generally low correlations with some unexpected relationships. Although we report the coefficients that were significant (or at a trend level), it is important to note that this analysis is exploratory in nature, the sample sizes were small, and we did not adjust for the multiple comparisons. Thus, some of the relationships identified may be spurious.

#### 1. Relationships Between IP-SAQ Scales and Observation Measures

We examined the relationships between the scale on the IP-SAQ and the different classroom observation measures. Because the sample size is so small, when examining relationships to the IP-SAQ scales ( $n = 9$  to  $49$ ), we report correlations with  $p < .10$ .

The following relationships were found between the IP-SAQ scales and the dimensions and domains of the CLASS (Table VI.1):

- Basic English language use is correlated with CLASS Behavior Management ( $r = .39$ ;  $p < .05$ ) and Language Modeling ( $r = .33$ ;  $p < .10$ )

- Academic language is negatively correlated with CLASS Negative Climate, Instructional Learning Formats, Instructional Support, Quality of Feedback, and Language Modeling ( $r = -.037$  to  $-.42$ ;  $p < .10$ )
- Vocabulary instruction is correlated with Behavior Management, Instructional Support, Quality of Feedback, and Language Modeling ( $r = .35$  to  $.40$ ;  $p < .10$ )
- Both general language support and use of home language are negatively correlated with two CLASS domains (Emotional Support and Instructional Support) and with three dimension scores (Teacher Sensitivity, Instructional Learning Formats, and either Quality of Feedback [use of home language] or Regard for Student Perspectives [general language support]) ( $r = -.25$  to  $-.33$ ;  $p < .05$ ).

The IP-SAQ scales positively related to some dimensions of the ELLE (Table VI.2). The IP-SAQ scales of beliefs about sophisticated language, early academic focus, English language use, and peer strategies were positively related ( $r = .29$  to  $.45$ ;  $p < .10$ ). Moderate relationships were found between phonics activities and explicit and intentional phonics instruction ( $r = .42$  and  $r = .40$ ;  $p < .01$ ).

The IP-SAQ scales that addressed use of multiple supports for language, beliefs about parent engagement, basic English use, and vocabulary instruction were positively related to the B-TBRS quantity (usually a measure of frequency) scales while the use of home language and academic language were negatively related to the B-TBRS. The relationship with the B-TBRS use of home language is not surprising given that the limited frequency of Spanish and other languages in these observations led to scales that are primarily based on English (Table VI.3):

- Multiple support for language with B-TBRS, Oral Language Use, Sensitive Behavior, and Print and Letter Knowledge ( $r = .50$  to  $.55$ ;  $p < .10$ )
- Beliefs about parent engagement with B-TBRS Sensitive Behavior ( $r = .50$ ;  $p < .05$ ), Centers ( $r = .58$ ;  $p < .01$ ), and Print and Letter Knowledge ( $r = .41$ ;  $p < .10$ )
- Basic English language use with B-TBRS Oral Language Use, Classroom Community, Sensitive Behaviors, and Centers ( $r = .41$  to  $.54$ ;  $p < .10$ )
- Vocabulary Instruction with B-TBRS Oral Language Use ( $r = .58$ ;  $p < .01$ ), Sensitive Behavior ( $r = .49$ ;  $p < .05$ ), and Centers ( $r = .42$ ;  $p < .10$ )
- Academic language is negatively correlated with B-TBRS Oral Language Use and Team Teaching ( $r = -.60$  and  $-.57$ ;  $p < .05$ )
- Use of home language empirical is negatively correlated with B-TBRS Centers and Team Teaching ( $r = -.58$  and  $-.51$ ;  $p < .10$ )

The IP-SAQ scales that addressed basic English use, beliefs about parent engagement, vocabulary instruction, and use of multiple supports for language were also positively related to the B-TBRS quality scores, while beliefs about academic English were negatively related to the scores (Table VI.4).

- Basic English use with the B-TBRS quality of Oral Language Use, Sensitive Behaviors, and Centers ( $r = .43$  to  $.50$ ;  $p < .10$ ,  $p < .05$ )



- Beliefs about parent engagement with the B-TBRS quality of Sensitive Behaviors, Centers, and Print and Letter Knowledge ( $r = .50$  to  $.54$ ;  $p < .05$ )
- Vocabulary instruction with the B-TBRS quality of Oral Language Use, Sensitive Behaviors, Centers, and Print and Letter Knowledge ( $r = .42$  to  $.55$ ;  $p < .10$ )
- Use of multiple supports for language with the B-TBRS quality of Oral Language Use, Sensitive Behaviors, and Print and Letter Knowledge ( $r = .53$  to  $.64$ ;  $p < .10$ )
- Beliefs about academic English with the B-TBRS quality of Oral Language Use ( $r = -.64$ ;  $p < .01$ ) and Team Teaching ( $r = -.50$ ;  $p < .05$ )

The IP-SAQ was positively related to several different scales on LISn† EVR (Tables VI.5-VI.8). A negative relationship was found between the use of decontextualized talk in Spanish/other languages by other adults and the IP-SAQ scales for instructional and visual supports and vocabulary. All the relationships with the EVR were positive, with the intentional/explicit instruction scale demonstrating the most relationships:

- LISn teacher contextualized talk in Spanish with IP-SAQ home language use ( $r = .68$ ;  $p < .05$ ) (Table VI.5)
- LISn teacher contextualized talk in English with phonics instruction ( $r = .38$   $p < .10$ ) (Table VI.6)
- LISn total sustained conversations and total teacher talk with basic English ( $r = .60$  and  $.56$ ; trend  $p < .10$ ) (Table VI.7)
- LISn teacher contextualized talk in Spanish is related to the IP-SAQ emphasis on home language ( $r = .68$ ;  $p < .05$ ), and the IP-SAQ early academics focus ( $r = .65$ ,  $p < .05$ ) (Table VI.5)
- LISn contextualized talk/singing in Spanish related to emphasis on home language, early academic focus, phonics activities, and explicit phonics instruction ( $r = .40$  [ $p < .10$ ] to  $.68$ ; [ $p < .05$ ]) (Table VI.5)
- Total teacher talk in English related to explicit and intentional phonics instruction ( $r = .38$ ;  $p < .10$ ) (Table VI.7)
- Other adult decontextualized talk in Spanish is negatively related to IP-SAQ instructional and visual supports, and IP-SAQ vocabulary ( $r = -.61$ ,  $p = .06$ , to  $r = -.81$ ,  $p < .001$ ) (Table VI.5)
- IP-SAQ scales of beliefs about basic English, beliefs about sophisticated language, beliefs about providing cues for meaning, beliefs/myths about ELLS, beliefs about parents engagement, and vocabulary instruction were positively related with the EVR intention/explicit instruction ( $r = .59$  to  $.77$ ;  $p < .10$ ) (Table VI.8)
- IP-SAQ scales of beliefs/myths about ELLS, emphasis on home language and English, assessment and instruction in home language, literacy emphasis, focused instruction in English, and screening and assessment and EVR time use/productivity were positively related ( $r = .60$  to  $.71$ ;  $p < .10$ ) (Table VI.8)
- The IP-SAQ peer strategies was also related to EVR intention/explicit instruction ( $r = .60$ ,  $p < .01$ ). (Table VI.8)

## 2. Relationships Between CLASS Measures

Correlations of all observation measures with the CLASS are generally low ( $r < .30$ ). Because the ELLE and the CLASS were completed by the same observer on a single visit, the number of observations in the analysis is greater than for the other measures. The sample included 91 to 95 classrooms; therefore, there was more statistical power to detect small relationships than with the other measures. The availability of literacy resources as measured by the ELLE literacy environment checklist is positively related to the Emotional Support scale on the CLASS, particularly to Teacher Sensitivity and Positive Climate (Table VI .9).

Few relationships were found between the CLASS and the B-TBRS quantity and quality measures (Tables VI.10 and VI.11). The sample size for examining these relationships ranged from 55 to 57. The B-TBRS Classroom Community quantity and quality scores were negatively related to the measure of Negative Climate on the CLASS ( $r = -.34$  to  $-.42$ ;  $p < .01$ ). Team Teaching on the B-TBRS represented the extent to which the assistant teacher provided classroom management and Instructional Support in the classroom and was positively related on both quantity and quality with the CLASS Instructional Support domain ( $r = .27$  to  $.29$ ;  $p < .05$ ). Somewhat surprisingly, Written Expression for B-TBRS quantity and quality was negatively related to all the components of the CLASS Instructional Support domain ( $r = -.32$  to  $-.43$ ;  $.05 < p < .01$ ). We can only speculate as to why this might be. The Written Expression items ask about teacher modeling of writing as well as the availability of writing materials for children. The CLASS focuses more on verbal support for learning.

The sample for examining relationships between the CLASS and the LISn+EVR ranged from 59 to 63. The individual codes for different kinds of talk were not related to the CLASS (Table VI.12). The number of sustained conversations among children was related positively to the Classroom Organization domain ( $r = .27$ ;  $p < .05$ ) and to the Behavior Management dimension ( $r = .28$ ;  $p < .05$ ). Scales on the LISn relating to the use of Spanish/other languages by the teacher were related to the CLASS (Table VI.13). Teacher elicit/respond to child language was the scale with the strongest relationships with the CLASS domains and dimensions. Significant relationships were found between the teacher elicit/respond scale and the CLASS Positive Climate, Teacher Sensitivity, Behavior Management, Concept Development and the Instructional Support domain ( $r = .27$  to  $.37$ ;  $.05 < p < .01$ ). Teacher contextualized talk/sing in Spanish/other was related to Positive Climate and Concept Development ( $r = .27$  and  $.26$  respectively;  $p < .05$ ). CLASS Concept Development was also related to Spanish scales on the LISn: teacher scaffolded decontextualized talk/read in Spanish/Other, teacher contextualized talk in Spanish/Other, and teacher scaffolded decontextualized talk in Spanish/other ( $r = .28$  to  $.37$ ;  $.05 < p < .01$ ). Teacher scaffolded decontextualized talk in Spanish/other was also related to Positive Climate, Teacher Sensitivity, and the Instructional Support domains ( $r = .27$  to  $.30$ ;  $p < .05$ ). However, the scales in English were not related to any of the domains or dimensions of the CLASS.

