AZELLA Kindergarten Placement Test Follow-up Study

Conducted by the National Center on Educational Outcomes

September 2015

Contents

Executive Summary

This report highlights an evaluation project conducted by the National Center on Educational Outcomes for the Arizona Department of Education to examine the accuracy of placement decisions made based on the Arizona English Language Learner Assessment (AZELLA), and whether the intended outcomes of the assessment are being met. The specific evaluation questions for this follow-up project included the following:

1. Does the AZELLA Kindergarten Placement Test appropriately classify initially fluent English Proficient (IFEP) students by their ability to access instruction in the classroom?
2. Once placed in a mainstream classroom, are IFEP students performing on par with English only (EO) students in that classroom?

Based on classroom observations and teacher-reported information, evaluation findings indicate that IFEP students and EO students in mainstream classrooms were performing about the same. In the areas of reading, IFEP students began the year about the same as their EO classmates; however, they made greater gains, with more IFEP students showing mastery by the second data collection. A similar pattern was noted for writing, with one exception – there was a slightly smaller percentage of IFEP students who performed at the highest level of mastery of sight words than EO students by the end of the year. However, even here, there was a larger percentage of IFEP students who performed within the two highest levels. IFEP students also started about the same in their understanding of math concepts and in their development of social skills.

DIBELS Next$^{®}$ reading assessment data from the participating Arizona schools and districts indicate that, overall, IFEP students and their EO peers in mainstream kindergarten classrooms were performing similarly to each other on the beginning and middle of the year formative reading assessments. The data show that most of the students in each group were on track to meet the Benchmark Goals for the spring DIBELS Next$^{®}$ administration.

Overall, the findings from both evaluation questions indicate that IFEP students and their EO peers were performing similarly in mainstream kindergarten classrooms and should be ready to move to mainstream classrooms in the first grade.

Introduction

The Arizona English Language Learner Assessment (AZELLA) is a standards-based assessment used in the State of Arizona to measure the English language proficiency of students in Kindergarten through Grade 12. The AZELLA measures skills in four domains: Listening, Speaking, Reading, and Writing. Kindergarten students who have been indicated as having a language other than English in response to any of three questions on the Primary Home Language Other Than English (PHLOTE; see Appendix A) survey are administered the AZELLA Kindergarten Placement Test (KPT) so that they may be placed in the appropriate instructional setting (AZELLA Reference Manual, 2012-2013). This test was introduced in Arizona for the 2012-2013 school year. Scores on the AZELLA KPT determine whether students meet criteria for English language learner (ELL) services, and are used to monitor student proficiency both while students are in ELL programming and for two years after they have exited the ELL program (AZELLA Reference Manual, 2012-2013).

In 2012-13, staff from the National Center on Educational Outcomes (NCEO) partnered with the Arizona Department of Education (ADE) to conduct a multi-part evaluation examining the accuracy of placement decisions made based on the test, and whether the intended outcomes of the test are being met. In addition, the State of Arizona wished to determine whether state-prescribed test administration protocols were adhered to, because changes in protocol may impact the reliability of test scores and accuracy of decisions made based on those scores. Based partially on the initial study, ADE decided to conduct an additional standard setting using data both from the KPT and students' Spring AZELLA Reassessment. This new standard setting committee recommended that the proficient cut score be raised three raw-score points.

This paper is only focused on two groups of Kindergarten students in mainstream classrooms: 1) students who took the AZELLA Kindergarten Placement Test and passed called Initially Fluent English Proficient (IFEP), and 2) students for whom their responsible party answered English to all language survey questions and therefore speak English only (EO).[1]

The specific evaluation questions for this follow-up project included the following:

1. **Does the AZELLA Kindergarten Placement Test appropriately classify IFEP students by their ability to access instruction in the classroom?**
2. **Once placed in a non-ELL classroom[2], are IFEP students performing on par with non-IFEP students in that classroom?**

To answer the first evaluation question, NCEO staff conducted two rounds of observations of classrooms and follow-up interviews with teachers. NCEO staff collected classroom-based

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[1] Students are referred to as English Only if they are not classified as IFEP or ELL.

[2] A "non-ELL classroom" is a mainstream classroom in which IFEP and EO students are the only student population. Typically, there are no ELLs in these classrooms.

information on the academic skills and behaviors of students, including IFEP, ELLs, and English only (EO) students. To answer the second evaluation question, NCEO staff collected formative reading assessment Dynamic Indicators of Basic Early Literacy Skills (DIBELS Next®) data from each of the participating districts.

All instruments used to collect data for the project (except DIBELS Next®) were created by NCEO staff and were approved by the Arizona Department of Education. These instruments are provided in Appendix B.

Districts Included in the Sample

NCEO worked closely with two staff at ADE to determine the districts to participate in the project. These two staff kept the information about participating districts confidential, thus protecting the anonymity of the districts in the study. Districts were chosen to participate in the project based on the following selection criteria:

1. The district met the requirements for Title III monitoring.
2. The district used DIBELS Next® as a district-wide assessment.
3. The district placed IFEP students in mainstream classrooms. "Mainstream classrooms" are defined as mainly serving students for whom ELL services are not required.
4. The district represented the geographic diversity of Arizona.

Classrooms were selected for inclusion in the study if they were considered to be mainstream classrooms and they had at least eight IFEP students in the classroom population and at least nine IFEP students in the school. Some schools were excluded because although they met these requirements, there were no English only students in the mainstream classrooms with IFEPs. This report includes observation information from a total of 15 classrooms in five districts throughout the state. Table 1 presents the number of students with included in the analyses by district, service region, school, classroom, and group. These schools all had school-wide Title I programs designed to address the learning needs of large populations of low-income, at-risk students.

NCEO initially conducted observations in nine districts. When the observations and interviews were conducted, however, it was determined that some of the identified districts did not place IFEP students in mainstream classrooms, and thus did not meet the criteria for inclusion in the study. The data from the four districts excluded after those initial observations are not included in this report. NCEO conducted two rounds of observations, Phase 1 in December 2014 and January 2015, and Phase 2 in March and April 2015.

DIBELS Next® was chosen as the district-wide assessment to study because among the districts that could potentially be included in the project, only DIBELS Next® was used in enough

districts to gather a sample large enough to study. Other districts used Measures of Academic Progress (MAP) or Galileo, but the sample size would have been too small to be representative of the population of all students in Kindergarten in Arizona.

Table 1. Number of Students Included in the Analyses by District, Service Region, School, Classroom, and Group

District	Service Region	Common Core of Data District Locale	Schools	Classrooms	Group	
					IFEP	EO
1	Maricopa County	Large suburban location	1.1	A	16	7
				B	9	13
			1.2	A	10	7
				B	3	10
2	West Central	Small city	2.1	A	9	14
				B	3	30
			2.2	A	3	21
				B	1	.
3	Maricopa County	Midsize city	3.1	A	7	21
4	Maricopa County	Large city	4.1	A	3	16
				B	5	19
5	Maricopa County	Large city	5.1	A	13	9
				B	10	9
				C	17	3
Totals (5)			7	15	109	179

Note. This table only includes students with data from both phases 1 and 2.

Evaluation Question One

Background

ADE sought information on whether KPT adequately classifies students as IFEP and ELL. The first evaluation question addresses this issue:

Does the AZELLA Kindergarten Placement Test appropriately classify IFEP students by their ability to access instruction in the classroom?

To address this evaluation question, NCEO staff conducted two primary activities: 1) observations of mainstream classrooms that included both EO and IFEP students in the classroom population; and 2) interviews with teachers of the observed classrooms.

Classroom observations and teacher interviews were conducted in both phases of the data collection process – Phase 1 in December, 2014-January, 2015, and Phase 2 in March, 2015. NCEO staff observed classrooms in teams of two, and NCEO staff took descriptive field notes.

Observations lasted approximately 30 minutes, and typically included an English language arts lesson. In most, but not all, cases, teachers provided classroom seating charts to assist with the identification of IFEP students. Interviews were conducted with teachers in individual or group format after (but on the same day as) classroom observations. A total of 15 teachers from seven schools in five school districts were observed and participated in interviews in both phases.

Classroom Observations

All observations took place in classrooms that had both IFEP and EO students. In some cases, the majority of students were EO, with only a small number of IFEP students (in one case, there were only two IFEP students in the classroom). In other classrooms, there were more IFEP students than EO students. One classroom had 16 IFEP students, which was two-thirds of the students in the classroom.

Most often, observations included an English language arts lesson; math lessons were also observed. In some cases, the large group "calendar time" activity was observed. In some classrooms, a large group story was observed. In other classrooms, intervention time—small groups working on target skills with a teacher or classroom aid—was observed. The classroom observations lasted roughly 30 minutes each. In most classrooms, a seating chart or name tags were used to identify which students were IFEP students.

Observers noted academic and social language use by students. IFEP students participated in classroom activities similar to their EO peers. IFEP students were observed to be engaged in classroom activities and almost exclusively speaking in English to both teachers and other students.

For example, in one classroom, researchers observed the teacher read aloud the story *Elmer and Rose* to the students as they were sitting on the floor in a large group. As the teacher read, she stopped to ask comprehension questions. A male IFEP student raised his hand to answer every time. The following excerpt is one exchange between the teacher and a male IFEP student:

> T: What colors are the elephants?
>
> IFEP: They are like rainbow elephants.
>
> (…)
>
> T: What made Rose blush?
>
> IFEP: Her getting really happy.
>
> T: Why is she happy?

IFEP: Because her cheeks are red. (After this exchange, the IFEP student tried to communicate with a boy who had been sent back to his desk. The teacher redirected the IFEP student.)

IFEP students used academic language similar to their EO peers. In one classroom, the students were working on writing, and, in a large group instructional setting, the teacher asked students to point out errors in writing on the whiteboard. The teacher wrote the following on the whiteboard:

thu Girl hasa small black cat

Then the teacher asked, "Who knows a mistake?"

One student, an IFEP, offered, "The 'g' needs to be lowercase."

An EO student told the teacher to draw a line between "has" and "a" to add a space.

Another student, an IFEP, noted, "The beginning of the sentence is supposed to be a capital letter."

In this short example, the IFEP and EO students were participating equally in the large group instructional setting.

IFEP students engaged in classroom activities with their peers. In one example, two students were in a literacy station choosing books. The following exchange shows the IFEP student being encouraged by her EO peer:

IFEP: I've got Clifford. (Holds up book.)

EO: I am reading counting books.

IFEP (to observer): Will you read me this book? I can't read.

EO (redirecting IFEP): You can sound out the words. (EO proceeded to help IFEP with the book.)

In another classroom, students were asked to read a beginning reader book, *A Hat I Like*, aloud to their partners. This class had two IFEP students, and both were observed to be actively engaged in reading the book aloud with their partner.

In one classroom, the teacher called observers' attention to two IFEP students who had the same initial score on the KPT. These two students participated in the same literacy group that was observed. One IFEP student was actively participating in the group, raising her hand to answer questions. The other student was quiet and needed prompting when called on to answer. In the follow-up interview with the students' teacher, she stated that the second student may be retained

in Kindergarten. The time constraints required to produce this report to provide ADE with actionable information for the 2015-2016 school year prevented investigating the percentage of students who were actually retained in Kindergarten.

Observers also noted social language use by students. Students who were IFEP were socially engaged in the classroom, similar to most of their peers. In one classroom, students were working at stations during the observation period. One small group included two IFEP students and two EO students working on a task related to word families. In addition to having an off-topic discussion about making a leaf pile during recess, this group had the following discussion:

> Girl IFEP to Boy IFEP: Look (shows work).
>
> Boy IFEP: What does "hot" mean?
>
> Girl IFEP: When you burn something.
>
> Boy EO: Hot mama! (laughs)

Limitations of the Observations

The classroom observations had some limitations. One challenge was that NCEO staff were not able observe the same types of activities in each classroom, nor were staff able to observe both English language arts and math lessons. Furthermore, schools were asked to provide seating charts for the NCEO researchers prior to their arrival on campus. The purpose of the seating charts was to help the observation team know which students were IFEP. In some cases, teachers did not provide seating charts or alternative means of identifying students. This made observing specific IFEP students challenging. In addition, students moved around frequently, as is typical of kindergarten classrooms, so in some classroom observations, having the seating chart was not very helpful in identifying IFEP students. In most cases, when observers had difficulty identifying the IFEP students, they focused their observations on one or two IFEPs who had been clearly identified. In other cases, the observers confirmed student status with teachers during the interviews.

Teacher Interviews

Teacher Demographic Information

Table 2 summarizes the information on teachers' professional experience, including their overall teaching experience, teaching kindergarten, teaching in their current school, and teaching ELLs. Fifteen teachers participated in this study. Teachers' overall professional experience ranged from 0.5 to 34 years as an educator, with an average of 11.4 years. Their experience teaching

kindergarten students ranged from 0.5 to 10 years, with an average of 5.1 years. Their experience specifically working with ELLs ranged from two to 20 years, with an average of 8.1 years. The average number of years teachers had worked at their current school was 8 years, with some having as little as nine weeks on the job in their current building, and others having up to 10 years in the building.

Table 2. Teachers' Professional Experience

Teacher	Years of Overall Professional Experience	Years of Teaching Kindergarten	Years of Teaching at the Current School	Years of Teaching ELLs
Number	14	15	15	14
Minimum	0.5	0.5	9 weeks	2
Maximum	34	10	10	20
Mean	11.7	5.0	4.7	8.1
Standard Deviation	8.0	2.6	3.3	5.2

Note. 13 teachers provided complete information.

All but one participant reported that they have an endorsement in Structured English Immersion (SEI) education as required by ADE for all certificated teachers. The one educator had just started the SEI program certification process in Phase 1 and had completed it by Phase 2. All teachers also were certified in early childhood (two teachers held a master's degree in this area). Additional certifications completed by respondents included a certificate in elementary education, secondary education, special education, and curriculum and instruction. Four teachers noted that they had previously taught at the preschool level, and seven other teachers reported having taught at a range of other grade levels.

Classroom Information

All interviewees reported that they taught full-day kindergarten classes five days a week. Their work days ranged from 5 hours 35 minutes of instruction per day to 7 hours of instruction per day (with an early release once a week in the latter case). Half of the respondents reported that their instruction lasted 6.5 hours daily. All respondents also noted that they were spending less than 30 minutes a day on classroom discipline and handling disruptive behavior, although several noted that they had spent more time handling discipline-related matters at the beginning of the school year.

Table 3 summarizes the information on class sizes by student gender, as reported by teachers. In Phase 1, the observed classes ranged from 23 to 34 students in size, and in Phase 2, this range was reported to be from 21 to 34 students. Although some fluctuation of male and female student

numbers between the two phases occurred (mostly due to student mobility, changes in placement when requested by parents, etc.), the totals of male and female students in the two phases were relatively comparable. Detailed information about individual classroom sizes is listed in Appendix C.

Table 3. Descriptive Statistics of the Classroom Size

	Phase 1			Phase 2		
	Male1	**Female1**	**N1**	**Male2**	**Female2**	**N2**
Minimum	10	9	23	10	8	21
Maximum	19	15	34	20	16	34
Mean	14.3	12.4	26.7	13.9	12.3	26.1
Standard Deviation	3.0	1.8	3.6	3.3	2.0	4.0

For the district-level assessments used at the kindergarten level, all teachers reported using the DIBELS Next® as their reading assessment. Additional reading assessments reported by some participants were the Kindergarten Inventory of Social-Emotional Tendencies (KIST), the ATI Galileo assessment, the STAR assessment, MAP, and other district standard assessments, checklists, and quizzes. For math, teachers reported using the ATI Galileo assessment, the STAR assessment, and other district-level assessments.

Instructional Goals

In the interviews, teachers were asked about their instructional goals for the lessons that were observed. The reported ELA and literacy goals in Phase 1 included reading sounds, letters, and words; learning short and long vowels; identifying capital letters; discussing story elements (the author, illustrator, title, etc.); reading with fluency; individual, partner, and group reading; and other goals. In Phase 2, the reported reading goals were: reviewing phonics; working with rhyming words; reviewing sentence structure (capitalization, punctuation, blending, etc.); discussing books; using high frequency words; and others.

Phase 1 goals for the observed math class centered on work around base 10 – place value, differentiating between ones and tens, counting up to certain numbers, and decomposing numbers. Phase 2 math goals included working with 10 frames, counting how many objects are needed to make 10, and introducing the idea of ten ones.

Student Identification Perceptions

Educators were asked to point out any IFEP students in their classroom who had been identified incorrectly. Eight of the 15 respondents did not have such students, noting that their IFEP students "fit in just fine." Another teacher noted that all the IFEP students in her classroom were "proficient" and perform "very high." The remaining respondents identified one or two students who, in their opinion, should not have scored as proficient on the KPT. One of those students was a "retention candidate." In several cases, however, teachers also reported that they were concerned about some of their IFEP students at the beginning of the year, but the students seemed to have progressed since. According to one teacher, two of her three lower performing IFEP students showed significant progress, and one of them speaks "only Spanish at home but she is one of the most highly performing kids in class." Some educators brought up the importance of family support in their students' education. One teacher named two misidentified IFEP students in her classroom:

> "[Student 1] is behind on language and academics. Fewer language supplies at home. Mom does not speak English, the student is an only child. In other cases, parents and siblings help. [Student 2] really picked up."

Student Work Samples

In Phase 2, educators were asked to provide four samples of their students' work: one sample of a low-achieving IFEP student's work, one sample of a low-achieving EO student's work, one sample of a high-achieving IFEP student's work, and one sample of a high-achieving EO student's work. Appendix D includes the work samples from the four student groups. In at least two instances, teachers were unable to produce work samples of their low-achieving IFEP students – one of them stated, "none of my IFEPs are low."