Numerous significant relationships were found between the CLASS and EVR scales (Table VI.14). The single item about teaching sounds was related to all CLASS dimensions and domains except the Negative Climate dimension. The intentional/explicit instruction scale had low to moderate relationships with almost all dimensions of the CLASS. The intentional/explicit instruction scale was related to with Instructional Support domain, Language Modeling, and Quality of Feedback ( $r = .26$ ,  $r = .27$ ;  $p < .05$ ; and  $r = .23$ , respectively). The EVR Positive Climate/Behavior Management was more strongly related to the Instructional Support domain ( $r = .28$ ;  $p < .05$ ) and Language Modeling dimension ( $r = .28$ ;  $p < .05$ ) than with the Positive Climate dimension of the CLASS ( $r = .24$ ;  $p < .10$ ).

### 3. Relationships Between ELLE and Other Measures

As noted above, we detected several low correlations between the ELLE and CLASS, particularly with the Emotional Support domain and dimensions. The ELLE and B-TBRS quantity and quality scores were not related except for a negative correlation between the ELLE and B-TBRS quantity ( $r = -.28$ ;  $p < .10$ ) and quality ( $r = -.30$ ;  $p < .05$ ) Print and Letter Knowledge (Tables VI.15 and VI.16). The ELLE correlates significantly with all EVR scales ( $r = .23$  [ $p < .10$ ] to  $.46$ ,  $p < .01$ ) (Table VI.17).

### 4. Evidence-Based Practices in LAUP

The review of research examining practices supporting the development of ELLs (Aikens et al. 2010) identified effects of using home language, reading and sharing books with children, peer strategies, explicit, intentional phonics instruction, and practices associated with evidence-based curriculum such as small group instruction and explicit, intentional instruction of vocabulary and language embedded in meaningful interactions. This section will discuss how each area is currently implemented in LAUP based on the source of information—, teacher self-reports on the IP-SAQ and classroom observations.

### 5. Language of Instruction

The use of bilingual (dual language) approaches to instruction has the strongest literature base with 12 studies that have a preschool sample. Table VI.18 provides the results from the teacher reports of different language use for instruction on the IP-SAQ scales. On average, the use of English is reported as more strongly endorsed and more frequently used than the children's home languages, with the exception of the use of dual languages at the beginning of the year.

The mean for implementing practices involving English was greater than 5 (implemented at least daily) for all items about English use. The most frequent practices on the IP-SAQ (means greater than 5.5 on a 1–7 scale) were repeating words and phrases in English, talking about things here and now in English, using gestures and body language, using choral responses in English, and repeating what ELLs say in English. Half or more of the teachers/providers reported use of “more than 15” of the following: labels in English (mean of 4.65 on a 1[none] to 5 [more than 15] scale), songs in English to teach concepts (mean = 4.37), phrases in English taught to ELLs, e.g., “I like...,” “I want to ...” (mean = 4.10), and new words directly taught to ELLs in English each week (mean = 3.83). The majority of teachers (85 percent or more) reported that in the first half of the year they did the following at least once a day:<sup>24</sup> counted with the children in English (mean = 6.33), read books in English (mean = 6.21), used songs in English to teach concepts (mean = 6.20), and read messages and labels in English (mean = 6.03).

Overall, the mean for home language practices indicated use once or twice a week. Ten to 20 percent of teachers/providers reported never using ELLs' home language for conversations. Twelve percent of teachers or providers reported that extended conversations in home language never occurred and 10 percent never used the home language. Fifteen percent of FCC providers and 26 percent of Center teachers never read books in ELLs' home language, while 10 (FCC) to

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<sup>24</sup> Scale is from 1 (never) to 7 (several times a day).

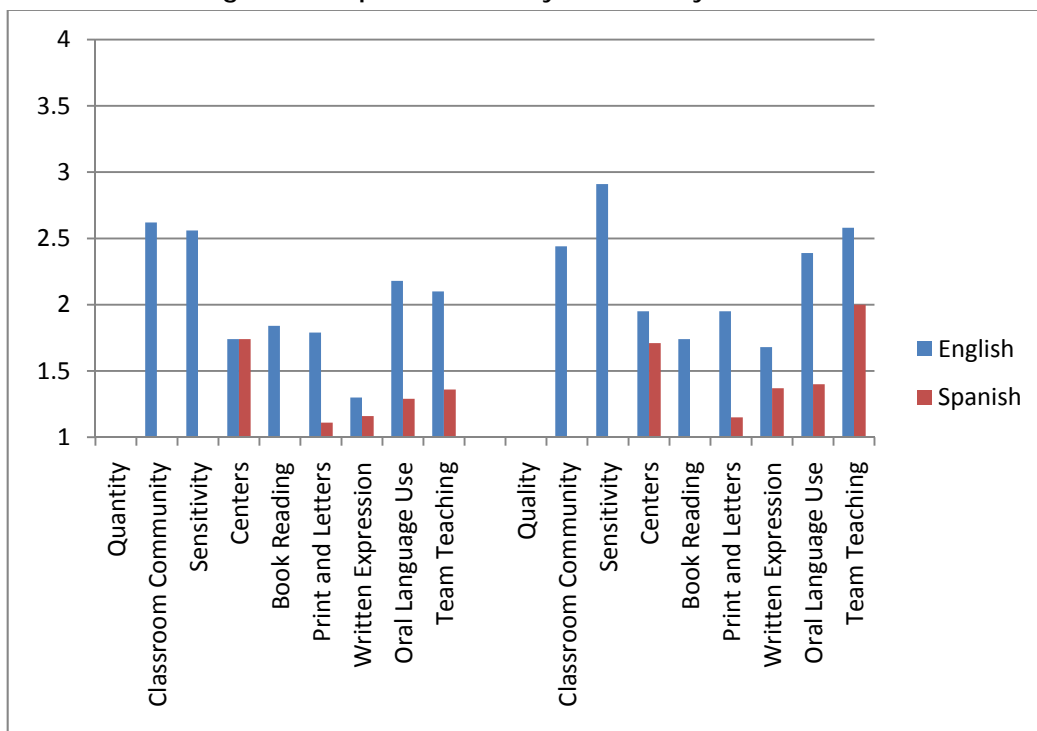
34 (Centers) percent never taught concepts in science and social studies in ELLs’ home language. Items on home language use had higher means in FCCs than in Centers and higher means in classrooms with high ELL concentration than in classrooms with low ELL concentration.

According to the observations using the ELLE, fewer Spanish or other language books were available in the Centers, although a variety of genres, including informational texts, were available in Spanish. While 95 percent of the classrooms had more than 16 books available in English, only 5 percent had 16 or more books in Spanish and none of the classrooms had that many in another language. Similarly, although 97 percent of the classrooms had labels or posters in English, only 27 percent had labels in Spanish and 7 percent had labels in other languages.

On the B-TBRS, both the quantity and the quality of English was rated more strongly than the use of Spanish/dual language (Figure VI.1). The B-TBRS scales of Classroom Community, Sensitivity, and Book Reading Behaviors are rated overall and do not distinguish language.

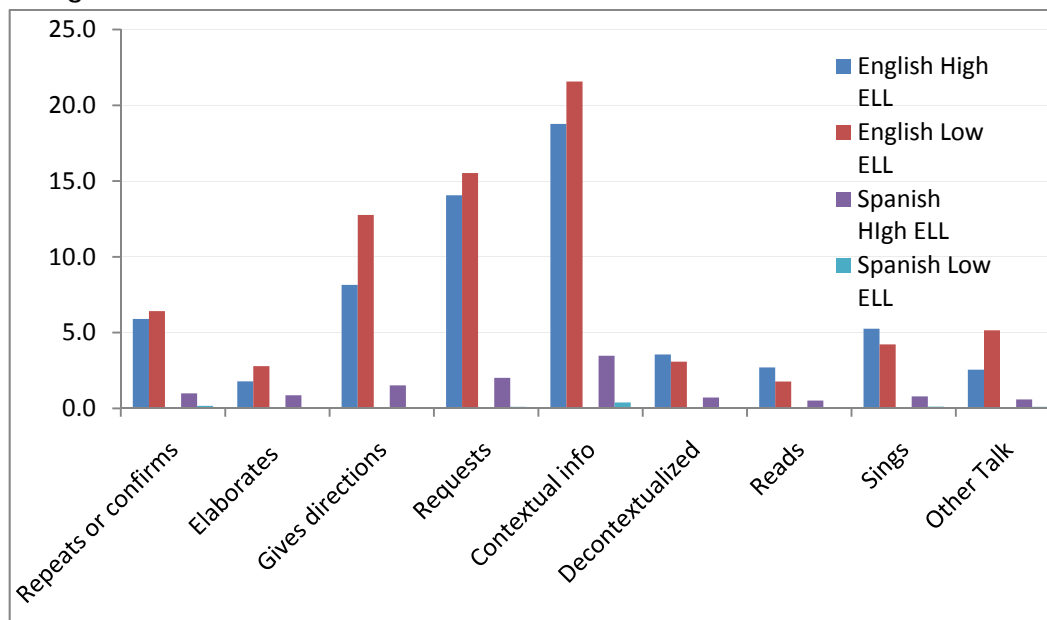
On the LISn, the use of English was also more evident than the use of Spanish/other languages in any type of talk and in both high and low ELL concentration classrooms (Figure VI.2). The most frequent type of talk used by the lead teacher was providing contextual information in English. On average, this was observed more frequently in English in low ELL concentration classrooms. Using English to ask about things that were present and to give directions were the next most frequent types of talk observed for the lead teacher. Singing was observed more often than reading. Decontextualized talk was observed more often in English than in Spanish/other languages even in high ELL classrooms. Decontextualized talk in Spanish/other, elaboration in Spanish/other and reading in Spanish/other were not observed in low concentration ELL classrooms.

Figure VI.1. B-TBRS English and Spanish Quantity and Quality



Note: Possible range for quantity is 1-3 and 1-4 for quality.

**Figure VI.2. LISn: Percentage of Timepoints With Teacher Talk in English and Spanish by Category of Talk in High and Low ELL Concentration Classrooms**



## B. Summary of Language of Instruction

Across all measures, instruction in English is more frequent and is usually rated at a higher quality than home language use. As expected, home language is used more often in high rather than low ELL concentration classrooms. B-TBRS notes more Spanish in FCCs while LISn notes more Spanish/other by center teachers. On the B-TBRS, instruction in home language was rated as lower quality than instruction in English.

### 1. Explicit Phonics Instruction

Teacher self-reports indicated frequent use of phonics activities. On the IP-SAQ phonics activities scale (mean = 4.8), letter and sound activities occur at least daily in most classrooms. Slightly more than 40 percent of respondents reported teaching individual sounds of letters more than five times a day. Approximately 50 percent teach blending more than once a day, with 47 percent of the FCCs reporting more than five times a day. About half of the respondents reported counting syllables and teaching English rhyming words at least once a day.

The observations did not present as strong a picture of phonics instruction nor were they consistent with the IP-SAQ in the pattern of findings. The B-TBRS Print and Letter Knowledge in English indicated lower levels of quality and quantity. The mean for quantity was 1.8 (scale ranges 1–3) and for quality the means was 2.0 on a 1–4 scale. This indicates implementation of medium-low quality occurs less than “sometimes” in the classrooms. Contrary to the IP-SAQ findings, the B-TBRS found stronger implementation in Centers than FCCs. The EVR item regarding teaching children about sounds and blending echoed the result from the B-TBRS. The EVR mean on this item was 2.3 on a scale of 1 (not at all characteristic) to 4 (extremely characteristic) and it was more characteristic of center-based classrooms than FCCs.

## 2. Reading and Sharing Books with Children

Providing book reading experiences in English and children’s home languages supports children’s interest in reading, print concepts and knowledge, and vocabulary. On the IP-SAQ, teachers reported that at the beginning of the year they read books (6.3 on a 1–7 scale) and messages or labels (6.0) in English at least daily. The literacy emphasis reported by teachers and providers had a mean of 3.4 on a 1–5 scale.

On the LISn, the observer indicated each timepoint in which the teacher or other adult read<sup>25</sup> in English, Spanish/other, or mixed utterances to the focus child or a group that included the focus child. The teacher or adult could read the same book in English and Spanish or other languages on a given occasion and both would be indicated in any 30-second timepoint in which it occurred. Although reading in English and Spanish were both more frequent in high ELL concentration classrooms, the mean number of timepoints still reflect that less than five minutes was spent on average reading to a focus child or a group that included that focus child. On the EVR, observers rated many classrooms low on the literacy activities. More than half of the Center classrooms (53 percent) and FCCs (68 percent) were rated as “not at all” or “minimally characteristic” on the item “talks meaningfully with children about books that are read.” More than 65 percent of classrooms (66 percent of Centers and 68 percent of FCCs) were rated “not at all” or “minimally characteristic” on “reads to children at different points throughout the day.”

The B-TBRS results were similar to the LISn, with the majority of the text in English (86 percent) and most read-aloud sessions in English (75 percent English, 2 percent Spanish, 23 percent bilingual). The mean scores on both the quantity (1.8) and the quality (1.7) of the book reading indicated that this activity was infrequent and limited.

The ELLE presents a slightly more positive picture of literacy—the majority of classrooms (70 percent) had at least one large group book-reading session and 31 percent of classrooms had more than one book reading session (32 percent of classrooms had at least one small group book-reading session). However, 23 percent of the classrooms did not have any reading sessions during the observation and the majority of large group sessions (85 percent) were less than 10 minutes and typically occurred in English. After full-group book reading in English, the most frequent literacy activity was reading with a friend or alone.

Observers noted more literacy activity in reading in high versus low ELL concentration classrooms with high ELL classrooms devoting more time to book-reading sessions for the entire group, more individual and small group reading in Spanish and other languages, and more writing activities.

Most of the literacy resources were in English:

- More books in English than in Spanish
- More classrooms with recorded books in English (69 percent) than Spanish (23 percent)

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<sup>25</sup> On the LISn, we counted as “reads” only if the adult read/said the text. Listening to a CD or tape recording, even if the adult was holding the book and turning the pages, was not counted as reading.

- Labels and posters in classrooms were usually in English (97 percent), with limited Spanish (27 percent), other languages (7 percent).

Classrooms had books available that represented a variety of genres including informational text, which is particularly important for helping to build important background knowledge. As with the overall supply of books, most of the informational text was in English. Almost three-quarters of the classrooms (74 percent) had more than four informational texts in English and 46 percent had at least one text in Spanish or other.

In summary, while resources are available, less time and attention is devoted to sharing books with children. Teachers could benefit from additional training in how to share books meaningfully with children:

- Books are available in English for children
- Informational text (particularly in English) is available
- Limited time devoted to book reading/sharing
- Quantity and quality of book sharing has room for improvement

### 3. Peer Strategies

The use of peer strategies, as defined by the research literature, involves providing structured and well-planned paired or small group opportunities for ELLs to interact with peers who have more developed language skills. Information was gathered from the IP-SAQ and the LISn and B-TBRS about the use of small groups and pairing children, ways that teachers might scaffold children to use language more often, and how frequently children talked with one another in English or Spanish. On the IP-SAQ, teachers and providers reported the use of peer strategies less than daily (mean of 4.9 on a 1–7 scale). This scale includes items about pairing talkers and non-talkers, pairing children who are more fluent in English with those who primarily speak another language, and encouraging English-speaking children to interact with ELLs.

The B-TBRS observers noted small groups using dual languages in 10 percent of the classrooms, in Spanish 30 percent, and in English 71 percent. Classrooms rarely or never pair or group children who are less fluent in English with more fluent peers in any of the classrooms (100 percent). Coaching children in language use during center time was also rare or never occurred and/or was of low quality in more than 50 percent of the classrooms. Sociodramatic play was rare or never occurred and was of low quality in all languages. The materials may be present in the environment, but the children were not receiving the support to benefit from the materials or to use them to increase understanding of language or learning goals.

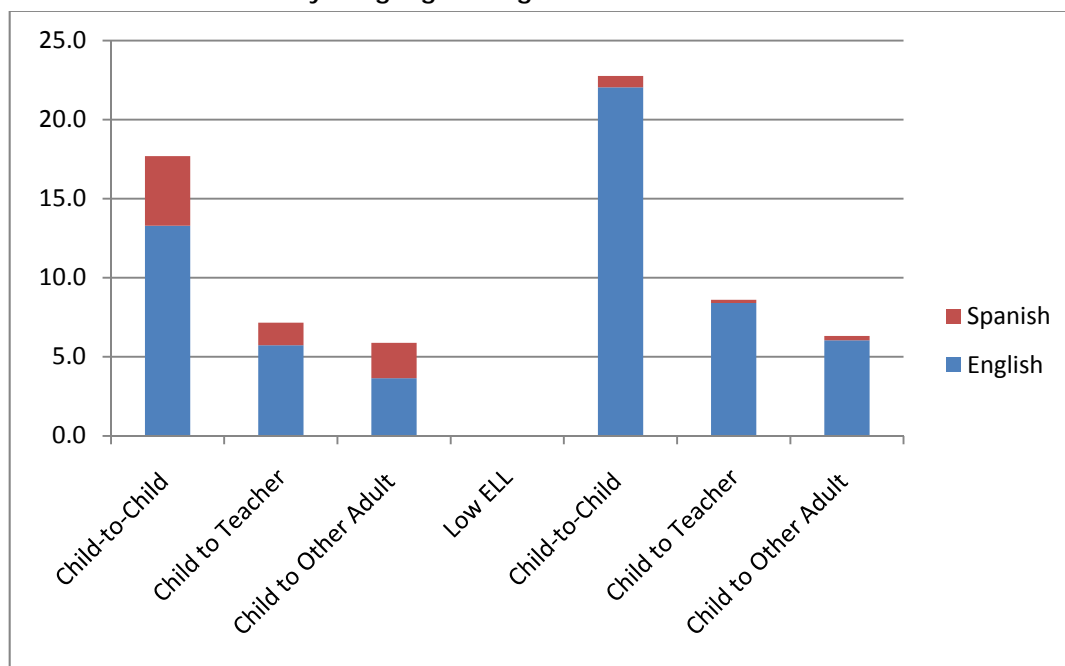
The classrooms observed with the LISn involved one or more of the focus children in a small group in 63 percent of the classrooms. However, across the day when compared with children in low ELL concentration classrooms, children in high ELL concentration classrooms participate in less talk in any language—particularly with peers (Figure VI.3)—and the ratings on the EVR indicated that peer interactions to support language are not strongly characteristic. On encouraging peer interactions to support language, 60 percent of classrooms were rated as not at all or minimally characteristic. However, peer-to-peer interaction about activities that includes non-verbal is strongly characteristic in 60 percent of classrooms, suggesting that children are being offered social opportunities but not scaffolded in using language during these opportunities.

#### 4. Components of Evidence-Based Curriculum

Characteristics of the evidence-based curriculum identified in the literature included the use of small groups and explicit instruction embedded in meaningful interaction. We noted above the use of small group in many of the classrooms and the limited scaffolding of peer language during social opportunities.

The CLASS Instructional Support scale provides some information about explicit instruction. Instructional Support had a mean of 2.8 on a 1–7 scale with ratings of 3 to 5 indicating the middle range of quality. The dimension scores in the Instructional Support domain in order of mean score are Quality of Feedback (mean = 2.9), Language Modeling (mean = 2.9), and Concept Development (2.6). Concept Development is the dimension that most strongly captures explicit instruction, but the higher scores on the other two dimensions include examples of how explicit instruction in meaningful interactions would be evident in instruction.

Figure VI.3. LISn: Child Talk by Language in High and Low ELL Concentration Classrooms



On the EVR, intentional/explicit instruction (mean = 2.3) was rated lower than general language stimulation scale (mean = 2.7). The range on the EVR scale is from 1, “not at all characteristic,” to 4, “extremely characteristic.” Intentional/explicit instruction on the EVR addresses mostly the intentional instruction of vocabulary and language with one item about explicit instruction of phonics and phonemic awareness.

The B-TBRS indicated low quantity and quality of instruction, particularly at Centers, during Book Reading, Print and Letters, and Written Expression.

#### 5. Building on Strengths

The B-TBRS indicated that teachers usually taught letters and sounds in combination with the symbols. Teachers (43 percent of center-based; 67 percent of FCCs) reported on the IP-SAQ that



they teach blending one or more times a day; more than five activities a day are offered to children (53 percent). Naming letters is an area in which children in LAUP did well in UPCOS-2 (Love et al., 2009) and the B-TBRS indicated breadth of activities offered to children in recognizing sounds, letters, and words.

Several of the general language stimulation items were rated as strongly or extremely evident in classrooms (EVR):

- 82 percent model correct use of English
- 80 percent of teachers listen attentively to children
- 72 percent provide clear instructions for tasks and activities
- 67 percent ask many questions that can be answered with a single word
- 65 percent effectively use gestures and facial expressions to help children understand
- 56 percent effectively use pictures and objects to help children understand what is being said.