Teachers often used similar descriptions when characterizing the work of their EO and IFEP students. They pointed out that high-achieving students' work samples are well-written; contain multiple sentences and unique thoughts; include all letters, spaces, and conventions; and follow directions completely. One IFEP student was described as "one of the highest in class; in math, she is ready for three-digit addition." Another IFEP kindergarten student participated in a pull-out reading program at the first grade level.

Low-achieving students' work samples were characterized as containing incomplete sentences and punctuation, sometimes random letters; missing some spacing and ending sounds; requiring intensive supervision; and containing errors in words. One IFEP student's work was described as "Not readable, no capitals, no periods, no spaces. [Student] is not able to do numbers past 20, he is not progressing, gets some right with support."

Teachers were also asked to comment on differences between the work of the IFEP and EO students and identify those differences specific to language. The majority of educators reported that they perceived no language-specific differences between their IFEP and EO students' work. The following are some of their responses:

> "No [differences]. Some of the highest are IFEP kids."

> "High[-performing] kids moved on to another step (both IFEP and English only), learning is not as laborious for them. My highest[-performing] kids are IFEP kids. No difference."

> "No oral differences. These students don't stick out because they speak another language. They all use English on the playground."

Those respondents who noted language-specific differences pointed to some difficulties among IFEP students when it comes to inserting sight words. One teacher also identified such differences as "placing verbs, fluency (broken speech, pauses), [errors in] complete sentences (not 'I can go to the bathroom?' but 'Can I go to the bathroom?')."

Additional Insights

When concluding the interview, several educators offered some summative insights on their IFEP students' education and SEI programming:

> "Generally IFEPs are accurately identified. Kids haven't used Spanish in the classroom."

> "IFEPs may need extra support but they belong in the [mainstream] classroom. It's good for their English only peers to enrich their vocabulary."

> "I just got SEI certified. The teacher stressed that SEI kids should be integrated. Then why do we have the SEI classrooms? I am confused about that. My IFEPs have gained so much from being with my English only students. The SEI kids still come up and try to speak Spanish to me."

> "We need mixed classes across the board so ELL students can benefit. [Student] was a little shy but she is more confident. I think with the new cut score, the IFEPs can progress into 1st grade. I think the kids will make it in mainstream 1st grade class. The new cut score is much better."

Student-Level Information

In addition to the classroom observations and teacher interviews, teachers were asked to provide information about each student at the time of both classroom visits, Phase 1 and Phase 2.

Information collected included background and demographic information, phonological awareness skills, reading skills, writing skills, math skills, social and behavioral information, and some additional questions related to overall performance. This information was collected on a Student Information Sheet, or SIS (see Appendix B for the Student Information Sheets).

Background Information

Additional information was collected on the 288 students. This number reflects only those students for whom information was provided for both Phase 1 and Phase 2. Table 4 below provides the additional background information about the students for whom NCEO gathered SIS data. It is important to note that all information in the following tables was provided by teachers.

Table 4. Student Background Information

Variable		N	Col%
Gender	Male	140	48.6
	Female	148	51.4
Student group	IFEP	109	37.9
	EO	179	62.2
Is the student repeating kindergarten?	Yes	7	2.4
	No	273	94.8
	Missing	8	2.8
When did the student enroll in this class?	The first day of school	228	79.2
	Within the first week of school	14	4.9
	Within the first month of school	10	3.5
	Other	30	10.4
	Missing	6	2.1

As illustrated in the table, the gender of the students in this analysis was nearly equal, with slightly more girls than boys. A majority of the students (62.2%) were EO students; slightly more than a third (37.9%) were IFEP students. Few of the students in the sample were repeating kindergarten (2% of the total), and most students had enrolled on the first day of school. The retention rate observed in this student population was much lower than the national average of 6%, as reported by the National Center for Education Statistics[3].

In breaking down these data by ELL status, it was observed that no major differences exist between IFEPs and their EO peers, except for gender. As Table 5 shows, among EOs, there were more girls than boys. With IFEPs, there were just slightly more boys than girls. Additional information in Table 6 shows that IFEP students attended school at about the same rate as EOs. In both Phase 1 and Phase 2, IFEP students had fewer days tardy than their EO peers. See Appendix E for the detailed sample size.

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[3] http://nces.ed.gov/programs/coe/indicator_tea.asp

A one-way MANOVA was conducted to investigate the existence of a phase effect. Wilks' λ showed that the result was significant (F = 2.83, p = .037). No significant differences were found for the number of days a student had attended school in that year or the number of days the student had been enrolled during the school year. However, the number of days a student was tardy was significant (F = 8.01, p = .005), with EO students being tardy more often than IFEP students.

Table 5. Background Information by IFEP Status

Variable		EO	IFEP
Gender	Male	47.5	50.5
	Female	52.5	49.5
Is the student repeating kindergarten?	Yes	1.7	3.7
	No	94.4	95.4
	Missing	3.9	0.9
When did the student enroll in this class?	The first day of school	79.9	78.0
	Within the first week of school	6.2	2.8
	Within the first month of school	2.8	4.6
	Other	9.5	11.9
	Missing	1.7	2.8

Table 6. Information on Attendance, Enrollment, and Being Tardy by IFEP Status

		# Days Attended		# Days Enrolled		# Days Tardy	
Time	Group	M	SD	M	SD	M	SD
Phase 1	IFEP	91.1	18.9	95.9	19.6	3.9	7.7
	EO	91.4	16.6	97.7	15.8	5.2	7.5
Phase 2	IFEP	137.9	18.6	147.1	15.3	4.7	7.9
	EO	136.2	23.0	147.6	22.8	8.1	10.9

M = Mean; SD = Standard Deviation

In Phase 1, teachers were asked about the languages students used for communication in the classroom and on the playground. Table 7 shows the information gathered on these questions. Both IFEP and EO students were reported to speak English the majority of the time in the classroom. On the playground, the use of English was reported to be lower for both groups, with 83.5% of IFEP students reported to use English always on the playground. This question was dropped for Phase 2 because most students were reported to use English for both the classroom and the playground in Phase 1. Fisher's Exact test showed that there was not a statistically significant relationship between group membership (IFEP, EO) and the frequency of use of English in the classroom (p = 0.40), but there was a statistically significant relationship between group membership and the frequency of spoken English with other students on the playground (p = 0.0064). Here IFEP students used English less often than EO students.

Table 7. Language Use by EO and IFEP Students

Variable		IFEP	EO
Frequency of spoken English with other students in the classroom	Always	92.7	95.0
	Often	6.4	2.8
	Sometimes	0.9	1.7
	Never	0.0	0.0
	Missing	0.0	0.6
Frequency of spoken English with other students on the playground	Always	83.5	93.9
	Often	12.8	2.8
	Sometimes	1.8	1.7
	Never	0.0	0.0
	Missing	1.8	1.7

Note. Some data were not reported by teachers, and is listed here is "Missing."

Reading Skills

Teachers were asked a number of questions to assess the reading skills of their students. They included several questions about phonological awareness, letter recognition, and reading levels.

Figures 1 to 7 illustrate the phonological awareness skills reported by teachers for EOs and IFEPs for both Phase 1 and Phase 2. In general, both groups of students had very similar performance in Phase 1. IFEP students showed more growth from Phase 1 to Phase 2 across the items that showed the development of phonological awareness. Note that missing data were included in the calculations for two reasons: 1) missing data were a result of teacher omission in reporting, and 2) excluding missing data would inflate the Phase 1 totals.
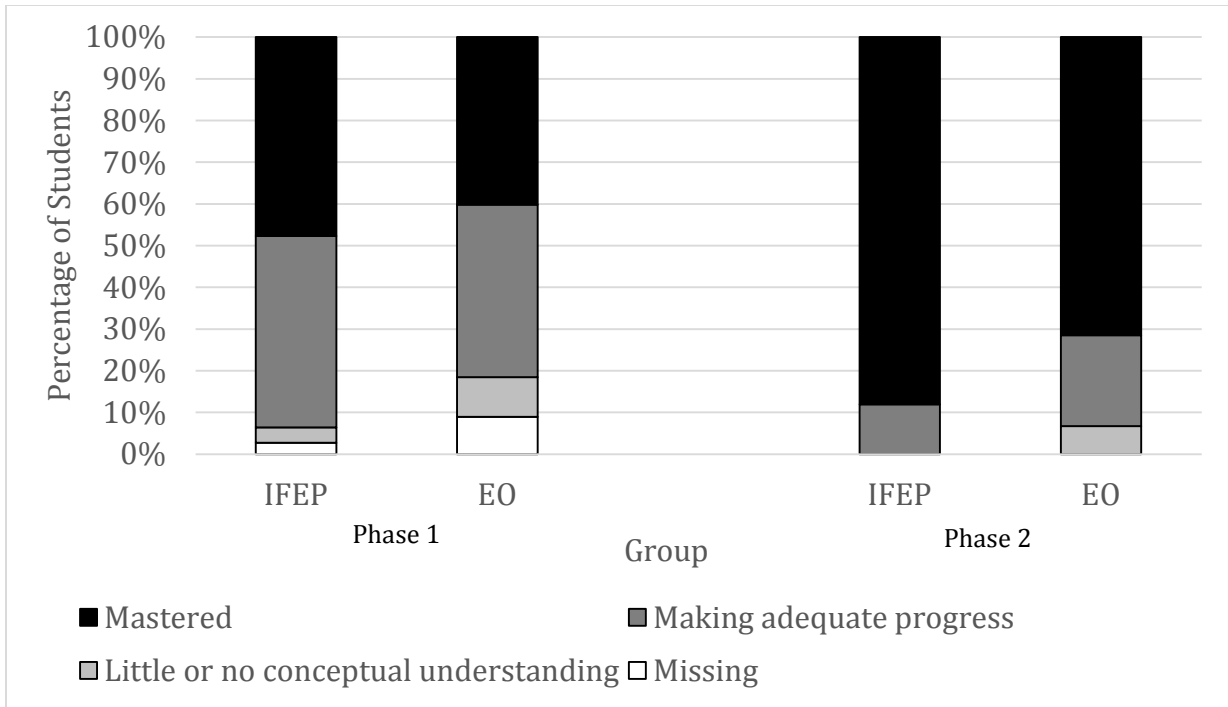
Figure 1. Percentage of IFEP and EO Students, by Mastery Level, Who Recognized how Many Words Are in a Short Sentence in Each Phase
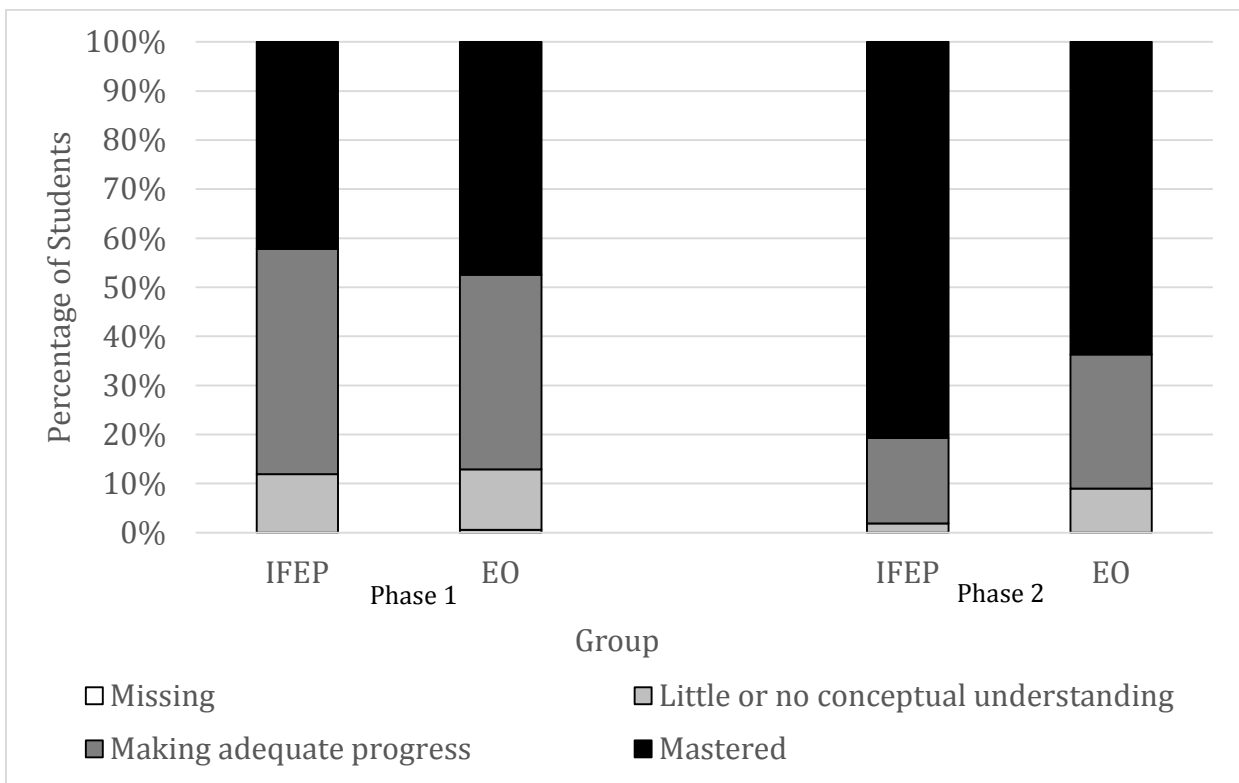

Figure 2. Percentage of IFEP and EO Students, by Mastery Level, Who Segmented and Blended Words of at Least Three Syllables in Each Phase
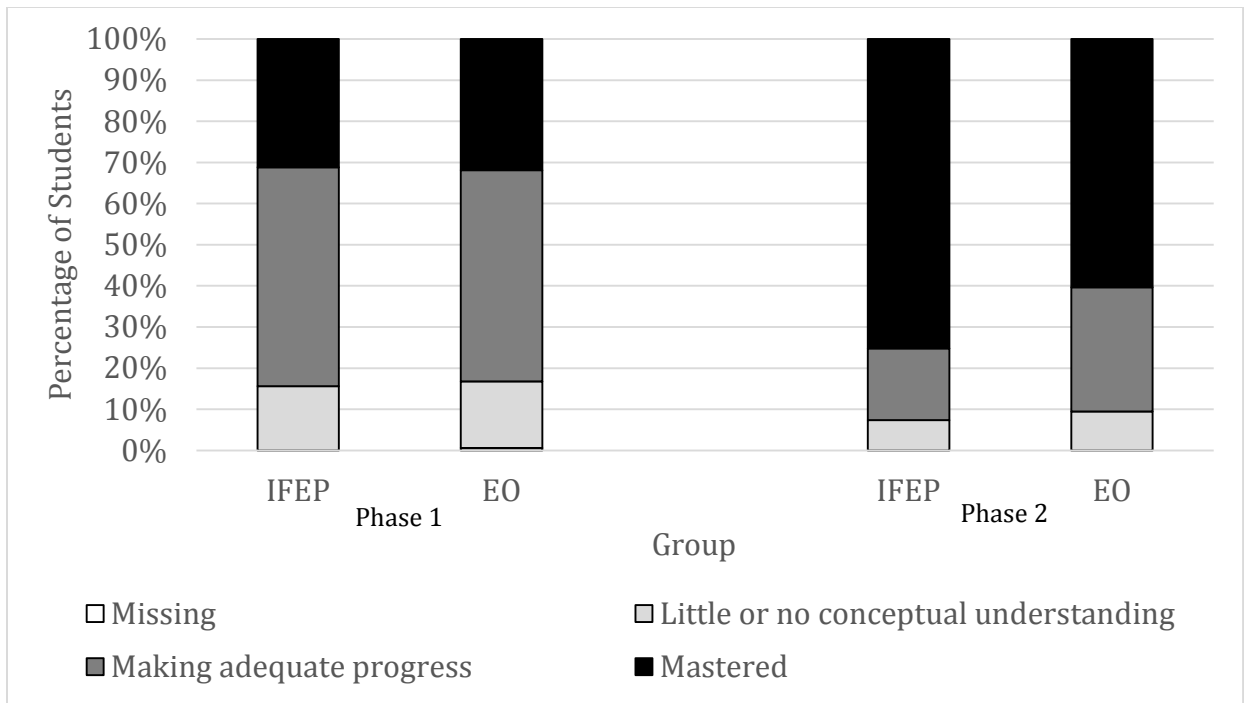
Figure 3. Percentage of IFEP and EO Students, by Mastery Level, Who Understood the Concept of Rhyming in Each Phase
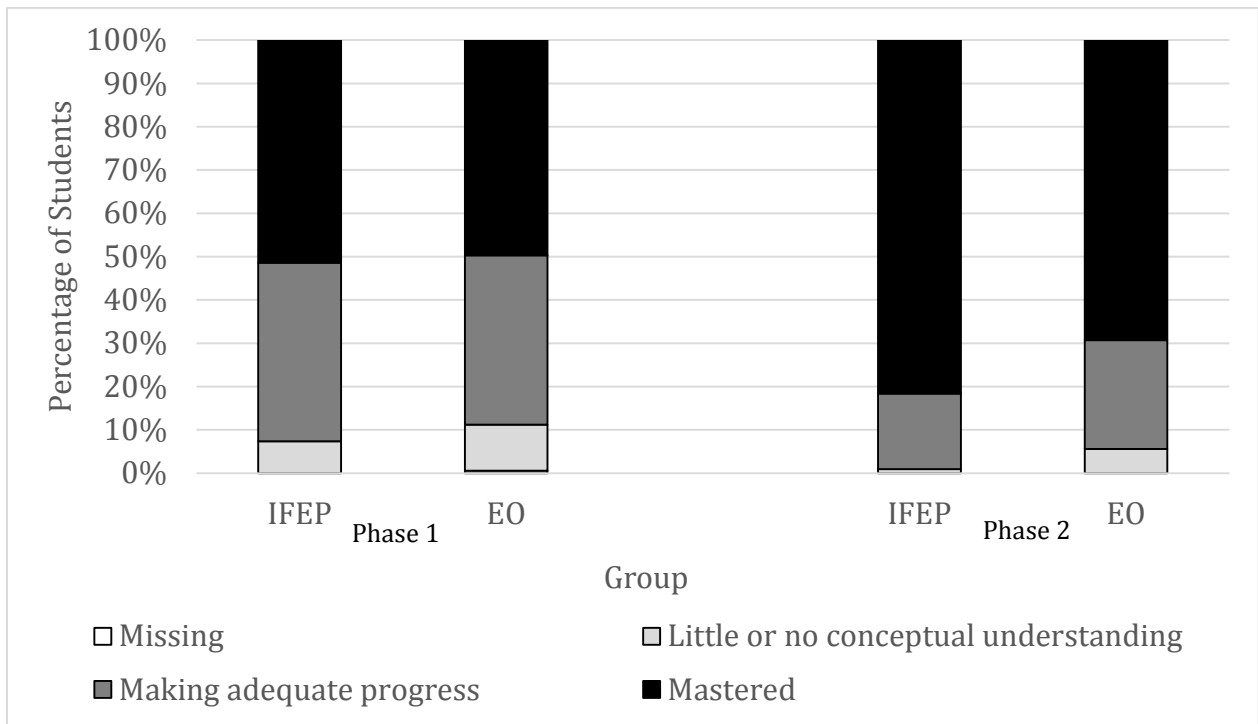