However, asking questions that require more elaborate responses and the intentional teaching of language (such as introducing vocabulary before reading, discussing words) is more limited.

On IP-SAQ, teachers/providers reported using singing one or more times a day to teach concepts, (95 percent of FCCs and 83 percent of Centers). Teachers also reported using more than 15 songs to teach concepts, indicating a strong preference that could be built upon to help teachers extend how they intentionally teach concepts. The LISn observations indicated singing is used more frequently than reading—twice as much in English (mean = 1.06 for reads in English and mean = 2.53 for sings in English). It is unclear whether the songs change throughout the year and if they are tied to themes being taught.<sup>26</sup> Teachers may need more support in connecting the concepts taught in songs to activities and other methods for helping children to understand them. The ratings in the Centers section on the B-TBRS did not indicate strong ties to themes or learning goals.

Classrooms have a variety of texts available including informational text that may be helpful for expanding the general knowledge and concept development of children. Many of the classrooms also have working computers available for children. However, teachers will need more support in how to use these resources, particularly in the use of informational text (Zucker et al. 2010).

### C. Potential Targets for Intervention

The review of beneficial instructional practices for supporting ELLs (Aikens et al. 2010) noted key messages from the research. Although few studies evaluated practices with preschool ELLs, and few met rigorous standards, the research indicates that (1) children make developmental progress when teachers use their home language in the classroom, (2) children make progress in phonics and vocabulary when teachers use direct, explicit instruction, and (3) direct, explicit instruction of

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<sup>26</sup> At least one teacher in a focus group talked about using Dr. Jean's songs—a resource providing thematically oriented songs and activities that is available on the Internet.

vocabulary and concepts may be more effective when embedded in meaningful teacher-child exchanges. More limited support was available in the literature for the use of peer strategies and techniques for sharing books with children.

However, the strategies identified in the literature as beneficial for ELLs are also weak in many of the classrooms and thus are potential targets for the enhanced practices:

- Use of home language
- Peer strategies
- Adults reading and sharing books with children
- Intentional/explicit instructional practices particularly around language/vocabulary embedded in meaningful interactions

In making decisions about which enhanced practices to select and implement, LAUP will want to consider feasibility. There are also workforce considerations (for example, availability of bilingual teachers/providers) and differences in the amount of support needed for teachers to learn to successfully implement some strategies. In addition, many LAUP programs are currently in the first year of implementing a new curriculum, which could impact the selection of instructional practices. LAUP should consider how to support teachers in learning these new practices and enhance their curriculum guidance. While the potential targets listed above are consistent with most early childhood curricula, these practices would supplement or expand on what is offered from curriculum. For example, after a thorough evaluation of current commonly-used preschool curricula, Neuman and Dwyer (2009) concluded that most curricula do not offer support for teachers in systematic methods for introducing and teaching vocabulary. Wasik (2010) further notes the role of professional development and coaching in supporting teachers in learning new ways of talking with children that are beneficial for vocabulary language development.

Care should be taken in considering how to train teachers in new practices. A recent study compared different methods of professional development for an intervention designed to positively impact children's language and social development. The researchers compared an approach using a manual, a professional development workshop, and a workshop combined with coaching. The results indicated negative findings for the children taught by the group of teachers who had the workshop without follow-up coaching. The children in those classrooms had more behavior problems and fewer prosocial behaviors than the children in the other two groups (Voegler-Lee et al. 2010).

When implementing professional development, previous research suggests that well-specified objectives and clearly defined approaches within a specified setting require less training in order to be effective than approaches that require modifying instruction across a variety of settings (Correnti and Rowan 2007; Justice et al. 2009). This suggests that a focus on a particular activity setting such as book sharing and/or sociodramatic play, would be easier for teachers to implement with fidelity and require less coaching support than more pervasive changes in practice.

**Table VI.1. Weighted Correlations Between IP-SAQ and CLASS Classroom Organization and Instructional Support**

Empirically Derived Scales	Classroom Organization	Behavior Management	Productivity	Instructional Learning Formats	Instructional Support	Language Modeling	Concept Development	Quality of Feedback
<b>Form A</b>								
Beliefs about basic English	0.25	0.39 *	0.03	0.32	0.32	0.33†	0.22	0.31
Beliefs about academic English	0.14	0.24	0.12	0.00	-0.41*	-0.37†	-0.30	-0.42*
Beliefs about sophisticated language	0.06	0.13	-0.09	0.17	0.30	0.29	0.28	0.24
Beliefs about providing cues for meaning	0.20	0.28	0.00	0.3	0.21	0.23	0.12	0.21
Beliefs/myths about ELLS	0.06	0.16	-0.13	0.19	0.16	0.24	0.09	0.10
Emphasis on home language	-0.03	-0.09	0.05	0.01	-0.01	0.03	-0.06	-0.01
Emphasis on English	0.00	0.04	-0.01	0.02	0.05	0.16	-0.08	0.08
Assessment and instruction in home language	-0.07	-0.13	0.00	-0.01	-0.14	-0.06	-0.18	-0.12
Literacy emphasis	-0.02	-0.05	0.04	0.00	-0.23	-0.14	-0.17	-0.29
Instructional and visual supports	0.10	0.10	-0.05	0.25	0.21	0.29	0.04	0.23
Focused instruction in English	0.02	-0.01	0.03	0.08	0.05	0.17	-0.12	0.10
Beliefs about parents engagement	0.18	0.28	0.00	0.25	0.32	0.36 †	0.22	0.30
Vocabulary Instruction form A	0.28	0.40*	0.05	0.36 †	0.35 †	0.36 †	0.24	0.33 †
Screening and assessment-form A	0.06	0.05	0.11	0.04	-0.04	-0.01	-0.07	-0.02
<b>Form B</b>								
Materials in home language	-0.44†	-0.14	-0.45*	-0.49*	-0.39†	-0.34	-0.27	-0.36
Early use of English	-0.09	0.07	-0.06	-0.18	-0.23	-0.25	0.02	-0.28
Early academic focus	-0.36	-0.05	-0.36	-0.42†	-0.35	-0.38†	0.01	-0.41†
Early use of multiple supports	-0.34	-0.29	-0.41†	-0.18	-0.19	-0.18	-0.02	-0.23
Early use of home language	-0.24	0.02	-0.22	-0.34	-0.29	-0.29	-0.15	-0.28
Early use of dual languages	-0.23	-0.02	-0.19	-0.31	-0.31	-0.38†	0.13	-0.41†
English language use-form B	-0.42†	-0.24	-0.44*	-0.36†	-0.3	-0.37†	0.14	-0.41†
Use of home languages-form B	-0.25	-0.06	-0.25	-0.28	-0.26	-0.26	-0.13	-0.26
Reading and sharing books with children	-0.29	-0.03	-0.29	-0.34	-0.32	-0.34	-0.05	-0.36
Screening and assessment-form B	-0.27	-0.23	-0.38†	-0.12	-0.20	-0.20	0.07	-0.28
<b>Forms A and B</b>								
Use of cues for meaning	-0.13	-0.02	-0.11	-0.17	-0.24†	-0.19	-0.18	-0.26†
Use of home language	-0.19	-0.03	-0.08	-0.32*	-0.31*	-0.31*	-0.17	-0.33*
Phonics activities	0.00	-0.02	-0.07	0.07	-0.02	0.03	-0.01	-0.07
General language support	-0.21	-0.07	-0.15	-0.28†	-0.25†	-0.21	-0.23	-0.23
Peer strategies	0.11	0.15	0.09	0.09	-0.01	-0.01	0.00	-0.03
Explicit and intentional phonics instruction	-0.07	-0.08	-0.15	0.02	-0.01	0.04	-0.01	-0.06
<b>Sample Size</b>	<b>20-49</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation and Instructional Practices Self-Administered Questionnaires.

Note: CLASS = Classroom Assessment Scoring System; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \* $p < .05$ .

Table VI.2. Weighted Correlations Between IP-SAQ and CLASS Emotional Support

Empirically Derived Scales	Emotional Support	Positive Climate	Negative Climate	Teacher Sensitivity	Regard for Student Perspectives
<b>Form A</b>					
Beliefs about basic English	-0.03	0.06	0.09	-0.10	-0.01
Beliefs about academic English	0.12	0.14	-0.38†	0.00	0.13
Beliefs about sophisticated language	-0.15	-0.04	0.24	-0.12	-0.20
Beliefs about providing cues for meaning	-0.08	-0.08	0.13	-0.12	0.01
Beliefs/myths about ELLS	-0.26	-0.12	0.21	-0.32†	-0.22
Emphasis on home language	-0.24	-0.11	0.21	-0.22	-0.29
Emphasis on English	-0.25	-0.06	0.08	-0.27	-0.32†
Assessment and instruction in home language	-0.24	-0.17	0.15	-0.18	-0.30
Literacy emphasis	-0.19	-0.15	0.23	-0.14	-0.21
Instructional and visual supports	-0.16	-0.19	0.11	-0.13	-0.14
Focused instruction in English	-0.26	-0.08	0.17	-0.26	-0.32
Beliefs about parents engagement	-0.15	0.00	0.07	-0.23	-0.13
Vocabulary Instruction form A	0.00	0.10	0.12	-0.05	-0.01
Screening and assessment-form A	-0.12	0.04	0.15	-0.13	-0.17
<b>Form B</b>					
Materials in home language	-0.22	-0.07	0.24	-0.25	-0.24
Early use of English	0.17	0.11	0.01	0.22	0.12
Early academic focus	-0.07	0.01	0.18	-0.09	-0.07
Early use of multiple supports	-0.19	-0.13	0.09	-0.19	-0.20
Early use of home language	0.02	0.09	0.20	0.00	-0.01
Early use of dual languages	-0.01	0.02	-0.11	0.02	-0.08
English language use-form B	-0.18	-0.19	0.35	-0.04	-0.24
Use of home languages-form B	-0.02	0.05	0.20	-0.02	-0.04
Reading and sharing books with children	0.06	0.08	0.03	0.08	0.00
Screening and assessment-form B	-0.20	-0.25	-0.08	-0.05	-0.33
<b>Forms A and B</b>					
Use of cues for meaning	-0.26†	-0.24†	0.16	-0.23	-0.26†
Use of home language	-0.32*	-0.26†	0.04	-0.33*	-0.30*
Phonics activities	0.01	0.04	0.18	0.02	0.01
General language support	-0.28†	-0.22	0.12	-0.25†	-0.29*
Peer strategies	-0.06	-0.01	-0.02	-0.05	-0.10
Explicit and intentional phonics instruction	-0.07	-0.07	0.30*	-0.01	-0.06
<b>Sample Size</b>	<b>20-49</b>				

Source: UPCOS-3 Winter 2010 Classroom Observation and Instructional Practices Self-Administered Questionnaires.

Note: CLASS = Classroom Assessment Scoring System; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \* $p < .05$ .

**Table VI.3. Weighted Correlations Between IP-SAQ and ELLE Literacy-Related Resources Score**

Empirically Derived Scales	ELLE
<b>Form A</b>	
Beliefs about basic English	0.26
Beliefs about academic English	0.12
Beliefs about sophisticated language	0.36†
Beliefs about providing cues for meaning	0.29
Beliefs/myths about ELLS	0.2
Emphasis on home language	0.23
Emphasis on English	0.17
Assessment and instruction in home language	0.21
Literacy emphasis	0.21
Instructional and visual supports	0.31
Focused instruction in English	0.22
Beliefs about parents engagement	0.27
Vocabulary Instruction form A	0.33
Screening and assessment-form A	0.14
<b>Form B</b>	
Materials in home language	0.32
Early use of English	0.3
Early academic focus	0.45†
Early use of multiple supports	0.36
Early use of home language	0.17
Early use of dual languages	0.32
English language use-form B	0.39†
Use of home languages-form B	0.18
Reading and sharing books with children	0.37
Screening and assessment-form B	0.41†
<b>Forms A and B</b>	
Use of cues for meaning	0.12
Use of home language	0.24
Phonics activities	0.42**
General language support	0.14
Peer strategies	0.28†
Explicit and intentional phonics instruction	0.4 **
<b>Sample Size</b>	<b>18-44</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: ELLE = Early Language and Literacy Environment; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \*\* $p < .01$ .

**Table VI.4. Weighted Correlations Between IP-SAQ and B-TBRS English Scale Scores**

Empirically Derived Scales	Oral Language Use	Classroom Community	Sensitive Behaviors	Centers	Book-Reading Behaviors	Print and Letter Knowledge	Written Expression	Team Teaching
<b>Form A</b>								
Beliefs about basic English	0.54*	0.47*	0.41†	0.39†	0.25	0.35	-0.2	0.23
Beliefs about academic English	-0.6**	0.19	-0.24	-0.23	-0.32	-0.07	-0.02	-0.57 *
Beliefs about sophisticated language	0.4 †	-0.26	0.26	0.3	0.38†	0.05	-0.13	0.06
Beliefs about providing cues for meaning	-0.06	0.09	0.08	-0.22	-0.21	0.02	0.15	-0.31
Beliefs/myths about ELLS	0.14	0.15	0.28	0.29	0.16	0.23	0.24	-0.16
Emphasis on home language	0.02	0.01	0.03	-0.09	0.09	-0.05	0.23	0.07
Emphasis on English	0.34	0.17	0.25	0.29	-0.02	0.23	0.03	0.12
Assessment and instruction in home language	-0.08	0.07	0.01	-0.2	0.05	-0.17	0.52*	0.07
Literacy emphasis	-0.34	-0.18	-0.04	-0.45 *	-0.13	-0.29	0.27	-0.34
Instructional and visual supports	0.14	-0.11	0.11	0.07	0.41†	-0.21	0.25	0.07
Focused instruction in English	0.34	0.22	0.22	0.36	0.06	0.26	0.1	0.11
Beliefs about parents engagement	0.39	0.38	0.5 *	0.58**	0.13	0.41†	0.09	0.02
Vocabulary Instruction form A	0.58**	0.38	0.49*	0.42†	0.32	0.35	-0.27	0.25
Screening and assessment-form A	-0.03	0.25	0.06	-0.27	-0.15	0.03	0.45*	0.14
<b>Form B</b>								
Materials in home language	0.18	-0.19	0.22	-0.15	-0.25	0.14	0.34	-0.36
Early use of English	-0.26	-0.14	-0.08	-0.48	0.02	-0.19	0	-0.37
Early academic focus	0.34	0.11	0.39	0.09	0.03	-0.02	-0.05	-0.05
Early use of multiple supports	0.55†	0.01	0.5	0.21	-0.25	0.52	0.11	0.07
Early use of home language	-0.18	-0.48	-0.01	-0.58 †	-0.33	-0.02	0.09	-0.51
Early use of dual languages	0.15	0.1	0.11	-0.19	-0.08	0.02	-0.14	-0.09
English language use-form B	0.46	0.34	0.4	0.11	0.03	0.23	0.05	0.08
Use of home languages-form B	-0.12	-0.46	0.04	-0.51	-0.34	0.09	0.12	-0.46
Reading and sharing books with children	0.28	0.08	0.36	-0.18	-0.08	0.05	0.14	-0.11
Screening and assessment-form B	0.25	0.1	0.21	-0.11	-0.05	0.28	0.11	-0.28
<b>Forms A and B</b>								
Use of cues for meaning	-0.17	0.17	-0.26	-0.23	0	-0.39 *	0.13	-0.04
Use of home language	-0.19	-0.03	-0.21	-0.28	-0.08	-0.21	0.14	-0.2
Phonics activities	-0.15	0.11	0.02	-0.14	-0.08	0.03	-0.02	-0.11
General language support	-0.22	-0.03	-0.25	-0.13	0.16	-0.39 *	0.16	-0.13
Peer strategies	-0.02	0.16	0	0.1	0.03	0.01	0.33†	-0.26
Explicit and intentional phonics instruction	-0.16	0.1	0.02	-0.15	-0.05	0	-0.02	-0.12
<b>Sample Size</b>	<b>10-31</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

**Table VI.5. Weighted Correlations Between IP-SAQ and B-TBRS English Quality Scores**

Empirically Derived Scales	B-TBRS Scale Scores							
	Oral Language Use	Classroom Community	Sensitive Behaviors	Centers	Book-Reading Behaviors	Print and Letter Knowledge	Written Expression	Team Teaching
<b>Form A</b>								
Beliefs about basic English	0.5 *	0.19	0.43†	0.45*	0.22	0.38	-0.07	0.2
Beliefs about academic English	-0.64 **	0.15	-0.21	-0.16	-0.27	-0.06	-0.02	-0.5*
Beliefs about sophisticated language	0.34	-0.39 †	0.33	0.2	0.44†	0.16	-0.17	-0.03
Beliefs about providing cues for meaning	-0.11	0.1	0.02	-0.31	-0.12	0.05	0.15	-0.31
Beliefs/myths about ELLS	0.13	0.09	0.35	0.2	0.17	0.35	0.27	-0.14
Emphasis on home language	-0.08	-0.09	0.03	-0.15	0.19	-0.04	0.18	0.09
Emphasis on English	0.22	0.17	0.24	0.23	0.07	0.27	0.03	0.1
Assessment and instruction in home language	-0.14	0.04	-0.02	-0.27	0.13	-0.17	0.41†	0.13
Literacy emphasis	-0.38	-0.08	-0.08	-0.49 *	-0.05	-0.28	0.09	-0.22
Instructional and visual supports	0.11	-0.2	0.18	-0.08	0.46*	-0.13	0.32	0.04
Focused instruction in English	0.26	0.19	0.23	0.27	0.13	0.3	0.11	0.09
Beliefs about parents engagement	0.38	0.13	0.5 *	0.54*	0.13	0.52*	0.1	-0.03
Vocabulary Instruction form A	0.55*	0.17	0.53*	0.46*	0.31	0.42†	-0.2	0.21
Screening and assessment-form A	-0.08	0.06	0.01	-0.2	-0.06	-0.02	0.33	0.19
<b>Form B</b>								
Materials in home language	0.29	-0.39	0.24	-0.07	-0.3	0.15	0.29	-0.32
Early use of English	-0.22	-0.06	-0.12	-0.51	0.03	-0.02	-0.03	-0.3
Early academic focus	0.37	0.09	0.3	0.05	0.04	0.09	-0.07	-0.02
Early use of multiple supports	0.64*	-0.1	0.53†	0.22	-0.27	0.6 †	0.18	0.13
Early use of home language	-0.05	-0.51	-0.01	-0.59 †	-0.36	0.14	0.09	-0.36
Early use of dual languages	0.18	0.19	0.02	-0.19	-0.05	0.19	-0.17	-0.09
English language use-form B	0.5	0.32	0.35	0.15	0.05	0.38	0.04	0.07
Use of home languages-form B	0	-0.5	0.06	-0.53 †	-0.38	0.25	0.13	-0.31
Reading and sharing books with children	0.37	0.08	0.31	-0.14	-0.11	0.24	0.13	-0.03
Screening and assessment-form B	0.32	-0.02	0.21	-0.04	-0.06	0.35	0.09	-0.31
<b>Forms A and B</b>								
Use of cues for meaning	-0.17	0.1	-0.27	-0.26	0.07	-0.38 *	0.1	-0.05
Use of home language	-0.21	-0.14	-0.22	-0.29	-0.03	-0.21	0.11	-0.2
Phonics activities	-0.14	0.06	0.03	-0.15	-0.02	0.15	-0.12	-0.09
General language support	-0.22	-0.22	-0.23	-0.16	0.18	-0.37 *	0.16	-0.16
Peer strategies	-0.06	0.04	-0.05	0.08	0.11	0.09	0.32†	-0.28
Explicit and intentional phonics instruction	-0.15	0.06	0.03	-0.16	0.03	0.14	-0.11	-0.09
<b>Sample Size</b>	<b>10-31</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: B-TBRS = Bilingual Teacher Behavior Rating Scales; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

†p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001.