Figure 4. Percentage of IFEP and EO Students, by Mastery Level, Who Recognized and Generated Rhyming Words in Each Phase
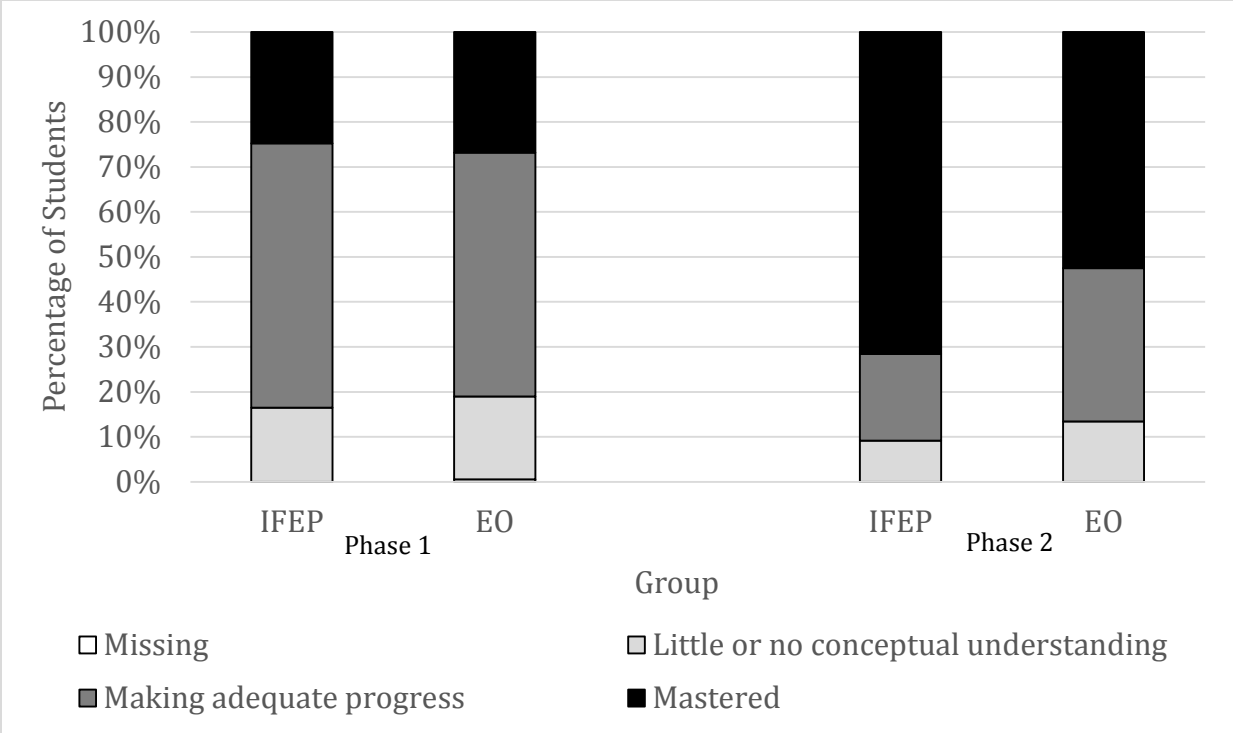
Figure 5. Percentage of IFEP and EO Students, by Mastery Level, Who Isolated Beginning or Ending Sounds in Words in Each Phase
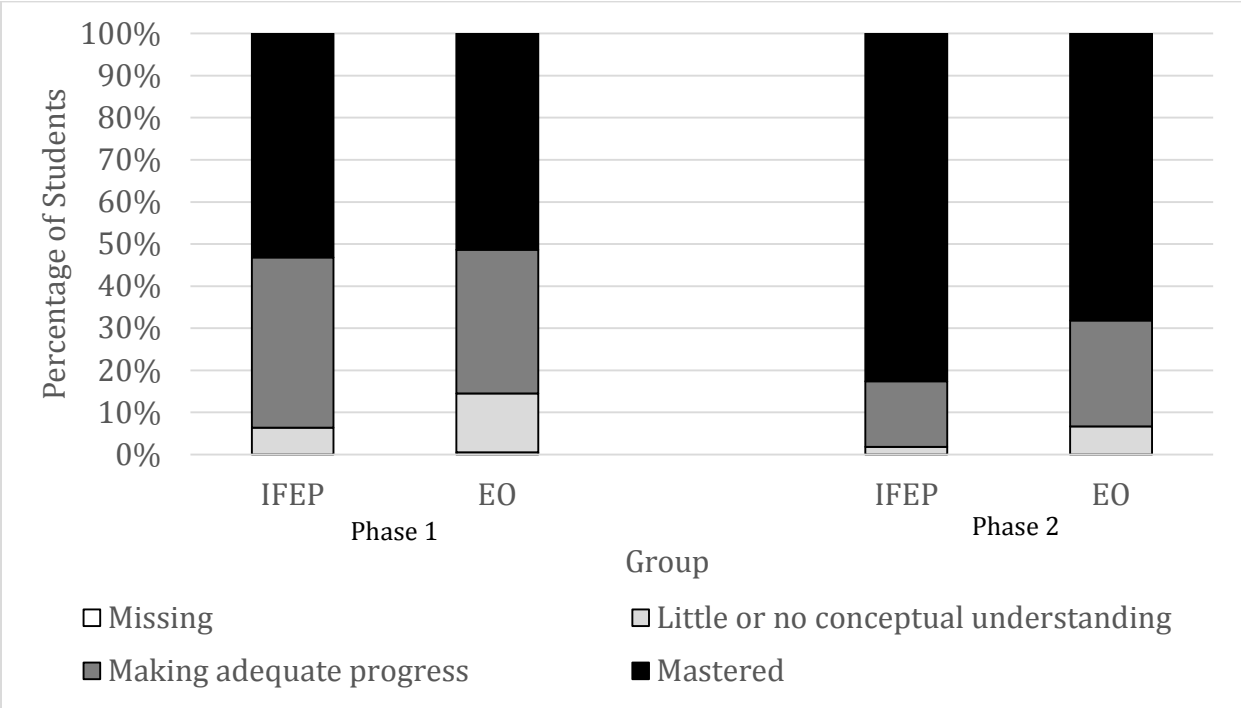

Figure 6. Percentage of IFEP and EO Students, by Mastery Level, Who Segmented and Blended Sounds in a Word With Three Sounds in Each Phase
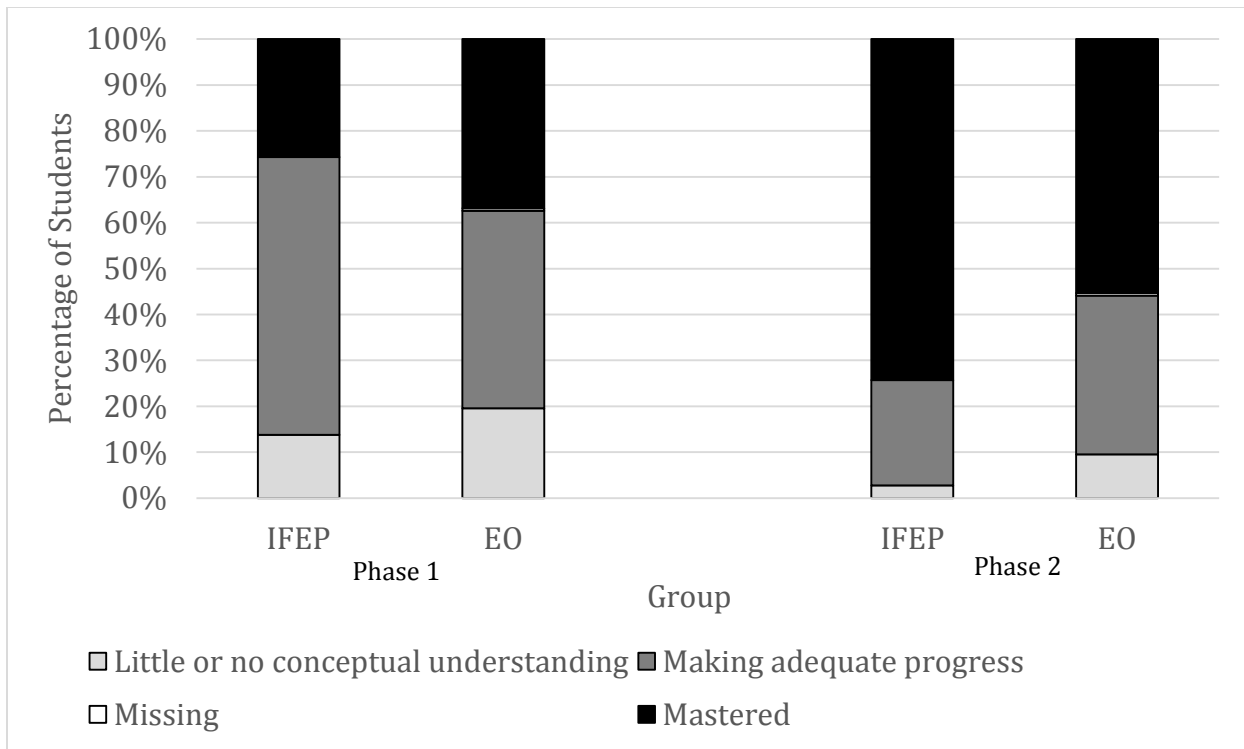
Figure 7. Percentage of IFEP and EO Students, by Mastery Level, Who Changed a Sound in a Word to Make a New Word at Each Phase

Chi-square analyses of each item related to phonological skills were conducted to investigate the relationship between each question and group in each phase. The results are presented in Table 8. In all but one comparison in which the IFEP students performed significantly differently from the EO students (Phase 1 – Recognizes how many words are in a short sentence and in Phase 2 – all seven categories), the IFEP students performed higher than the EO students. The one comparison where EO students performed significantly better than the IFEP students was in Phase 1 (Changes a sound in a word to make a new word).

Table 8. Results of Analyses of Phonological Awareness Skills

	Phase 1[1]		Phase 2[2]	
	χ^2	p-value	χ^2	p-value
Recognizes how many words are in a short sentence		<.0001*		.0006*
Segments and blends words of at least three syllables	1.0409	.5942		.0031*
Understands the concept of rhyming	0.0652	.9679	6.977	.0305
Recognizes and generates rhyming words	0.4955	.7805	10.3636	.0056
Isolates the beginning or ending sounds in words	0.8892	.6411		.0277*
Segments and blends sounds in a word with three sounds	4.2403	.1200		.0161*
Changes a sound in a word to make a new word	8.0864	.0175		.0034*

Note. Students with missing responses were excluded from the Chi-square analyses.
*If cell size was fewer than 5, then Fisher's Exact Test was used instead of Chi-Square.
[1]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 1.
[2]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 2.

Teachers were also asked to provide information on the reading skills of their students. This information included recognizing uppercase and lowercase letters of the alphabet, reading simple one-syllable and high frequency words, indicating how many words a student could read, and selecting a reading level for the student in both Phase 1 and Phase 2. Figures 8-11 provides an overview of the information gathered on reading skills for both EOs and IFEPs (detailed information is available in Appendix E). In some instances, teachers did not indicate how many words a student could read.

In Phase 1, IFEP students performed better at most reading skills, although both groups had about the same number of students indicated as Early Fluent or Fluent readers. In Phase 2, IFEP students also outperformed their EO peers in reading skills.
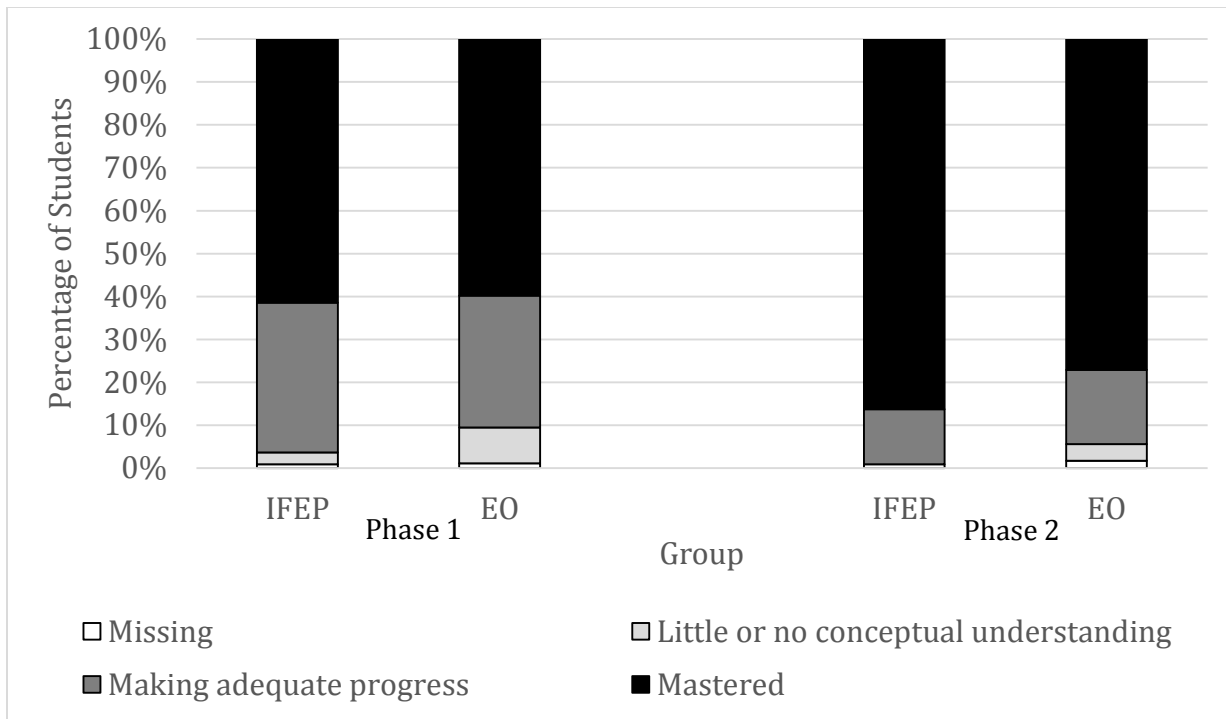
Figure 8. Percentage of Students Who Recognized and Named All Uppercase and Lowercase Letters of the Alphabet
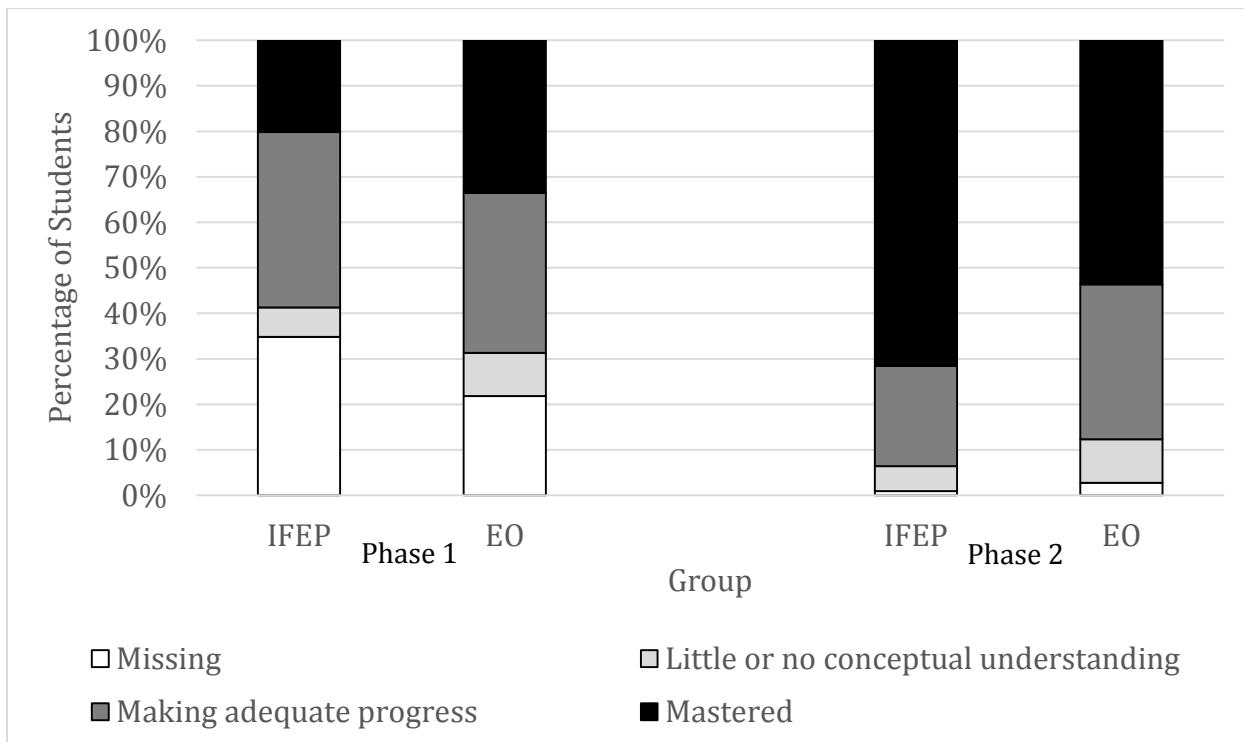