**Table VI.6. Weighted Correlations Between IP-SAQ and LISn Spanish/Other Language Factor Scores**

Empirically Derived Scales	Teacher Contextualized Talk/Sing in Spanish/Other	Teacher Scaffolded Decontextualized Talk/Read in Spanish/Other	Teacher Elicit/Respond Child Language	Teacher Contextualized Talk in Spanish/Other	Teacher Scaffolded Decontextualized Talk in Spanish/Other	Other Adult Contextualized Talk in Spanish/Other	Other Adult Scaffolded Decontextualized Talk in Spanish/Other
<b>Form A</b>							
Beliefs about basic English	0.25	-0.01	0.13	0.25	0.05	-0.23	-0.83 **
Beliefs about academic English	-0.44	0.16	-0.12	-0.44	0.05	0.09	0
Beliefs about sophisticated language	0.41	0.03	0.24	0.41	0.12	-0.11	-0.57 †
Beliefs about providing cues for meaning	0.27	0.09	0.2	0.27	0.14	-0.14	-0.88 ***
Beliefs/myths about ELLS	0.42	-0.03	0.19	0.42	0.06	-0.2	-0.69 *
Emphasis on home language	0.68*	0.27	0.54	0.68*	0.38	0.36	0.35
Emphasis on English	0.33	-0.03	0.16	0.33	0.05	-0.02	0.07
Assessment and instruction in home language	0.54	0.24	0.45	0.54	0.33	0.33	0.38
Literacy emphasis	0.34	0	0.18	0.34	0.07	0.02	0.12
Instructional and visual supports	0.26	0.03	0.15	0.26	0.08	-0.18	-0.87 ***
Focused instruction in English	0.51	0.09	0.33	0.51	0.19	0.13	0.16
Beliefs about parents engagement	0.33	-0.03	0.15	0.33	0.05	-0.22	-0.78 **
Vocabulary Instruction form A	0.31	0.05	0.2	0.31	0.11	-0.16	-0.78 **
Screening and assessment-form A	0.38	0	0.21	0.38	0.08	0.08	0.34
<b>Form B</b>							
Materials in home language	0.49	0.2	0.46	0.45	0.26	0.6 †	0.44
Early use of English	0.45	0.32	0.48	0.43	0.52	0.05	-0.19
Early academic focus	0.66*	0.51	0.63*	0.65*	0.6 †	0.28	0.13
Early use of multiple supports	0.29	0.25	0.3	0.28	0.48	-0.17	-0.22
Early use of home language	0.51	0.35	0.43	0.49	0.43	0.04	-0.25
Early use of dual languages	0.4	0.36	0.37	0.4	0.51	-0.17	-0.28
English language use-form B	0.39	0.36	0.41	0.39	0.51	-0.05	-0.15
Use of home languages-form B	0.41	0.26	0.35	0.39	0.39	-0.03	-0.29
Reading and sharing books with children	0.58†	0.46	0.59†	0.57†	0.62†	0.06	-0.2
Screening and assessment-form B	0.13	0.01	0.19	0.12	0.22	-0.02	-0.11
<b>Forms A and B</b>							
Use of cues for meaning	0.33	-0.08	0.05	0.34	-0.12	-0.17	-0.05
Use of home language	0.52*	0.18	0.34	0.53*	0.19	0.06	-0.2
Phonics activities	0.41†	-0.05	0.15	0.4 †	-0.03	0.08	0.36
General language support	0.15	-0.26	-0.14	0.16	-0.3	-0.25	0.09
Peer strategies	0.39	-0.05	0.07	0.4 †	-0.1	-0.24	-0.05
Explicit and intentional phonics instruction	0.31	-0.08	0.09	0.31	-0.07	0.03	0.27
<b>Sample Size</b>	<b>9-21</b>						

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



**Table VI.7. Weighted Correlations Between IP-SAQ and LISn English Factor Scores**

Empirically Derived Scales	Teacher Contextualized Talk in English	TeacherScaffolded Decontextualized Talk in English	Other Adult Contextualized Talk in English	Other Adult Scaffolded Decontextualized Talk in English
<b>Form A</b>				
Beliefs about basic English	0.52	0.34	0.01	-0.36
Beliefs about academic English	-0.24	0.41	-0.03	0.54
Beliefs about sophisticated language	0.42	0.27	0.17	-0.14
Beliefs about providing cues for meaning	0.42	0.37	-0.14	-0.43
Beliefs/myths about ELLS	0.53	0.31	0.09	-0.27
Emphasis on home language	-0.1	-0.49	0.45	0.36
Emphasis on English	0.22	-0.12	0.4	0.26
Assessment and instruction in home language	-0.1	-0.36	0.59†	0.56†
Literacy emphasis	0.2	0.01	0.63†	0.49
Instructional and visual supports	0.44	0.37	-0.18	-0.52
Focused instruction in English	0.13	-0.29	0.43	0.28
Beliefs about parents engagement	0.54	0.27	0.11	-0.35
Vocabulary Instruction form A	0.48	0.32	0.06	-0.29
Screening and assessment-form A	0.08	-0.25	0.55†	0.46
<b>Form B</b>				
Materials in home language	0.49	-0.12	-0.4	-0.6†
Early use of English	0.21	-0.25	-0.43	-0.64 *
Early academic focus	0.33	-0.19	-0.43	-0.68 *
Early use of multiple supports	-0.03	-0.34	-0.34	-0.62 †
Early use of home language	0.36	-0.19	-0.45	-0.51
Early use of dual languages	0.17	-0.18	-0.36	-0.6†
English language use-form B	0.07	0.03	-0.36	-0.43
Use of home languages-form B	0.29	-0.23	-0.45	-0.55 †
Reading and sharing books with children	0.22	-0.14	-0.45	-0.57 †
Screening and assessment-form B	0.11	-0.09	-0.19	-0.59 †
<b>Forms A and B</b>				
Use of cues for meaning	0.32	-0.05	0.08	-0.19
Use of home language	0.26	-0.3	-0.06	-0.4†
Phonics activities	0.4 †	0.12	-0.08	-0.14
General language support	0.21	-0.05	-0.04	-0.26
Peer strategies	0.13	0.05	0.0	-0.21
Explicit and intentional phonics instruction	0.4 †	0.26	-0.07	-0.02
<b>Sample Size</b>	<b>9-21</b>			

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \* $p < .05$ .

**Table VI.8. Weighted Correlations Between IP-SAQ and LISn Total Talk**

Empirically Derived Scales	Total Teacher Talk English	Total Other Adult Talk English	Child Sustained Conversations with Teacher	Child Sustained Conversations with Other Adult	Child Sustained Conversations with Other Children	Total Sustained Conversations
<b>Form A</b>						
Beliefs about basic English	0.56†	-0.09	0.51	0.11	0.51	0.6 †
Beliefs about academic English	0	0.18	0.34	0.58†	-0.34	0.11
Beliefs about sophisticated language	0.49	0.06	0.38	0.13	0.43	0.49
Beliefs about providing cues for meaning	0.49	-0.25	0.55	0.15	0.41	0.56†
Beliefs/myths about ELLS	0.57†	-0.03	0.43	0.08	0.38	0.47
Emphasis on home language	0.19	0.36	0.03	0.0	0.15	0.11
Emphasis on English	-0.14	0.57†	-0.39	0.15	-0.07	-0.17
Assessment and instruction in home language	0.2	0.66*	-0.18	0.11	0.06	0
Literacy emphasis	0.5	-0.31	0.53	0.04	0.37	0.49
Instructional and visual supports	0.05	0.37	-0.17	-0.04	0.04	-0.06
Focused instruction in English	0.54	0.01	0.36	0.02	0.48	0.49
Beliefs about parents engagement	0.52	-0.03	0.45	0.15	0.49	0.57†
Vocabulary Instruction form A	0.03	0.53	-0.24	0.06	0.04	-0.06
Screening and assessment-form A	0.05	0.37	-0.17	-0.04	0.04	-0.06
<b>Form B</b>						
Materials in home language	0.28	-0.46	-0.3	-0.26	-0.14	-0.24
Early use of English	0.05	-0.52	-0.05	-0.25	-0.41	-0.34
Early academic focus	0.18	-0.5	-0.13	-0.12	-0.14	-0.15
Early use of multiple supports	-0.09	-0.41	0.18	-0.06	-0.19	-0.1
Early use of home language	0.19	-0.52	-0.24	-0.28	-0.48	-0.44
Early use of dual languages	0.09	-0.43	0.1	-0.03	-0.18	-0.09
English language use-form B	0.13	-0.4	0	-0.02	-0.11	-0.07
Use of home languages-form B	0.13	-0.53	-0.17	-0.3	-0.49	-0.43
Reading and sharing books with children	0.14	-0.53	-0.08	-0.21	-0.45	-0.36
Screening and assessment-form B	0.17	-0.27	0.43	0.16	-0.13	0.08
<b>Forms A and B</b>						
Use of cues for meaning	0.25	0.02	-0.06	-0.03	0.04	0
Use of home language	0.08	-0.17	-0.12	-0.2	-0.17	-0.2
Phonics activities	0.32	-0.07	-0.22	-0.09	0.01	-0.08
General language support	0.13	-0.08	-0.12	-0.24	0.07	-0.07
Peer strategies	0.21	-0.04	0.1	0.09	0.1	0.11
Explicit and intentional phonics instruction	0.38†	-0.06	-0.26	-0.07	0.02	-0.08
<b>Sample Size</b>	<b>9-21</b>					

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: LISn = Language Interaction Snapshot; IP IP-SAQ = Instructional Practices Self-Administered Questionnaires.

† $p < .10$ ; \* $p < .05$ .

**Table VI.9. Weighted Correlations Between IP-SAQ and EVR**

Empirically Derived Scales	General Language Stimulation	Intentional/Explicit Instruction	Positive Climate/Behavior Management	Time Use/Productivity	Reading (items n, o, and p)	Teaching About Sounds (item r)
<b>Form A</b>						
Beliefs about basic English	0.41	0.77**	0.13	0.5	0.5	0.5
Beliefs about academic English	0.31	0.2	0.81**	0.09	0.46	-0.62 †
Beliefs about sophisticated language	0.32	0.68*	0.06	0.53	0.4	0.52
Beliefs about providing cues for meaning	0.34	0.59†	0.08	0.41	0.39	0.35
Beliefs/myths about ELLS	0.24	0.7 *	0.1	0.6 †	0.45	0.53
Emphasis on home language	-0.05	0.12	0.21	0.71*	0.1	0.32
Emphasis on English	0.23	0.54	0.33	0.61†	0.39	0.35
Assessment and instruction in home language	0.04	0.27	0.32	0.7 *	0.26	0.33
Literacy emphasis	0.1	0.55	0.27	0.58†	0.49	0.46
Instructional and visual supports	0.23	0.48	-0.05	0.3	0.31	0.34
Focused instruction in English	0.11	0.4	0.3	0.68*	0.33	0.37
Beliefs about parents engagement	0.31	0.76*	0.07	0.55	0.51	0.61†
Vocabulary Instruction form A	0.4	0.76*	0.15	0.54	0.51	0.51
Screening and assessment-form A	0.05	0.38	0.27	0.61†	0.26	0.38
<b>Form B</b>						
Materials in home language	-0.07	0.25	-0.04	-0.02	0.38	0.21
Early use of English	-0.11	0.29	-0.23	-0.12	0.25	0.48
Early academic focus	-0.03	0.42	-0.09	-0.03	0.39	0.41
Early use of multiple supports	-0.13	0.24	-0.28	-0.24	0.15	0.56†
Early use of home language	-0.18	0.45	-0.33	-0.12	0.47	0.42
Early use of dual languages	-0.08	0.36	-0.21	-0.12	0.24	0.55
English language use-form B	-0.03	0.11	-0.1	-0.23	0.1	0.25
Use of home languages-form B	-0.2	0.38	-0.36	-0.16	0.39	0.47
Reading and sharing books with children	0.02	0.53	-0.15	0	0.5	0.6 †
Screening and assessment-form B	-0.05	0.18	-0.17	-0.25	0.21	0.69*
<b>Forms A and B</b>						
Use of cues for meaning	-0.04	0.25	-0.05	-0.01	0.04	0.22
Use of home language	-0.08	0.32	-0.15	0.11	0.2	0.35
Phonics activities	0.13	0.31	0.22	0.33	0.18	0.32
General language support	-0.03	0.09	0.01	0.01	-0.11	0.09
Peer strategies	0.24	0.6 **	0.12	0.32	0.39	0.7 **
Explicit and intentional phonics instruction	0.1	0.15	0.21	0.16	0.07	0.09
<b>Sample Size</b>	<b>9-21</b>					

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: EVR = End of Visit Ratings; IP-SAQ = Instructional Practices Self-Administered Questionnaires.