Figure 9. Percentage of Students Who Read Simple One-syllable and High Frequency Words
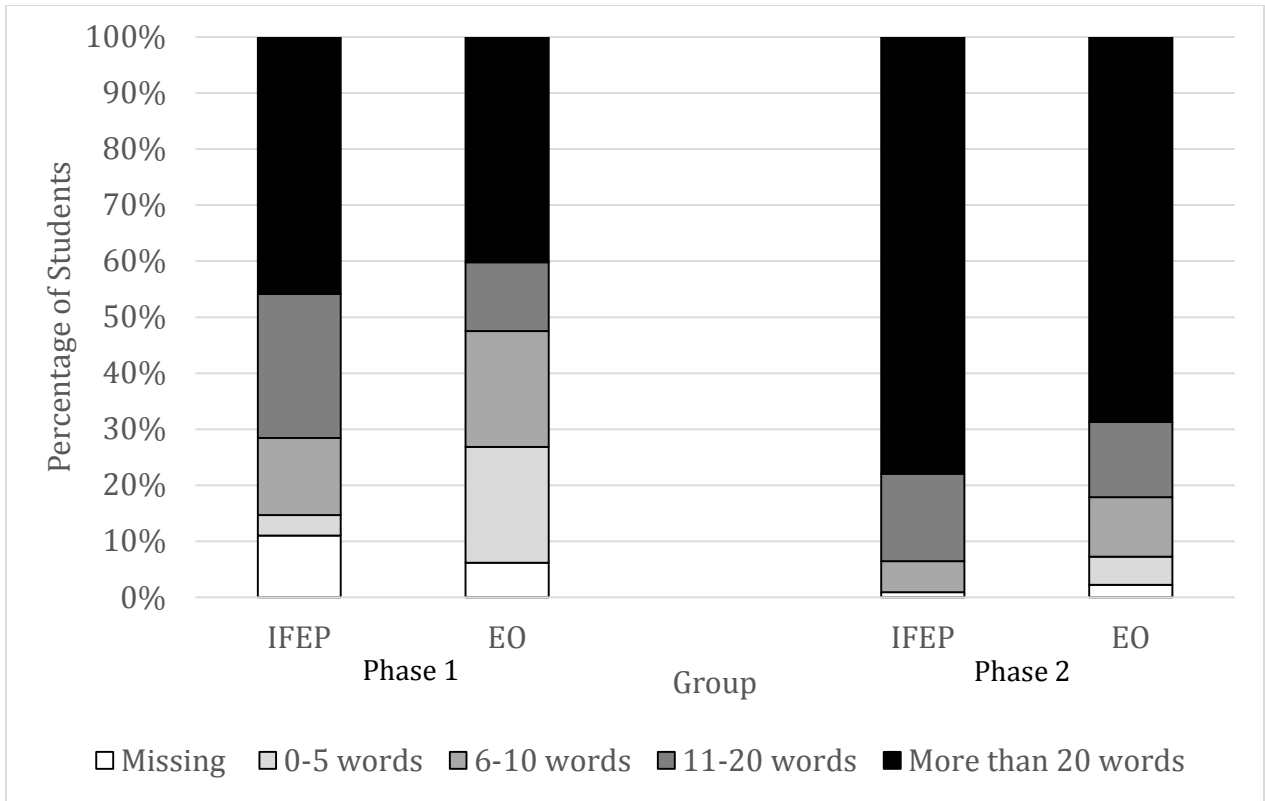
Figure 10. Percentage of Students in Different Ranges of Word Reading Ability
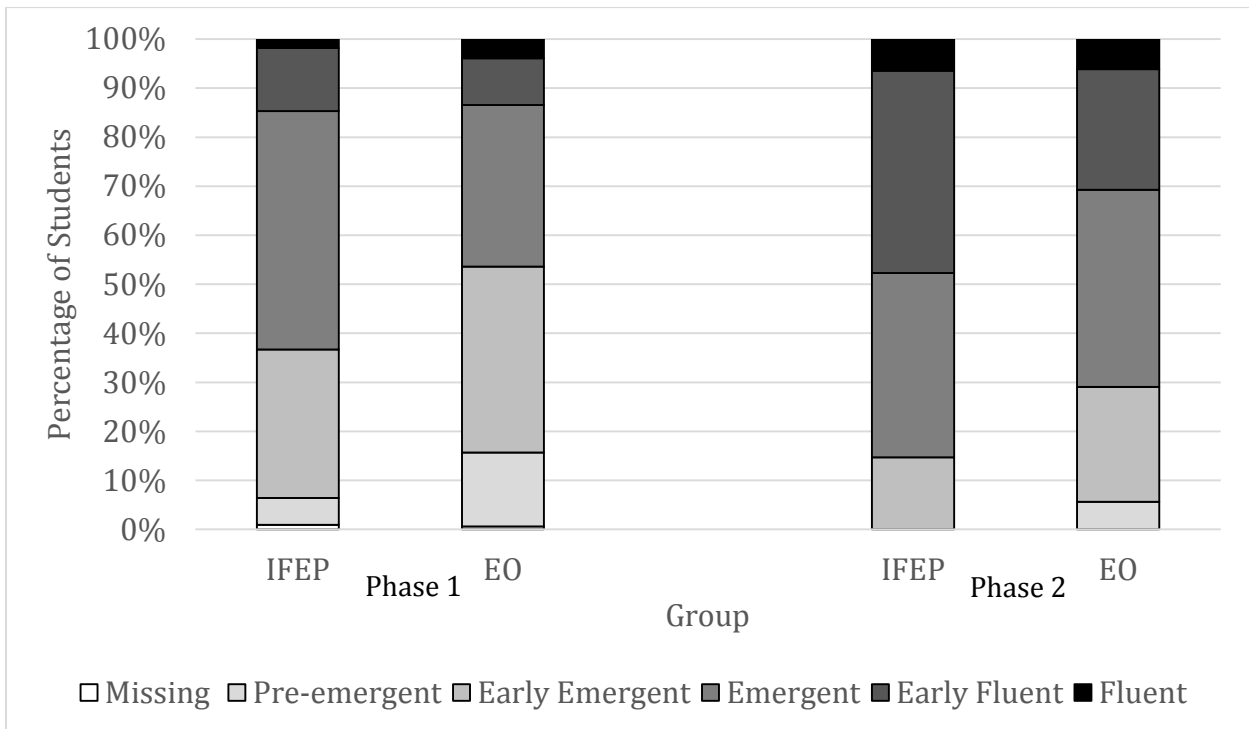

Figure 11. Percentage of Students at Each Reading Level

Chi-square analyses for each item of reading skills were conducted to investigate the relationship between each question and group in each phase. The results are presented in Table 9. For these analyses, IFEP students performed significantly better than EO students in Phase 1 on Range of word reading ability and in Phase 2 on all four categories, whereas EO students performed better than IFEP students only in Phase 1 Reading level.

Table 9. Results of Analyses of Reading Skills

	Phase 1[1]		Phase 2[2]	
	χ^2	p-value	χ^2	p-value
Recognizes and names all uppercase and lowercase letters of the alphabet		.1501*		.0494*
Reads simple one-syllable and high frequency words	3.8211	.1480	8.233	.0163
Range of word reading ability[3]	19.5983	<.0001	6.8971	.0318
Reading level		.0123*		.0031*

Note. The students with missing response were excluded from the Chi-square analyses.
*If cell size was fewer than 5, then Fisher's Exact Test was used instead of Chi-Square.
[1]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 1.
[2]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 2.
[3]The lowest 3 levels—0 word, 1-5 words, and 6-10 words—were collapsed into one level called "0-10 words."

Writing Skills

Teachers were asked to provide information on writing skills for EOs and IFEPs, for both Phase 1 and Phase 2. This information included skills related to writing beginning consonants and short vowel sounds, having sound to symbol associations, independently writing high frequency and sight words, number of words the student can write, and indicating a writing level. This information is summarized in Figures 12-16 (detailed information is available in Appendix E). Similar to other skill areas, IFEP students performed slightly better overall than their EO peers.
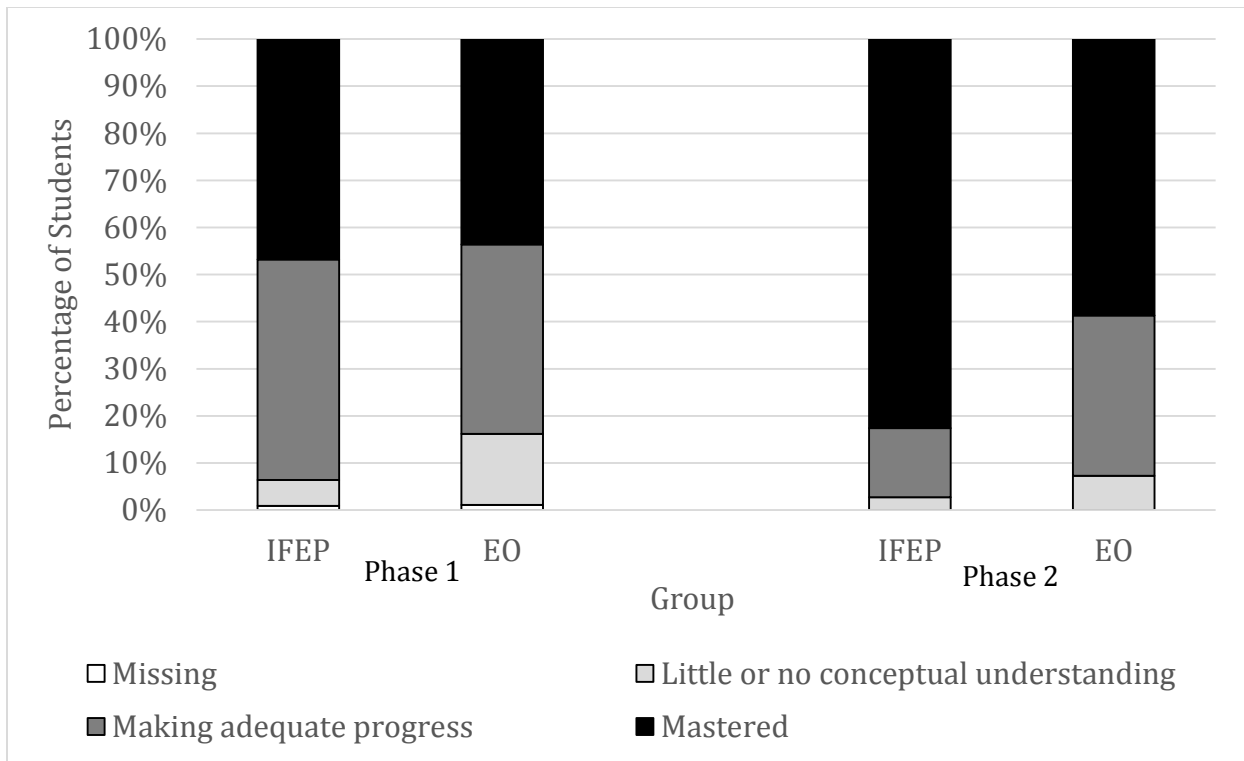
Figure 12. Percentage of Students Who Wrote Beginning Consonant and Short Vowel Letter Sound for Objects Presented in Picture Form
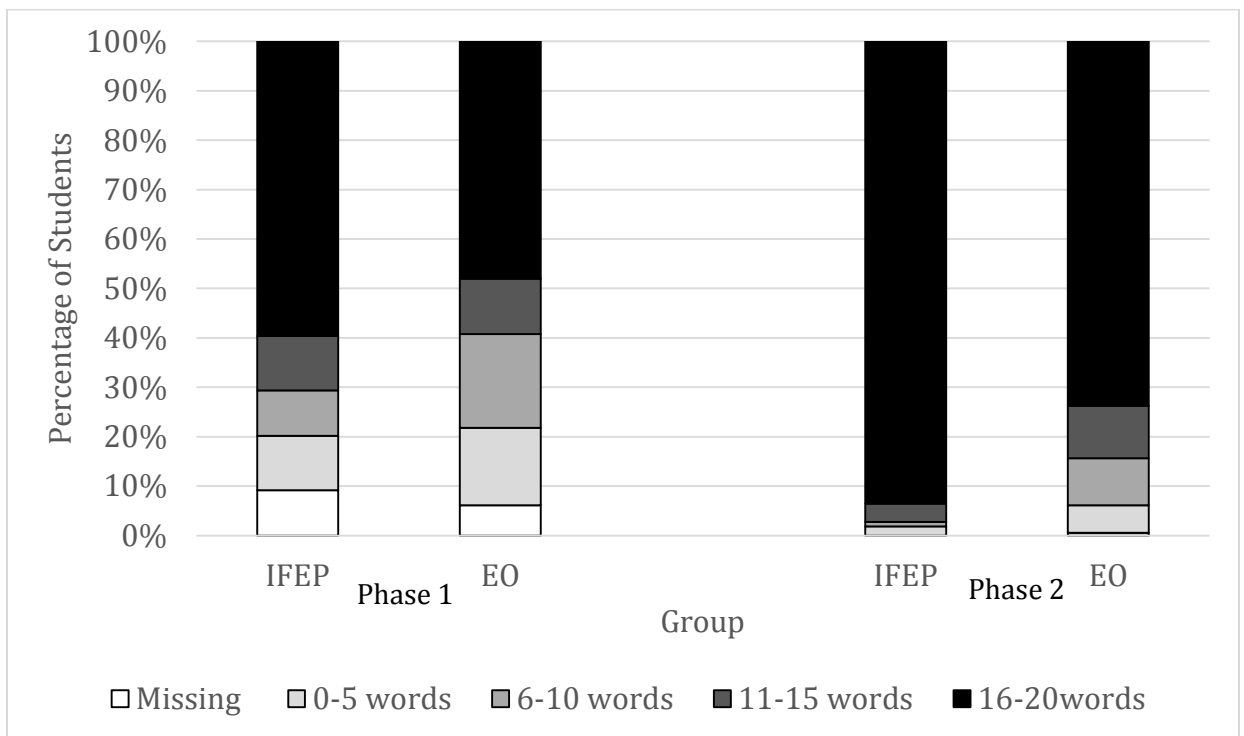
Figure 13. Percentage of Students' with Different Numbers of Highest Sound to Symbol Association
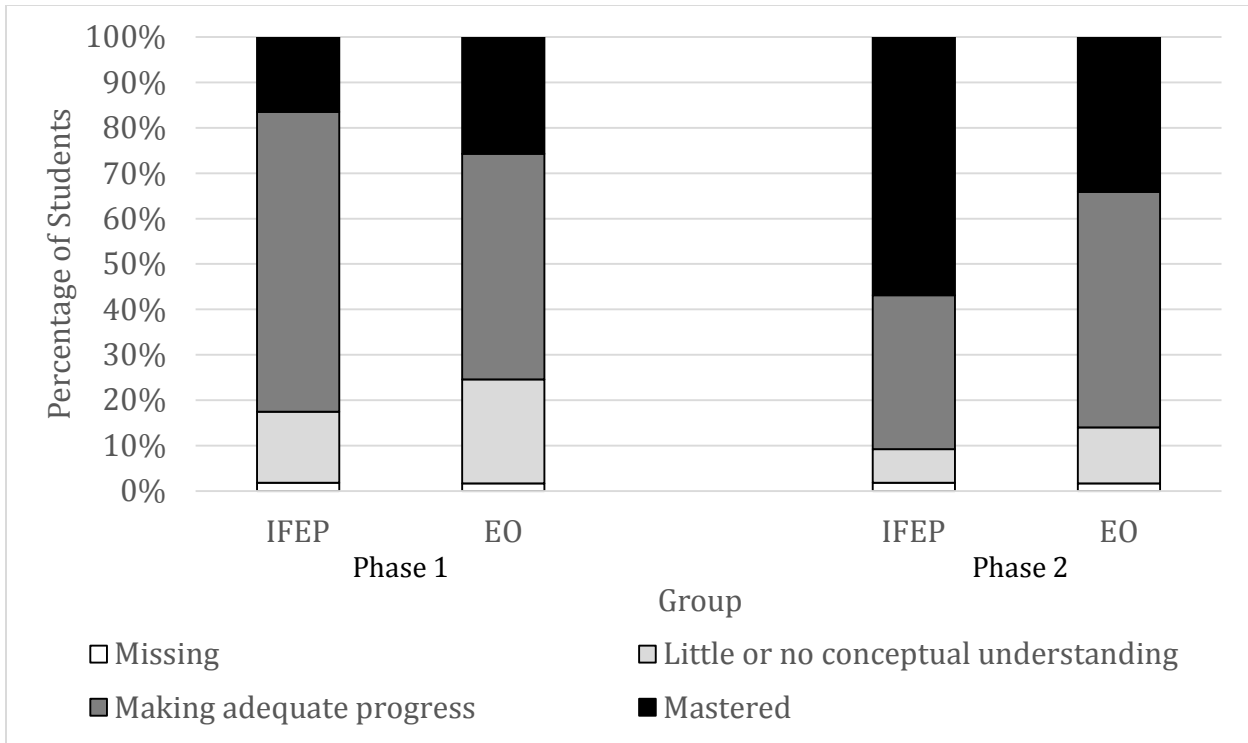
Figure 14. Percentage of Students Who Independently Wrote Grade-level Appropriate High Frequency/Sight Words
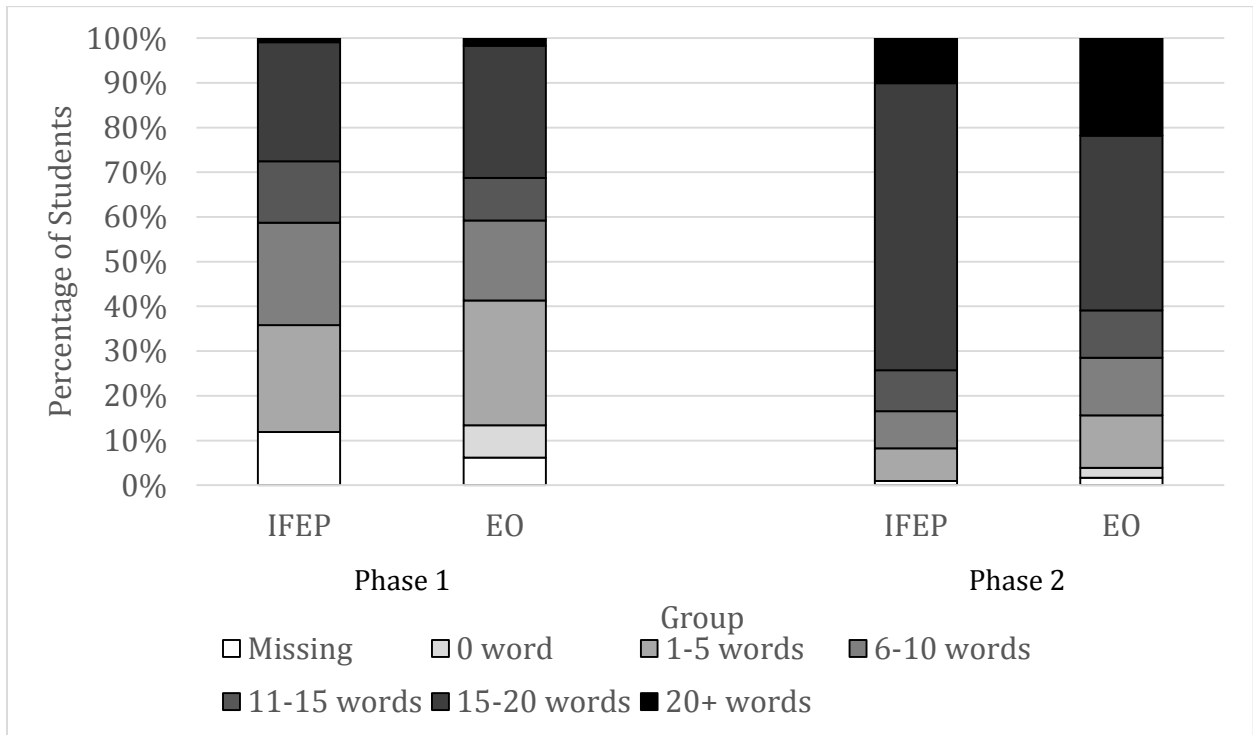
Figure 15. Percentage of Students' With Different Numbers of Highest Range of High Frequency/Sight Word Writing Ability
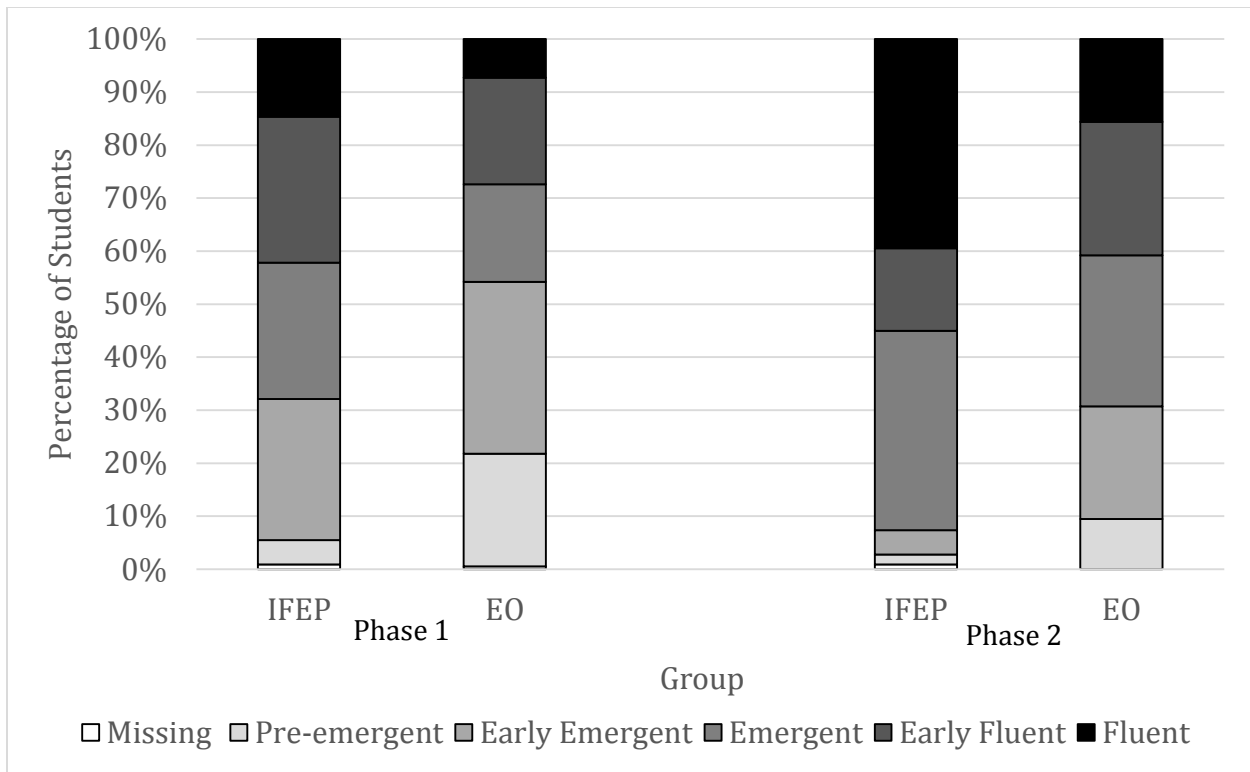
Figure 16. Percentage of Students at Each Writing Level

Chi-square analyses for each item of writing skills were conducted to investigate the relationship between each question and group in each phase. The results are presented in Table 10. For writing, IFEP students performed significantly better than EO students in Phase 1 on Writing beginning consonants and short vowel letter sound, Number of highest sound to symbol association, and Writing ability, whereas EO students performed better in Independently writing grade-level high frequency (HF)/sight words. For Phase 2, IFEP students performed better than EO students in all categories except for Number of highest range of HF/sight word writing ability. However, even here there was a higher percentage of IFEP students who performed within the two highest levels (see Figure 15).

Table 10. Results of Analyses of Writing Skills

	Phase 1[1]		Phase 2[2]	
	χ^2	p-value	χ^2	p-value
Writes beginning consonant and short vowel letter sound for objects presented in picture form (sound to symbol association)	6.2619	.0437		<.0001*
Number of highest sound to symbol association	6.5759	.0373		<.0001*
Independently writes grade-level appropriate high frequency (HF)/sight words[3]	7.6048	.0223	14.7160	.0006
Number of highest range of HF/sight word writing ability[4]		.6275*	18.0085	.0004
Writing Level	20.3437	.0004		<.0001*

Note. Students with missing responses were excluded from the Chi-square analyses.
*If cell size was fewer than 5, then Fisher's Exact Test was used instead of Chi-Square.
[1]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 1.
[2]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 2.
[3]The lowest 2 levels—0-5 words and 6-10 words—were collapsed into one level called "0-10 words."
[4]The lowest 3 levels—0 words, 1-5 words, and 6-10 words—were collapsed into one level called "0-10 words."