†  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ .

**Table VI.10. Weighted Correlations Between CLASS and ELLE Literacy-Related Resource Score**

CLASS Measures	ELLE
Emotional support	0.21*
Positive climate	0.24*
Negative climate	0.04
Teacher sensitivity	0.25*
Regard for student perspectives	0.13
Classroom organization	0.2 †
Behavior management	0.17†
Productivity	0.19†
Instructional learning formats	0.18†
Instructional support	0.16
Language modeling	0.16
Concept development	0.08
Quality of feedback	0.18†
<b>Sample Size</b>	<b>91-95</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; ELLE = Early Language and Literacy Environment.

†  $p < .10$ ; \*  $p < .05$ .

**Table VI.11. Weighted Correlations Between CLASS and B-TBRS English Scale Scores**

CLASS Measures	Oral Language Use	Classroom Community	Sensitive Behaviors	Centers	Book-Reading Behaviors	Print and Letter Knowledge	Written Expression	Team Teaching
Emotional support	-0.15	0.14	0.03	-0.17	-0.03	0.06	-0.13	0.07
Positive climate	-0.09	0.18	0.06	-0.04	0.02	0.14	-0.1	0.15
Negative climate	-0.19	-0.42 **	-0.23 †	-0.19	-0.13	-0.16	-0.23 †	-0.11
Teacher sensitivity	-0.15	0.06	0.03	-0.19	0.0	-0.04	-0.16	0.03
Regard for student perspectives	-0.19	0.05	-0.05	-0.25 †	-0.12	0.05	-0.12	0.02
Classroom organization	-0.16	0.1	-0.14	-0.16	-0.12	0.11	-0.18	-0.09
Behavior management	-0.15	0.06	-0.12	-0.15	0.02	0.09	-0.19	-0.1
Productivity	-0.18	0.11	-0.21	-0.22	-0.22	0.06	-0.12	-0.14
Instructional learning formats	-0.11	0.08	-0.08	-0.08	-0.06	0.1	-0.19	-0.01
Instructional support	0.16	-0.03	0.02	0.24†	0.12	0.17	-0.43 **	0.29*
Language modeling	0.12	-0.08	-0.08	0.15	0.05	0.09	-0.36 **	0.26†
Concept development	0.13	0.06	0.13	0.25†	0.22	0.26†	-0.4**	0.25†
Quality of feedback	0.18	-0.03	0.02	0.23†	0.05	0.13	-0.37 **	0.26†
<b>Sample Size</b>	<b>55-57</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; B-TBRS = Bilingual Teacher Behavior Rating Scales.

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

**Table VI.12. Weighted Correlations Between CLASS and B-TBRS English Quality Scores**

CLASS Measures	Oral Language Use	Classroom Community	Sensitive Behaviors	Centers	Book Reading Behaviors	Print and Letter Knowledge	Written Expression	Team Teaching
Emotional support	-0.13	0.16	0.02	-0.11	-0.05	0.05	-0.21	0.1
Positive climate	-0.07	0.18	0.06	0.03	-0.02	0.09	-0.17	0.15
Negative climate	-0.14	-0.34 **	-0.17	-0.23 †	-0.12	-0.19	-0.23 †	-0.09
Teacher sensitivity	-0.12	0.1	0.05	-0.13	-0.02	-0.03	-0.24 †	0.08
Regard for student perspectives	-0.19	0.08	-0.09	-0.22 †	-0.11	0.05	-0.2	0.04
Classroom organization	-0.17	0.1	-0.17	-0.15	-0.13	0.08	-0.24 †	-0.07
Behavior management	-0.17	0.06	-0.15	-0.12	0	0.08	-0.26 †	-0.1
Productivity	-0.2	0.09	-0.24 †	-0.21	-0.22	0.03	-0.19	-0.15
Instructional learning formats	-0.12	0.11	-0.1	-0.09	-0.07	0.08	-0.23 †	0.03
Instructional support	0.17	0.07	0.05	0.21	0.09	0.16	-0.4**	0.27*
Language modeling	0.13	0.02	-0.04	0.13	0.03	0.08	-0.32 *	0.26†
Concept development	0.12	0.16	0.17	0.23†	0.21	0.25†	-0.41 **	0.22
Quality of feedback	0.19	0.04	0.03	0.2	0.02	0.1	-0.33 *	0.25†
<b>Sample Size</b>	<b>55-57</b>							

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; B-TBRS = Bilingual Teacher Behavior Rating Scales.

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

**Table VI.13. Weighted Correlations Between CLASS and LISn Total Talk**

CLASS Measures	Total Teacher Talk English	Total Other Adult Talk English	Child Sustained Conversations with Teacher	Child Sustained Conversations with Other Adult	Child Sustained Conversations with Other Children	Total Sustained Conversations
Emotional support	0.1	-0.13	0.01	-0.03	0.17	0.08
Positive climate	0.07	-0.16	0.0	-0.04	0.13	0.05
Negative climate	-0.08	-0.02	-0.07	-0.03	-0.01	-0.04
Teacher sensitivity	0.01	-0.09	-0.01	0.02	0.16	0.08
Regard for student perspectives	0.07	-0.16	0.01	-0.03	0.16	0.08
Classroom organization	0.15	-0.02	0.01	0.02	0.27*	0.14
Behavior management	0.07	-0.06	0.15	0.11	0.28*	0.22†
Productivity	0.17	0.03	-0.05	-0.02	0.23†	0.09
Instructional learning formats	0.07	-0.02	-0.04	0.01	0.25†	0.11
Instructional support	-0.16	-0.04	-0.04	0.04	0.12	0.06
Language modeling	-0.09	-0.05	0.02	0.03	0.1	0.07
Concept development	-0.19	-0.03	-0.08	0.06	0.13	0.05
Quality of feedback	-0.14	-0.04	-0.04	0.03	0.1	0.05
<b>Sample Size</b>	<b>59-63</b>					

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; LISn = Language Interaction Snapshot.

† $p < .10$ ; \* $p < .05$ .

**Table VI.14. Weighted Correlations Between CLASS and LISn Factor Scores**

CLASS Measures	Teacher Contextualized Talk in English	Teacher Scaffolded Decontextualized Talk in English	Other Adult Contextualized Talk in English	Other Adult Scaffolded Decontextualized Talk in English	Teacher Contextualized Talk/Sing in Spanish/Other	Teacher Scaffolded Decontextualized Talk/Read in Spanish/Other	Teacher Elicit/Respond Child Language	Teacher Contextualized Talk in Spanish/Other	Teacher Scaffolded Decontextualized Talk in Spanish/Other	Other Adult Contextualized Talk in Spanish/Other	Other Adult Scaffolded Decontextualized Talk in Spanish/Other
Emotional support	0.09	0.04	-0.15	-0.08	0.09	0.14	0.11	0.1	0.14	0.0	-0.03
Positive climate	0.05	0.02	-0.18	-0.07	0.27*	0.22†	0.29*	0.27*	0.27*	0.01	0.01
Negative climate	-0.1	0.0	0.0	-0.09	0.14	0.06	0.01	0.13	0.0	-0.11	-0.07
Teacher sensitivity	-0.05	0.05	-0.14	0.06	0.17	0.24†	0.27*	0.18	0.29*	-0.05	-0.03
Regard for student perspectives	0.12	-0.04	-0.16	-0.19	0.1	0.11	0.08	0.1	0.09	0.11	0.07
Classroom organization	0.15	0.01	-0.02	-0.12	0.03	-0.01	0.06	0.03	0.05	-0.09	-0.09
Behavior management	0.09	-0.06	-0.07	-0.14	0.22†	0.15	0.29*	0.22†	0.25†	-0.04	-0.01
Productivity	0.17	0.04	0.04	-0.07	-0.04	-0.1	-0.01	-0.05	-0.03	-0.06	-0.06
Instructional learning formats	0.06	-0.01	-0.02	-0.06	0.07	0.02	0.11	0.06	0.09	-0.11	-0.09
Instructional support	-0.16	-0.13	-0.04	0.03	0.22†	0.21	0.31*	0.24†	0.3*	-0.02	0.08
Language modeling	-0.09	-0.09	-0.05	0.04	0.17	0.13	0.24†	0.18	0.22†	0.04	0.13
Concept development	-0.2	-0.15	-0.02	-0.02	0.26*	0.28*	0.37**	0.28*	0.37**	-0.09	-0.01
Quality of feedback	-0.15	-0.1	-0.04	0.04	0.17	0.15	0.23†	0.18	0.21†	0.01	0.1
<b>Sample Size</b>	<b>59-63</b>										

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; LISn = Language Interaction Snapshot.

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .



**Table VI.15. Weighted Correlations Between CLASS and EVR**

CLASS Measures	General Language Stimulation	Intentional/ Explicit Instruction	Positive Climate/Behavior Management	Time Use/ Productivity	Reading (items n, o, and p)	Teaching about sounds (item r)
Emotional support	0.35**	0.39**	0.18	0.23†	0.26†	0.39**
Positive climate	0.38**	0.51***	0.24†	0.28*	0.39**	0.46***
Negative climate	-0.18	-0.22 †	-0.12	-0.21 †	-0.21 †	-0.18
Teacher sensitivity	0.39**	0.38**	0.29*	0.21	0.26*	0.39**
Regard for student perspectives	0.3 *	0.3 *	0.1	0.24†	0.13	0.32*
Classroom organization	0.19	0.28*	0.03	0.14	0.2	0.4 **
Behavior management	0.25†	0.38**	0.12	0.25*	0.26*	0.41**
Productivity	0.2	0.27*	0.0	0.12	0.19	0.43***
Instructional learning formats	0.18	0.21	0.05	0.12	0.16	0.32*
Instructional support	0.36**	0.26*	0.28*	0.31*	0.16	0.32*
Language modeling	0.36**	0.27*	0.28*	0.35**	0.16	0.32*
Concept development	0.25*	0.2	0.18	0.17	0.13	0.28*
Quality of feedback	0.34**	0.23†	0.28*	0.32**	0.14	0.25*
<b>Sample Size</b>	<b>58-63</b>					

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: CLASS = Classroom Assessment Scoring System; EVR = End of Visit Ratings.

†  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

**Table VI.16. Weighted Correlations Between B-TBRS English Scale Scores and ELLE Literacy-Related Resources Scores**

B-TBRS Scale Scores	ELLE SCORES
Oral Language Use	-0.15
Classroom Community	0.14
Sensitive Behaviors	0.06
Centers	-0.13
Book-Reading Behaviors	-0.05
Print and Letter Knowledge	-0.28 †
Written Expression	-0.07
Team Teaching	-0.05
<b>Sample Size</b>	<b>45</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: ELLE SCORES = Early Language and Literacy Environment; B-TBRS = Bilingual Teacher Behavior Rating Scales.

†  $p < .10$ .

**Table VI.17. Weighted Correlations Between B-TBRS English Quality Scores and ELLE SCORES Literacy-Related Resources Scores**

B-TBRS Quality Scores	ELLE SCORES
Oral Language Use	-0.18
Classroom Community	0.1
Sensitive Behaviors	0.07
Centers	-0.1
Book-Reading Behaviors	-0.07
Print and Letter Knowledge	-0.3*
Written Expression	-0.11
Team Teaching	-0.05
<b>Sample Size</b>	<b>45</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: ELLE SCORES = Early Language and Literacy Environment; B-TBRS = Bilingual Teacher Behavior Rating Scales.

\*  $p < .05$ .

**Table VI.18. Weighted correlations Between EVR Scores and ELLE SCORES Literacy-Related Resources Scores**

EVR Scores	ELLE SCORES
General Language Stimulation	0.46***
Intentional/Explicit Instruction	0.34*
Positive Climate/Behavior Management	0.4 **
Time Use/Productivity	0.35**
Reading (items n, o, and p)	0.23†
Teaching About Sounds (item r)	0.33*
<b>Sample Size</b>	<b>52-53</b>

Source: UPCOS-3 Winter 2010 Classroom Observation.

Note: ELLE SCORES = Early Language and Literacy Environment; EVR = End of Visit Ratings.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table VI.19**

Instruction in English (mean)	Instruction in Home Language (mean)
Instruction practices (1-7 scale): general language support (5.6)	Instruction practices (1-7 scale): use of home language (4.7)
Beginning of the year practices (1-7 scale): early English (4.8)	Beginning of the year practices (1-7 scale): dual language (5.0)
Beginning of the year practices (1-7 scale): early academics (4.3)	Beginning of the year practices (1-7 scale): early home language (3.8)
Endorsement of activities emphasizing English (4.1 on a 1-5 scale)	Endorsement of activities (1-5 scale): assess/teach home language (3.7)
Provider beliefs (1-4 scale): Basic English (3.5)	Endorsement of activities (1-5 scale): emphasis on home language (3.1)
Academic English (2.4)	Resources (1-5 scale): materials in home language 2.7
Supporting ELLs (including practices not supported in literature <sup>27</sup> ) (3.4)	

<sup>27</sup> This scale includes beliefs about transitioning to English such as "parents can best support ELLs' learning by teaching their children English," and "everything said in the classroom should be translated to English."



## REFERENCES

- Aikens, Nikki, Sarah Duffy, and John Love. "Identifying Enhanced Instructional Practices that Support English Language Learners: Background Literature Review for Study 2 of the Universal Preschool Child Outcomes Study." Report submitted to First 5 LA. Washington, DC: Mathematica Policy Research, May 2010.
- Assel, M. A., S. H. Landry, P. R. Swank, and S. Gunnewig. "An Evaluation of Curriculum, Setting, and Mentoring on the Performance of Children Enrolled in Pre-kindergarten." *Reading and Writing*, vol. 20, 2006, pp. 463–494.
- Atkins-Burnett, Sally, Nikki Aikens, John Love, Cheri Vogel, and Susan Sprachman. "Classroom Observation Tools for the Los Angeles Universal Preschool Child Outcomes Study, 2007-2008." Princeton, NJ: Mathematica Policy Research, June 2007.
- Atkins-Burnett, Sally, Susan Sprachman, and Margaret Caspe. "Language Interaction Snapshot with End of Visit Ratings (LISn + EVR)", Princeton NJ: Mathematica Policy Research, 2010.
- Castro, Dina. "The ELLCO Addendum." Chapel Hill, NC: University of North Carolina, 2005.
- Correnti, Richard and Brian Rowan. "Opening Up The Black Box: Literacy Instruction in Schools Participating in Three Comprehensive School Reform Programs." *American Educational Research Journal*, vol. 44, no. 2, 2007, pp. 298–338.
- Downer, Jason, Michael Lopez, Aki Hamagami, Carollee Howes, and Robert Pianta. "Investigating the Classroom Assessment Scoring System (CLASS) with Dual Language Learners from a Multi-state Study of Preschool Programs." Charlottesville, VA: University of Virginia, 2009.
- Ford, J. Kevin, Robert C. MacCallum, and Marianne Tait. "The Application of Exploratory Factor Analysis in Applied Psychology: A Critical Review and Analysis." *Personnel Psychology*, vol. 39, 1986, pp. 291-314.
- Garson, D. G. (2009). *Factor Analysis: Statnotes*. Retrieved February 26, 2010, from North Carolina State University Public Administration Program, <http://www2.chass.ncsu.edu/garson/pa765/factor.htm>
- Halle, Tamara, Jessica E. Vick Whittaker, and R. Anderson. *Quality in Early Childhood Care and Education Settings: A Compendium of Measures, Second Edition*. Washington, DC: Child Trends. Prepared by Child Trends for the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2010.
- Justice, Laura M., Joan N. Kaderavek, Xitao Fan, Amy Sofka, and Aileen Hunt. "Accelerating Preschoolers' Early Literacy Development Through Classroom-Based Teacher-Child Storybook Reading and Explicit Referencing." *Language, Speech, and Hearing Services in Schools*, vol. 40, 2009, pp. 67–85.
- Landry, S. H., A. Crawford, S. Gunnewig, and P. R. Swank. *The CIRCLE-Teacher Behavior Rating Scale*. Houston: Center for Improving the Readiness of Children for Learning and Education, University of Texas Health Science Center at Houston, Unpublished research instrument.

- Landry, S. H., A. Crawford, S. Gunnewig, and P.R. Swank. "Teacher Behavior Rating Scale." Houston: Center for Improving the Readiness of Children for Learning and Education, University of Texas Health Science Center at Houston, unpublished research instrument, 2001.
- Love, John M., Sally Atkins-Burnett, Cheri Vogel, Nikki Aikens, Yange Xue, Maricar Mabutas, Barbara Lepidus Carlson, Emily Sama Martin, Nora Paxton, Margaret Caspe, Susan Sprachman, and Kathy Sonnenfeld. *Los Angeles Universal Preschool Programs, Children Served, and Children's Progress in the Preschool Year: Final Report of the First 5 LA Universal Preschool Child Outcomes Study*, Princeton, NJ: Mathematica Policy Research, 2009.
- MacCallum, Robert C. "Working with Imperfect Models." *Multivariate Behavioral Research*, vol. 38, no. 1, 2003, pp. 113-139.
- MacCallum, Robert C., Keith F. Widaman, Shabo Zhang, and Sehee Hong. "Sample Size in Factor Analysis". *Psychological Methods*, vol. 4, no. 1, 1999, pp. 84-99..
- Mitchell, R. J. "Path analysis: Pollination" In Schneider, S. M. & Gurevitch, J., (Eds). *Design and analysis of ecological experiments*. (pp. 211-231). New York: Chapman and Hall, 1993.
- Neuman, Susan B., and Julie Dwyer. "Missing in Action: Vocabulary Instruction in Pre-K." *The Reading Teacher*, vol. 62 no. 5, 2009, pp. 384-392.
- Neuman, Susan B., Julie Dwyer, and Serene Koh. *Child/Home Early Language & Literacy Observation Tool (CHELLO)*. Baltimore, MD: Brookes Publishing, 2007.
- Pianta, Robert C., Karen M. La Paro, and Bridget K. Hamre. "CLASS Classroom Assessment Scoring System Manual." Charlottesville, VA: Center for Advanced Study of Teaching and Learning, 2008.
- Preschool Curriculum Evaluation Research Consortium . *Effects of Preschool Curriculum Programs on School Readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office, 2008.
- Smith, Miriam W. and David K. Dickinson with Angela Sangeorge and Louisa Anastasopoulos. *Early Language & Literacy Classroom Observation (ELLCO) Toolkit, Research Edition* Newton, MA: Education Development Center, 2002.
- Voegler-Lee, Mary Ellen, Janis B. Kupersmidt, Michael Willoughby, Donna Bryant, David Arnold, and Ellen Peisner-Feinberg. *The Building Bridges Program: Promoting Children's Self-Regulation and Social Competence*. Paper presented at Head Start's 10th National Research Conference, Washington, DC, June 23, 2010.
- Wasik, Barbara A. "What Teachers Can Do to Promote Preschoolers' Vocabulary Development: Strategies From An Effective Language And Literacy Professional Development Coaching Model." *The Reading Teacher*, vol. 63 no. 8, 2010, pp. 621-633.
- Zucker, Tricia A., Laura M. Justice, Shayne B. Piasta, and Joan M. Kaderavek. "Preschool Teachers' Literal and Inferential Questions and Children's Responses During Whole-Class Shared Reading." *Early Childhood Research Quarterly*, vol. 25, no. 1, 2010, pp. 65-83.



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