Math Skills

In addition to literacy skills, teachers were asked to provide information about student performance in relation to Arizona's kindergarten math standards. This information included number recognition, writing numbers, recognizing shapes, and completing basic addition and subtraction. In one classroom, shape recognition was notated as "not applicable," so that classroom's information was included as "missing." As indicated in Figures 17-23 (detailed information is presented in Appendix E), IFEP students generally performed similar or better than their EO peers in math skills. One notable exception is that EO students performed slightly better at subtraction than IFEP students.
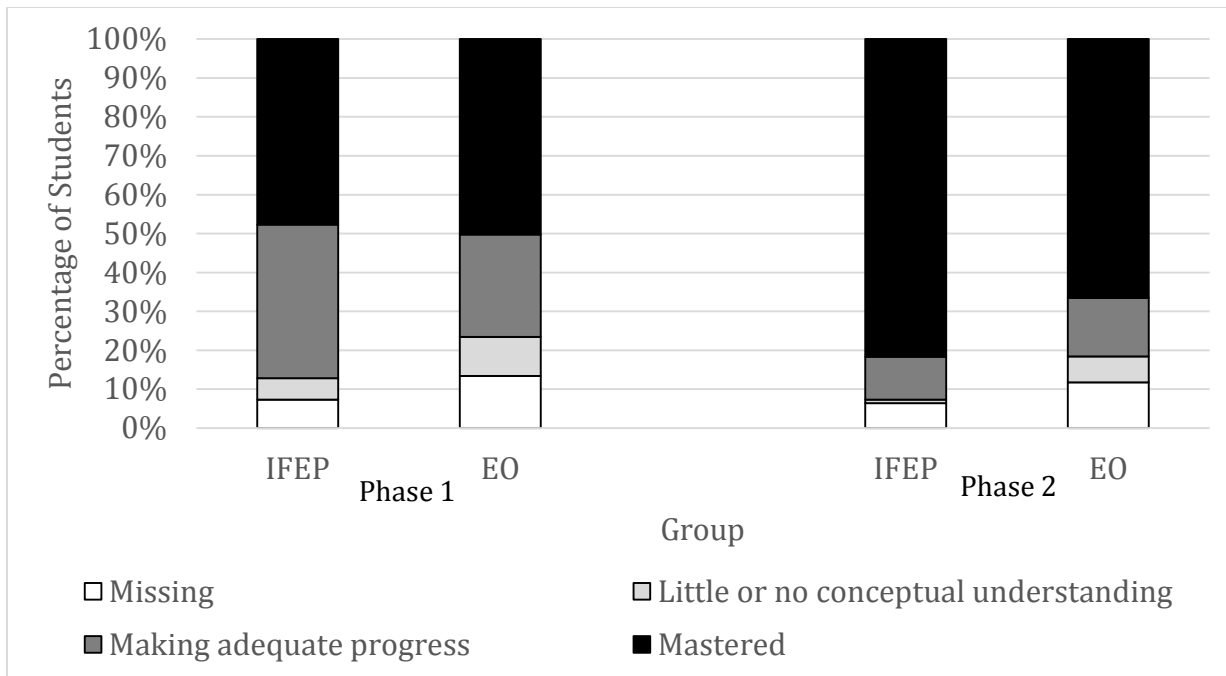
Figure 17. Percentage of Students Who Recognized Numbers From 0-20 in and out of Order
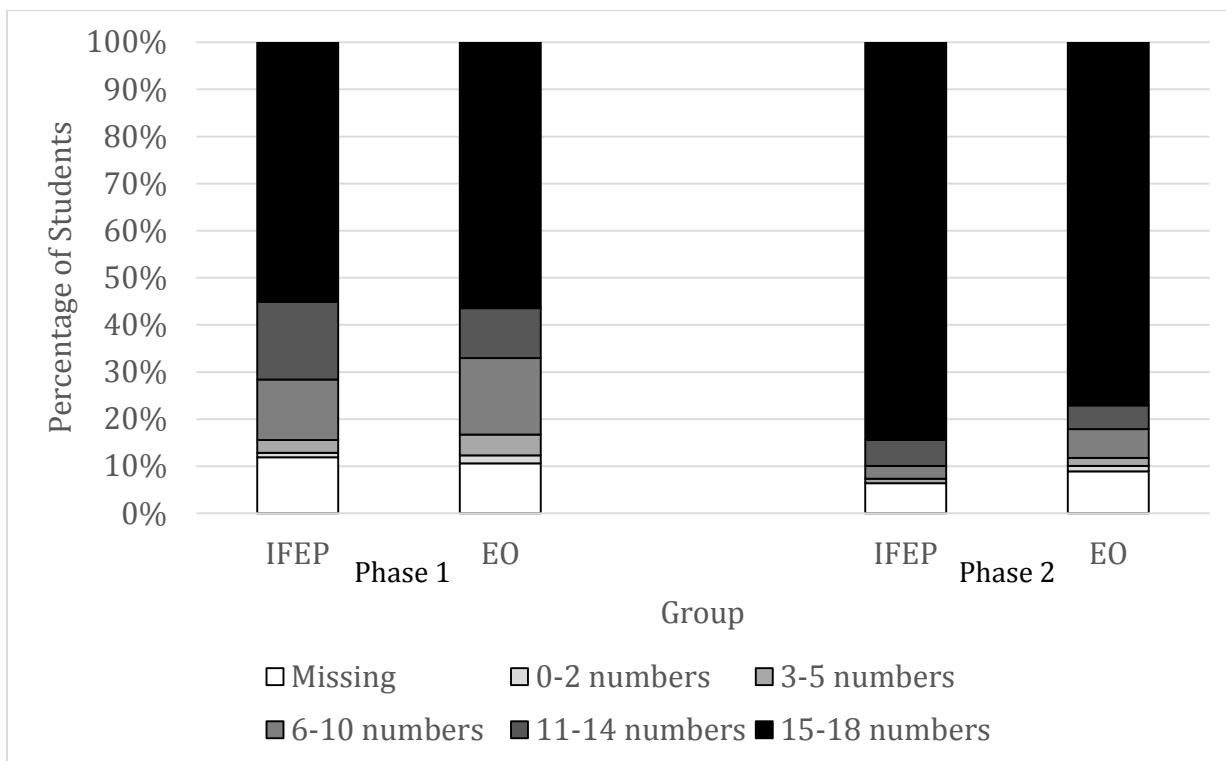
Figure 18. Percentage of Students With Different Highest Number of Symbols Recognized
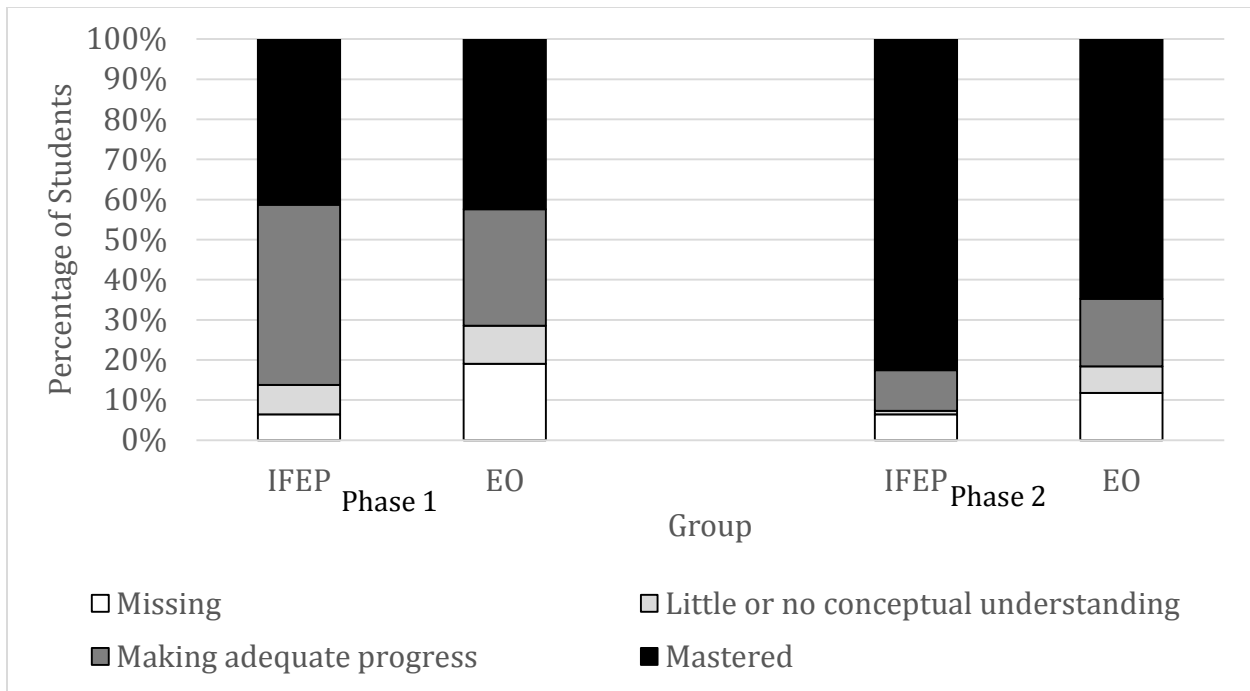
Figure 19. Percentage of Students Who Correctly Wrote Numbers From 0-20 out of Order From Auditory Prompt
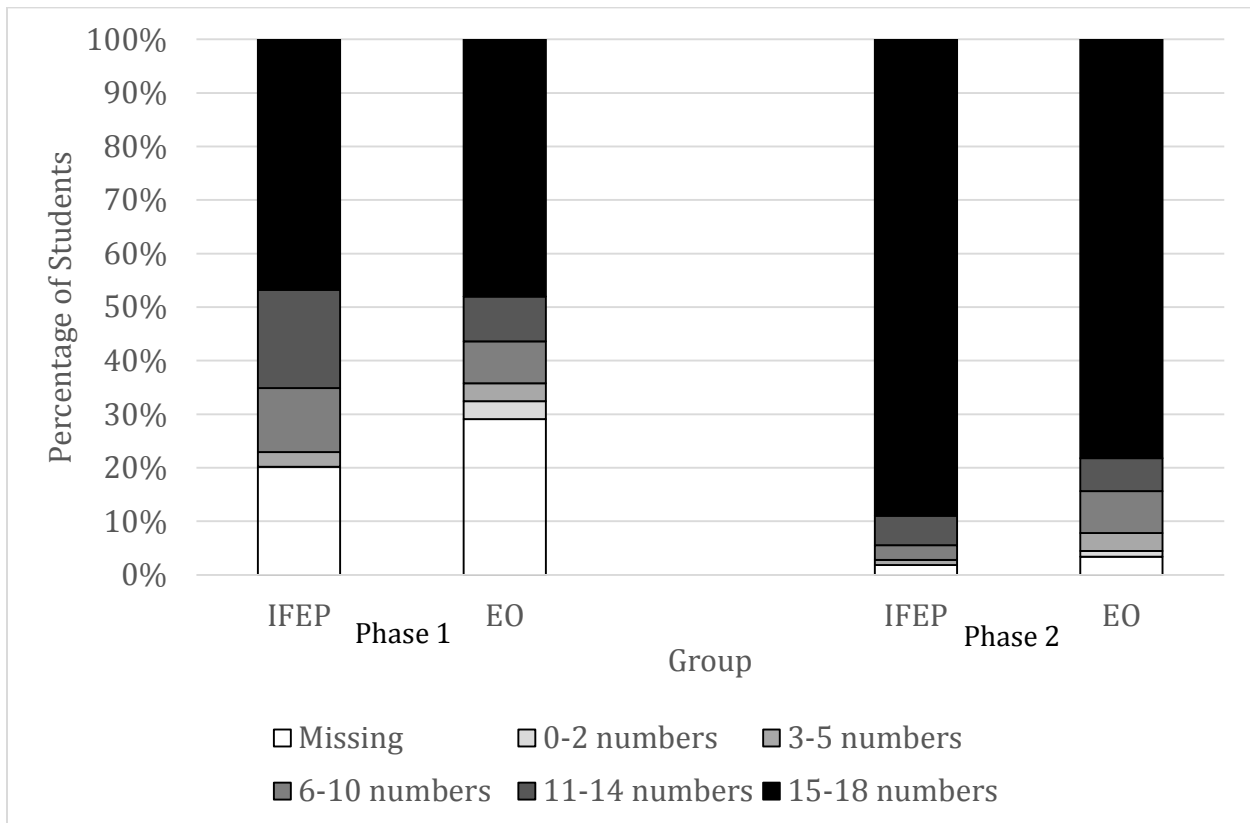
Figure 20. Percentage of Students' Highest Number of Symbols Correctly Written
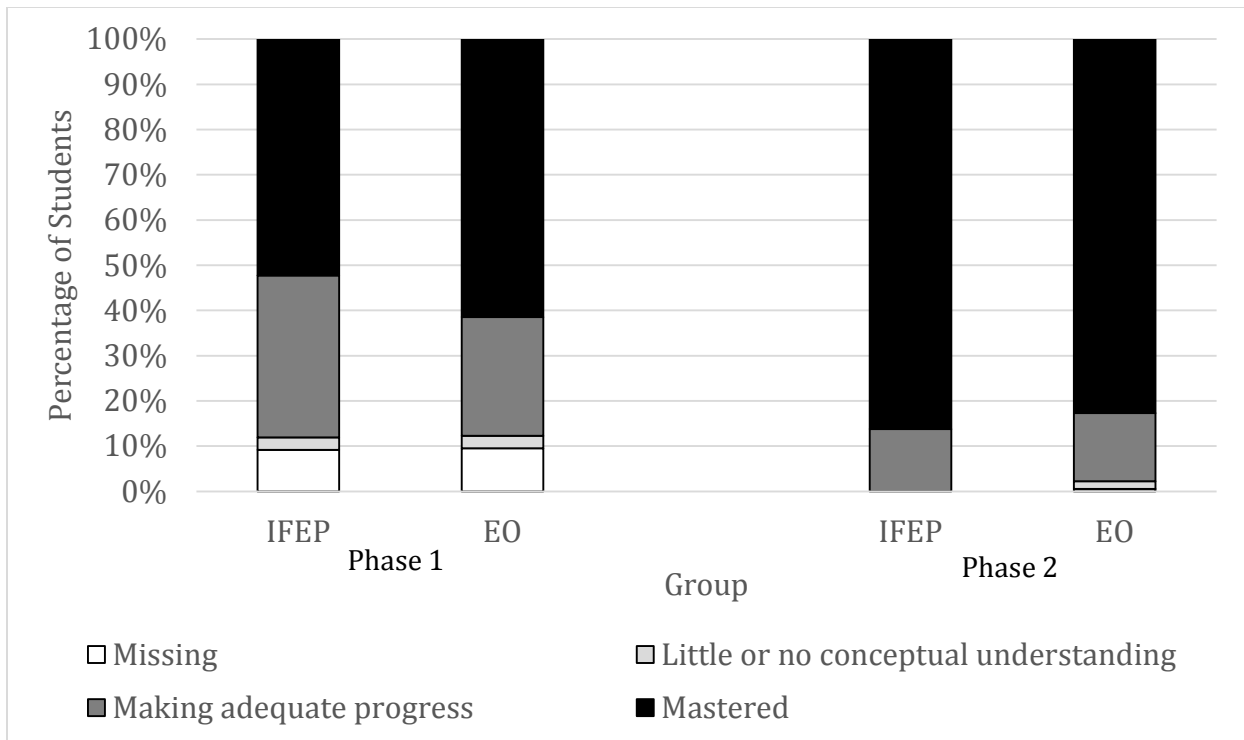
Figure 21. Percentage of Students Who Recognized and Named Basic Shapes
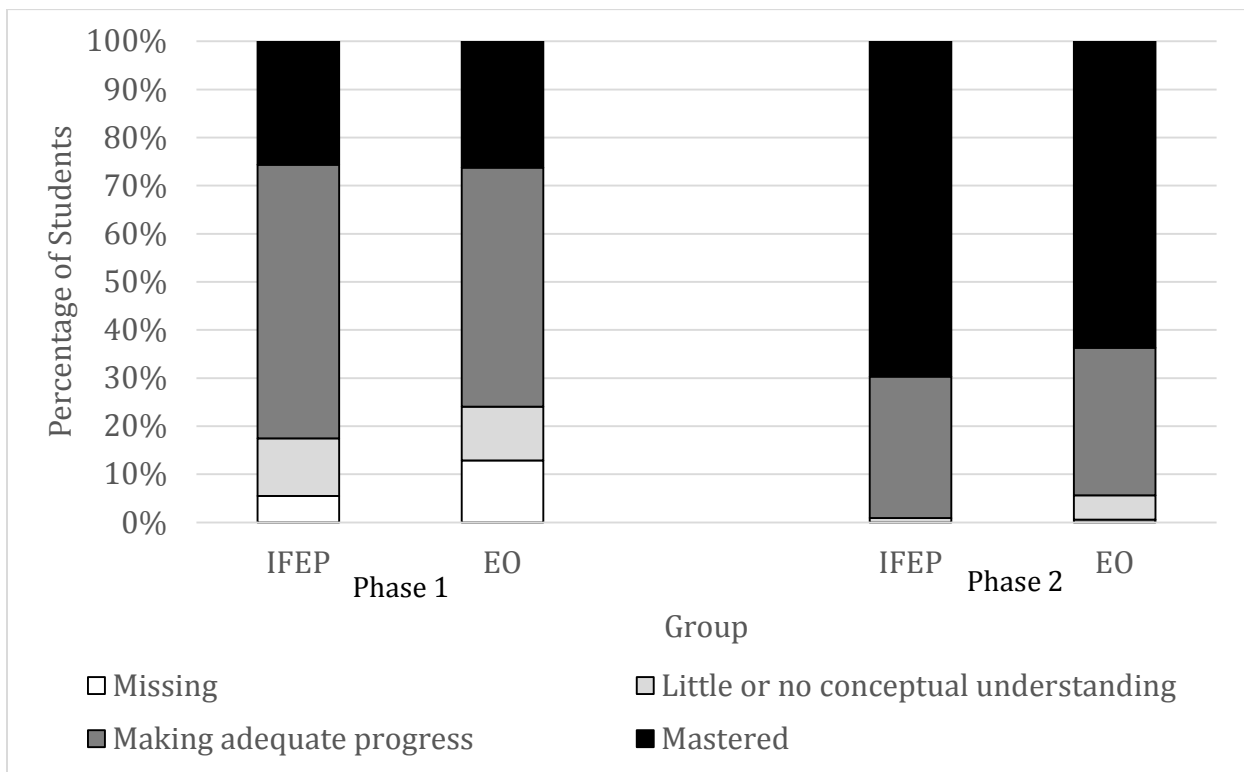
Figure 22. Percentage of Students Demonstrating Grade Level Appropriate Addition With Manipulatives, Verbally, and/or in Writing
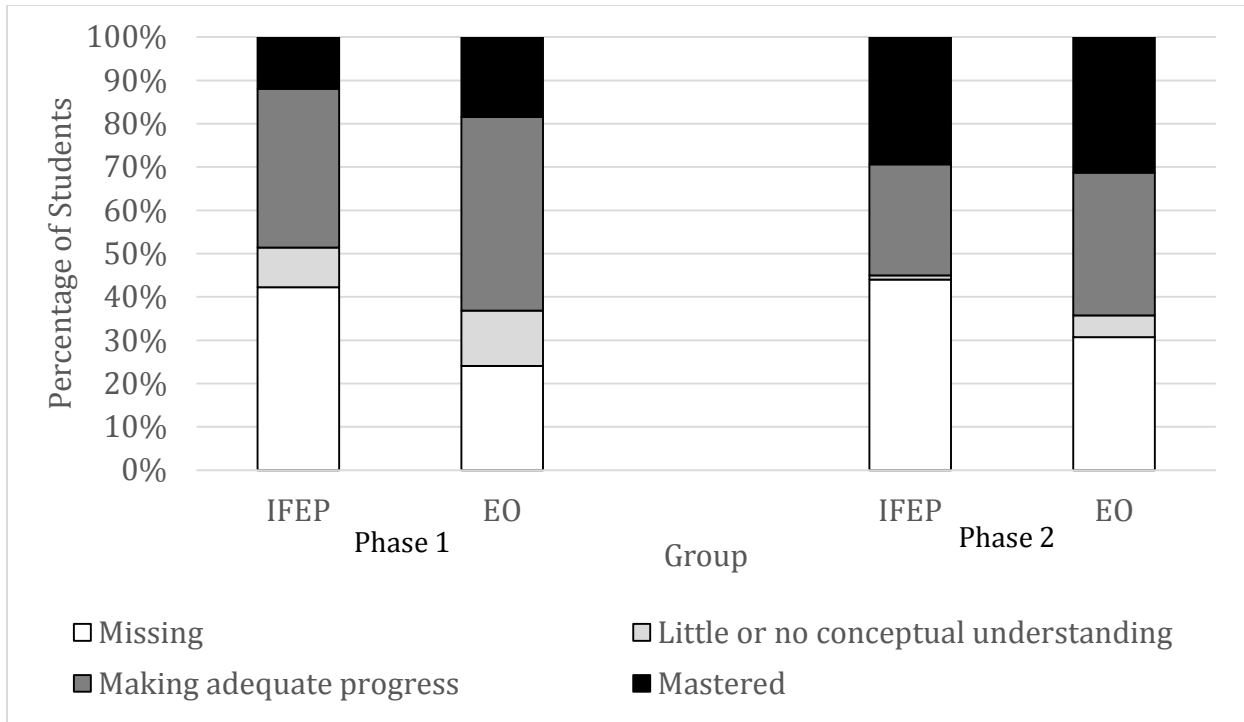
Figure 23. Percentage of Students Demonstrating Grade Level Appropriate Subtraction With Manipulatives, Verbally, and/or in Writing

Chi-square analyses for each item of math skills were conducted to investigate the relationship between each question and group in each phase. The results are presented in Table 11. For mathematics, in all three comparisons where the two groups performed significantly differently in Phase 2, IFEP students performed better than EO students.

Table 11. Results of Analyses of Math Skills

	Phase 1[1]		Phase 2[2]	
	χ^2	p-value	χ^2	p-value
Recognizes numbers from 0-20 in and out of order	5.1870	.0748		.0171*
Highest number of symbols recognized[3]	3.0004	.2231	3.124	.2097
Correctly writes numbers from 0-20 out of order from auditory prompt	3.9037	.1420		.0067*
Highest number of symbols correctly written[4]	4.6674	.0969	6.54	.038
Recognizes and names basic shapes		.2087*		.4605*
Represents grade level appropriate addition with manipulatives, verbally, and/or in writing	0.2927	.8639		.1581*
Represents grade level appropriate subtraction with manipulatives, verbally, and/or in writing	0.4290	.8069		.1981*

Note. Students with missing responses were excluded from the Chi-square analyses.

*If cell size was fewer than 5, then Fisher's Exact Test was used instead of Chi-Square.

[1]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 1.

[2]Tested whether group (EO vs. IFEP) and mastery level were significantly related in Phase 2.

[3]The lowest 3 levels—0-2 numbers, 3-5 numbers, and 6-10 numbers—were collapsed into one level called "0-10 numbers."

[4]The lowest 3 levels—0-2 numbers, 3-5 numbers, and 6-10 numbers—were collapsed into one level called "0-10 numbers."

Social/Behavioral Skills

Teachers provided information on the social and behavioral skills of students, specifically rating ability to work independently, take turns, exhibit age-appropriate problem solving skills, sit still and pay attention, show sensitivity to other students' needs, and communicate wants and needs in English. The results for these questions are summarized in Figures 24-30 (detailed information is available in Appendix E). With the exception of "Communicating Wants and Needs in English" for Phase 1, IFEP students were rated higher in all of the social and behavioral categories for both Phase 1 and 2 than their EO peers. In addition, IFEP students demonstrated more growth in all of these areas from Phase 1 to Phase 2 than their EO peers.
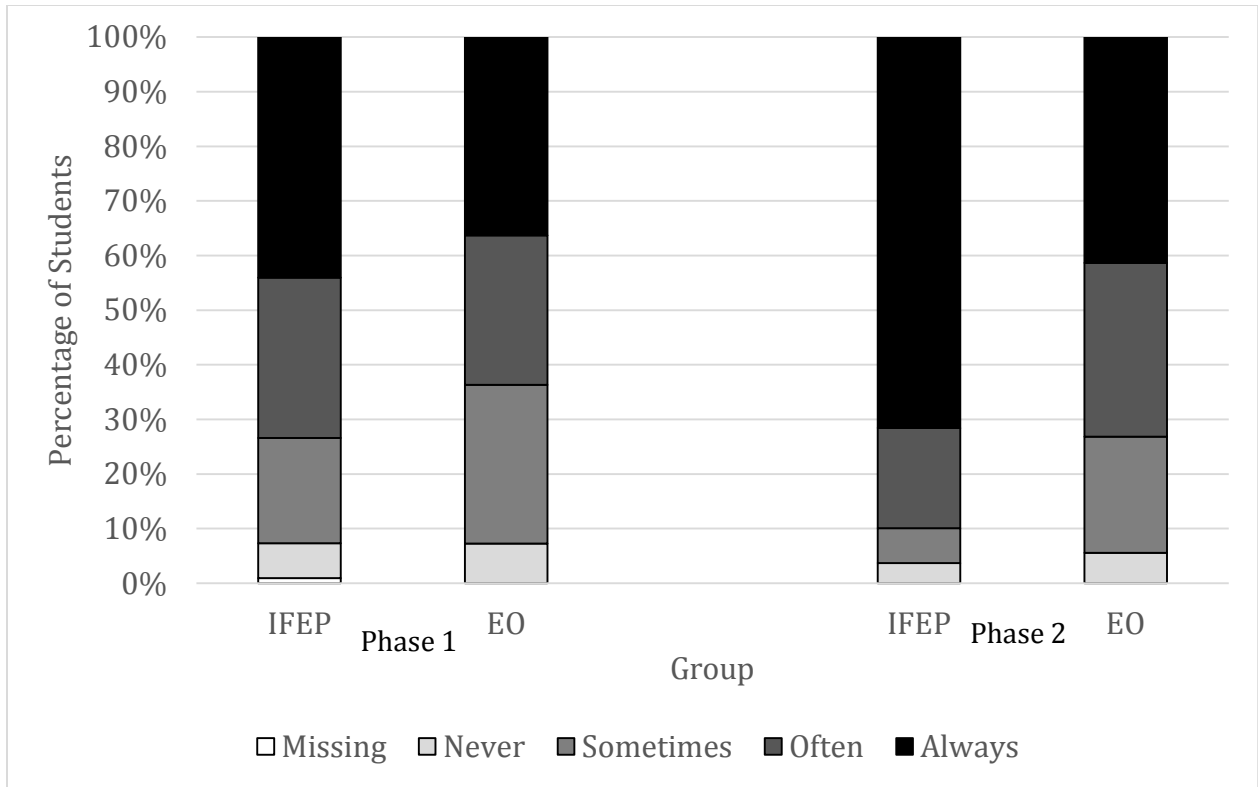
Figure 24. Percentage of Students Who Independently Finished Most Tasks
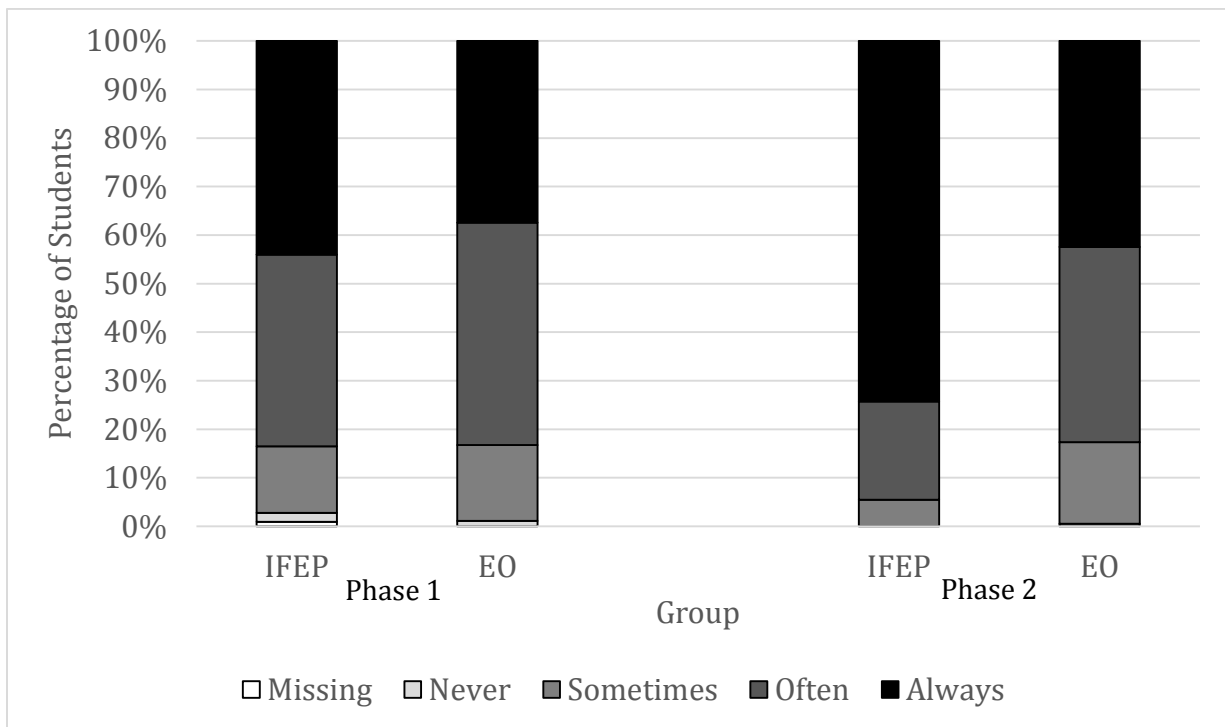
Figure 25. Percentage of Students Who Took Turns and Shared in the Classroom
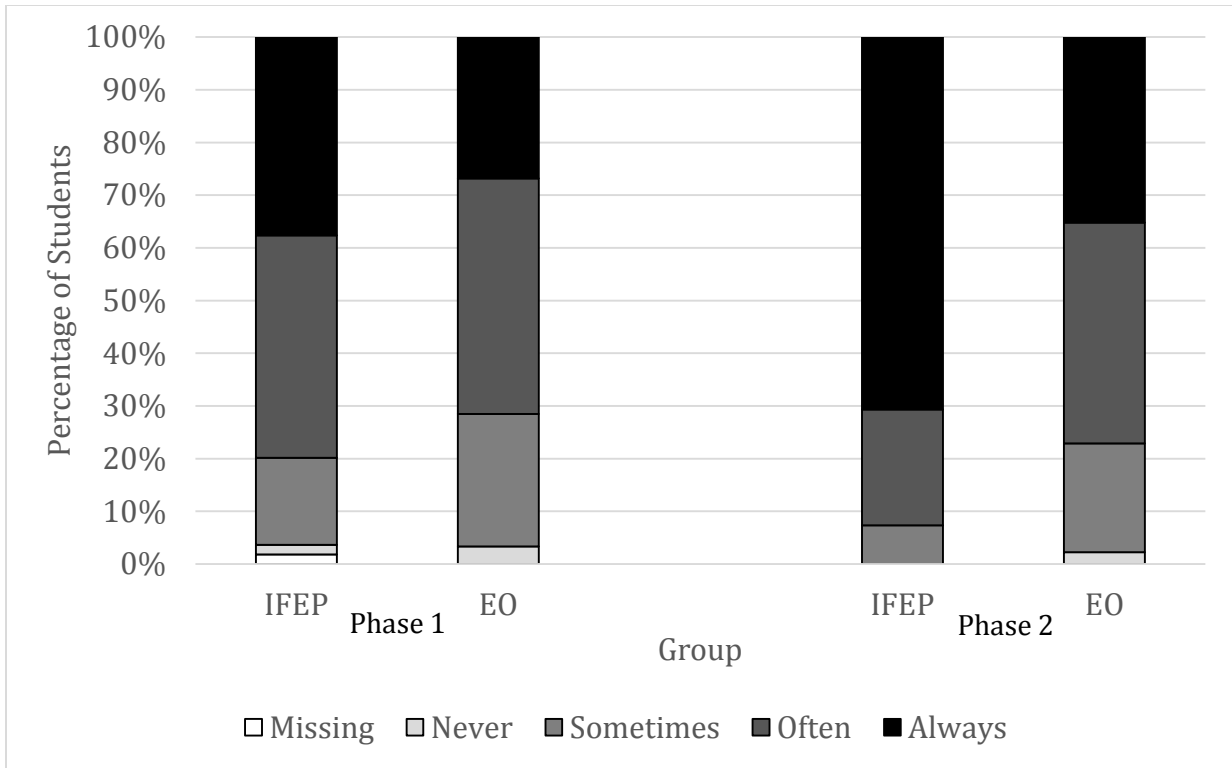
Figure 26. Percentage of Students Who Exhibited Age-appropriate Problem-solving Skills
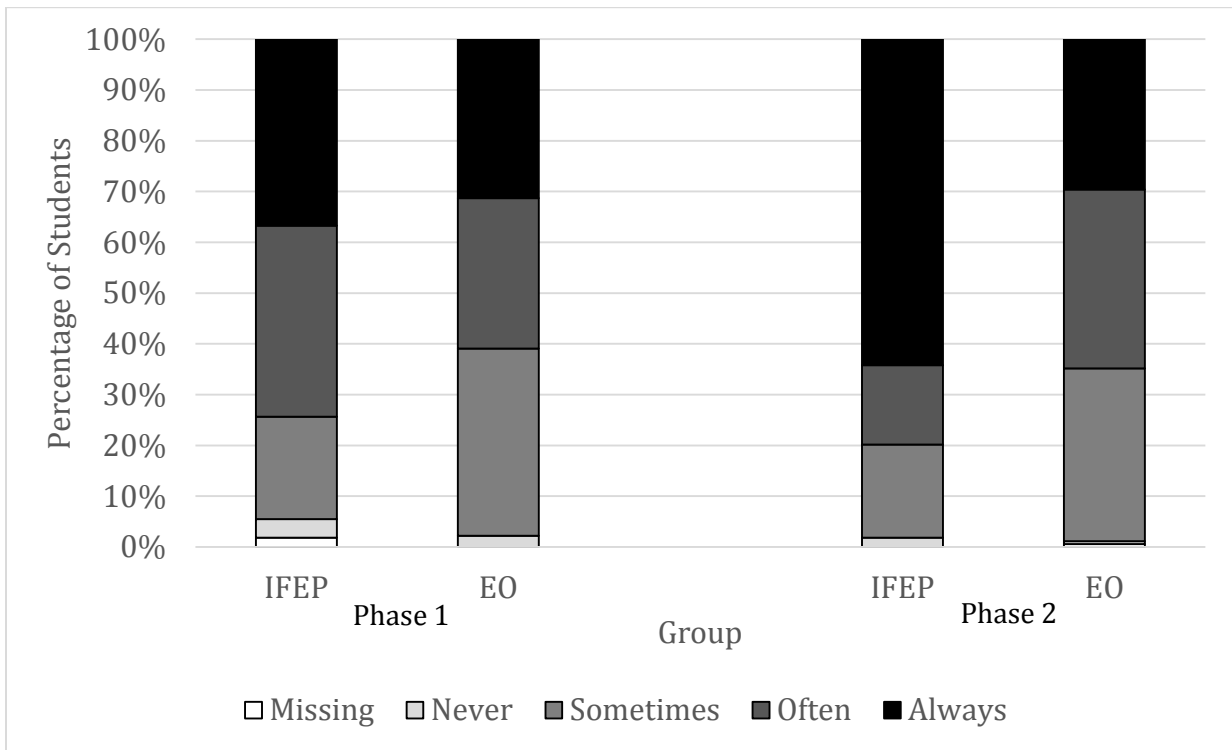
Figure 27. Percentage of Students Who Sat Still and Paid Attention
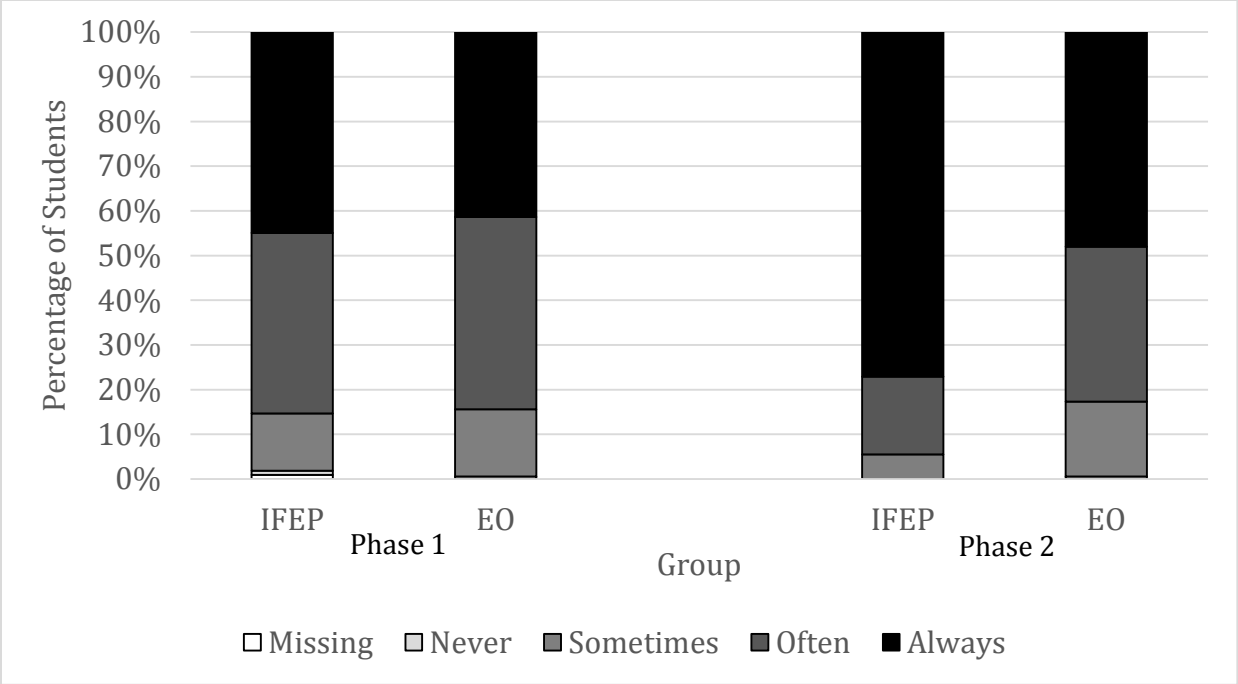
Figure 28. Percentage of Students Who Were Sensitive to the Feelings of Other Students
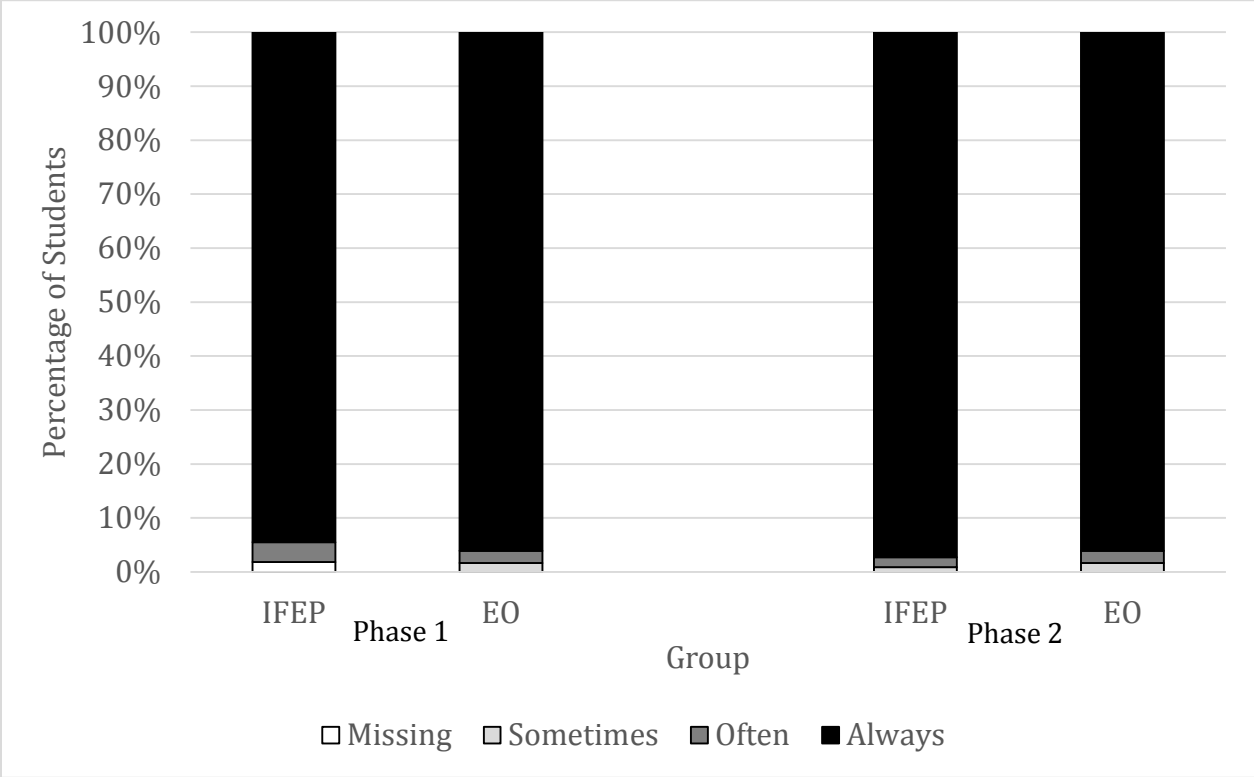
Figure 29. Percentage of Students Who Communicated Needs and Wants in English
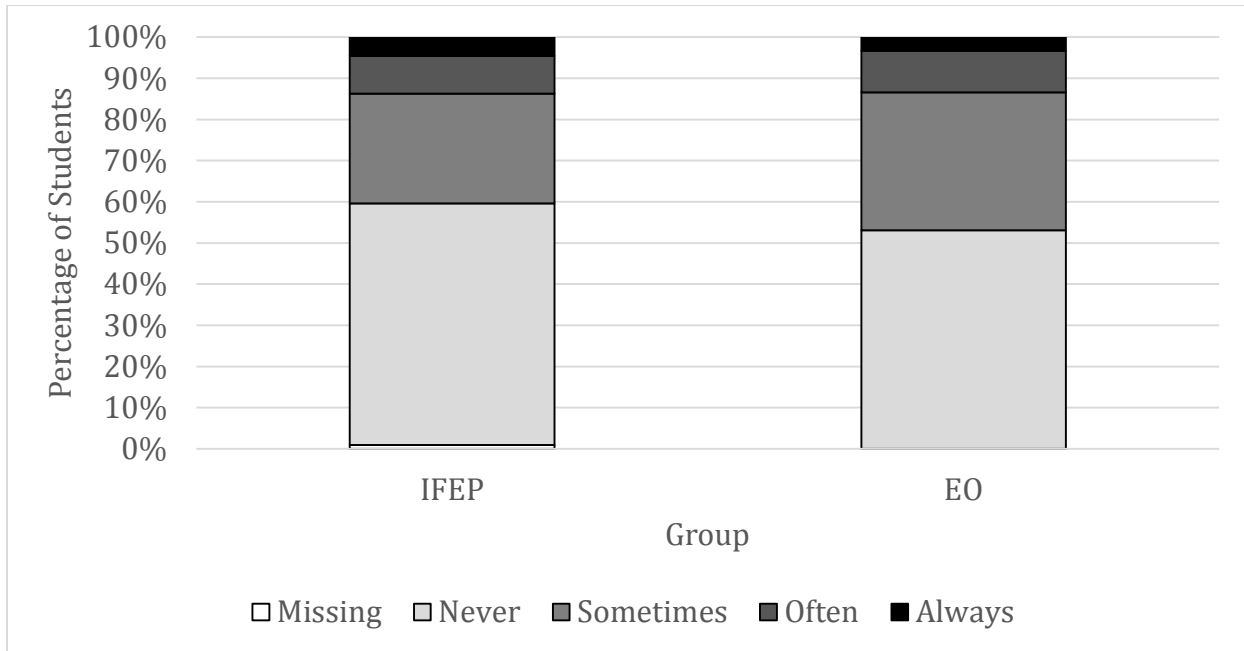
Figure 30. Percentage of Students Who Exhibited Disruptive Behavior in Class in Phase 1

Overall Performance

Finally, teachers were asked to provide information about each student's overall academic performance in relation to peers, overall social comparison to peers, and an indication of whether or not the student was ready for first grade. This last question was only asked in Phase 2.

As shown in Figures 31-33, in Phase 1, IFEP students were indicated to be just slightly above their peers, both academically and socially. In Phase 2, EO students were rated about the same as they had been in Phase 1, whereas, IFEP students improved in these areas according to teacher ratings. Most EO and IFEP students were considered to be ready for first grade, according to their teachers. A slightly higher number of EOs (8.4%) than IFEPS (5.5%) were considered not ready for first grade (detailed information is available in Appendix E).
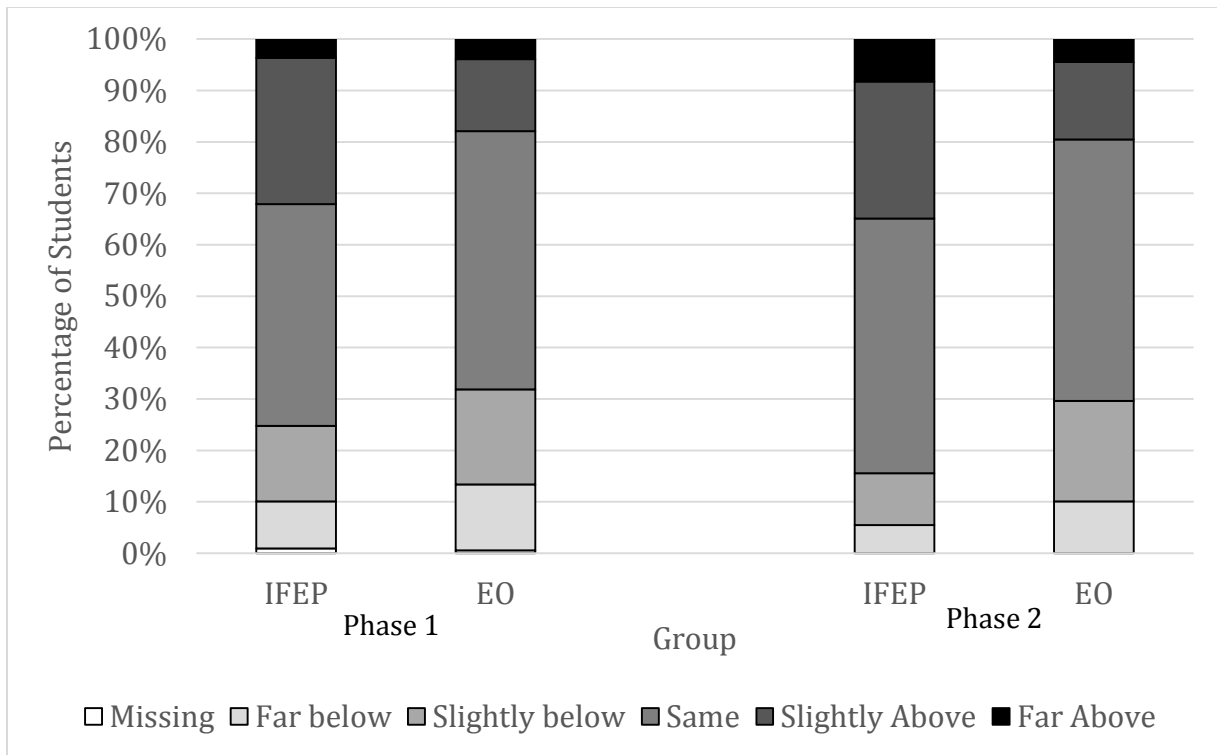
Figure 31. Percentage of how Students Compare to Their Grade Level Peers Academically
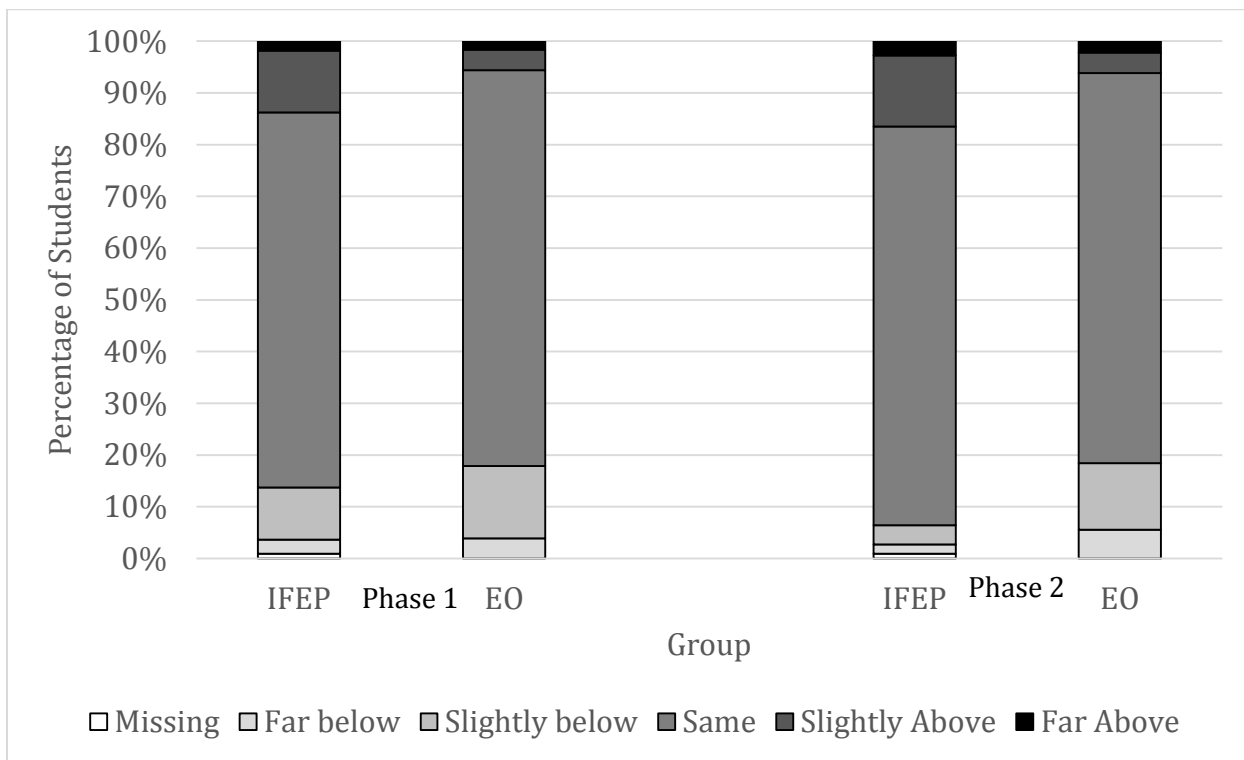
Figure 32. Percentage of how Students Compare to Their Grade Level Peers Socially
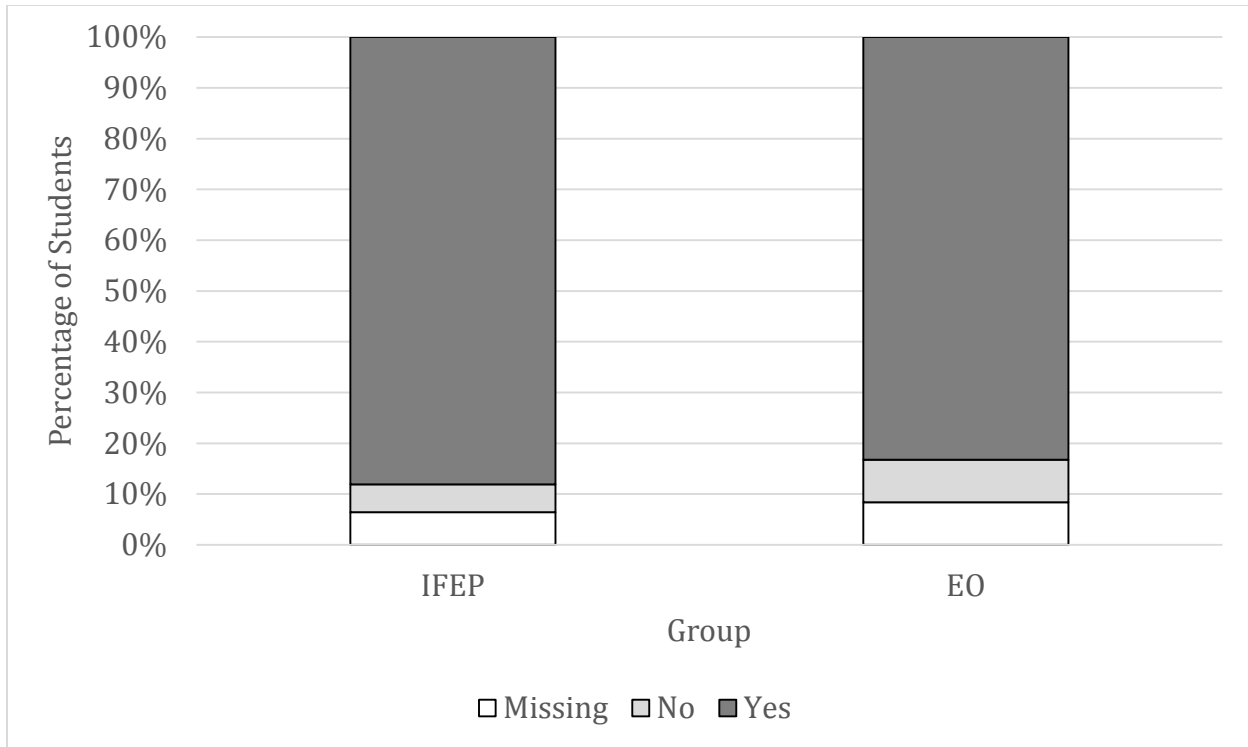
Figure 33. Percentage of Students' Readiness for Grade 1

Chi-square analyses for each item of overall performance were conducted to investigate the relationship between each question and group at each phase. The results are presented in Table 12. These results indicate that while IFEP and EO students' academic and social performance failed to show significant difference at Phase 1, IFEP students performed significantly better than EO students on both based on the Phase 2 data.

Table 12. Results of Analyses of Overall Performance

	Phase 1[1]		Phase 2[2]	
	χ^2	p-value	χ^2	p-value
Academically, how does this student compare to his/her grade level peers		.0517*		.0191*
Socially, how does this student compare to his/her grade level peers		.1179*		.0013*

Note. Students with missing responses were excluded from the Chi-square analyses.

*If cell size was fewer than 5, then Fisher's Exact Test was used instead of Chi-Square.

[1]To test if the group (EO vs. IFEP) and the mastery level are significantly related in Phase 1.

[2]To test if the group (EO vs. IFEP) and the mastery level are significantly related in Phase 2.

The questions on the Student Information Sheet (SIS) were intended to supplement the analysis of DIBELS Next® data for this follow-up study. It was hoped that the SIS data would allow for a more complete picture of students' experiences in mainstream classrooms. The questions on the SIS data forms were based on Arizona standards for kindergarten. Although the questions were prioritized to minimize the burden on teachers, completing the forms required some effort and time on the part of teachers. Unfortunately, teachers skipped some questions or left questions blank, which is indicated by the numbers of students with missing data. The percentages presented are based only on the data that teachers supplied. It is unclear as to whether the results would have been different if the data set were more complete.

An additional limitation is that the data here do not represent the exact same set of students in the DIBELS Next® analysis, so no comparison can be made across the results from the two evaluation questions. Nevertheless, the vast majority of students being included in both data sets. Still, some students were only in the DIBELS Next® analysis, and some were only in the SIS analysis.

In conclusion, based on classroom observations and teacher-reported information, including teacher interviews and classroom-based data, IFEP students and EO students in mainstream classrooms were performing about the same. In the areas of reading, IFEP students began the year about the same as their EO classmates; however, they made greater gains, with more IFEP students showing mastery by the second data collection. A similar pattern was noted for writing, with one exception – IFEP students demonstrated slightly less mastery of sight words than EO students by the end of the year. IFEP students also started about the same in their understanding of math concepts. Again, IFEP students showed greater progress on the teacher-reported measures. Finally, with regard to social skills, although IFEP and EO students started out about the same, by the end of the year, the IFEP students were reported to have a higher percentage in mastery than their EO peers.

Evaluation Question Two

Background

The second evaluation question was identified to fit with the available formative reading assessment data from the participating schools and districts.

Once placed in a non-ELL classroom, are Initially Fluent English Proficient (IFEP) students performing on par with English Only (EO) students in that classroom?

Additional related questions included the following:

How do mainstreamed IFEP students in the selected schools perform on district measures of reading in comparison to their EO peers? How do they perform at the beginning of the year? How do they perform in the middle of the year?

Participating Schools and Districts

Initially, 16 schools in nine districts were chosen from a pool recommended by the Arizona Department of Education. The schools and districts in this pool were believed to meet the following inclusion criteria: (a) They placed IFEP students in mainstream kindergarten classes with EO students; and (b) They offered a Structured English Immersion (SEI) model for the instruction of ELLs.

After NCEO staff visited districts, they discovered that some schools did not meet the two criteria stated above, and others had a very small number of mainstreamed kindergarten IFEP students. The inclusion criteria were then revised by the state to require that there needed to be a minimum of two mainstreamed kindergarten IFEPs in classes with primarily EO students and at least nine IFEP students in the school in order for the school to be included in the study. Fifteen classrooms in seven schools within five districts met the final inclusion criteria for the study.

Available Formative Reading Assessment Data

The schools and districts involved in this study all administered the DIBELS Next® reading assessment. Districts provided NCEO with data files or hard copies of score reports between December, 2014 and March, 2015.

According to the DIBELS Next® Assessment Manual (Good & Kaminski, 2011), a different set of DIBELS Next® subtests is given in the beginning and middle of the year. The Beginning of the Year (BOY) tests are typically administered between months one to three of the school year, while the Middle of the Year (MOY) tests are administered between months four to six. Each of the subtests is described below.

Beginning of the Year

The Beginning of the Year (BOY) subtests take approximately three minutes to administer per kindergarten student. These subtests are First Sound Fluency (FSF), a measure of phonemic awareness, and Letter Naming Fluency (LNF), which is an indicator of student risk status rather than an indicator of basic early literacy skills (Good & Kaminski, 2011). A composite score is created by summing the individual subtest scores.[4] There is an established benchmark goal for the FSF subtest and for the Composite Score (see Table 13). Students who reach, or score above the benchmark goal, are making "adequate progress" in reading for a given point in the year, and

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[4] Because different subtests are given at each point in time, the test developer does not recommend comparing students' composite scores over time.

are 80-90% likely to meet the next set of benchmarks if they have sufficient instruction (Good & Kaminski, 2011).

Table 13. BOY Scoring and Benchmark Goals

Basic Early Literacy Skills	DIBELS Next® Subtest	Scoring	Benchmark Goal
Phonemic Awareness	**First Sound Fluency (FSF):** The test administrator says a list of words, and the student says the first sound in those words.	2 points for each correct initial phoneme the student provides in 1 minute. 1 point for each correct initial consonant blend, consonant + vowel, or consonant blend + vowel.	10
n/a	***Letter Naming Fluency (LNF):** The student is to name the letters written on a sheet of letters.	Number of letters correctly named in 1 minute. Only 3 seconds allowed per letter.	*None*
--	**Composite Score**	The sum of the FSF and LNF subtest scores.	26

Note. The DIBELS Next® manual states that the Letter Naming Fluency measure does not have a strong relationship to early reading skills, but <u>does</u> have a relationship to long term reading ability. For this reason, the test developers recommend using the LNF subtest scores in conjunction with other subtest scores, particularly at the start of the school year.

Middle of the Year

The two subtests given at the beginning of the year, First Sound Fluency (FSF), and Letter Naming Fluency (LNF) are repeated as part of the Middle of the Year (MOY) assessment. Two additional subtests, Phoneme Segmentation Fluency (PSF) and Nonsense Word Fluency (NWF) are administered for the first time at the middle of the year assessment. Phoneme Segmentation is a measure of a student's phonemic awareness; while Nonsense Word Fluency measures basic phonics skills and application of the alphabetic principle (see Table 14).

Table 14. MOY Scoring and Benchmark Goals

Basic Early Literacy Skills	DIBELS Next® Subtest	Scoring	Benchmark Goal
Phonemic Awareness	**First Sound Fluency (FSF):** The test administrator says a list of words, and the student says the first **sound** in those words.	2 points for each correct initial phoneme the student provides in 1 minute. 1 point for each correct initial consonant blend, consonant + vowel, or consonant blend + vowel.	30
N/A	***Letter Naming Fluency (LNF):** The student is name the letters written on a sheet of letters.	Number of letters correctly named in 1 minute. Only 3 seconds allowed per letter.	*None*
Phonemic Awareness	**Phoneme Segmentation Fluency (PSF):** The assessor says words, and the student says the individual sounds in each word.	Number of correct sound segments said in 1 minute.	20
Alphabetic Principle and Basic Phonics	**Nonsense Word Fluency (NWF):** The student reads aloud a list of vowel-consonant and consonant-vowel-consonant nonsense words (e.g., sig, rav, ov). The goal is to read whole words, but in the middle of kindergarten a more common response is for students to read the individual sounds (e.g., /s/, /i/, /g/).	If students read a word as individual sounds they get one point for each correct sound under the Correct Letter Sound (CLS) score. If they read the word as a whole word they get one point per sound under the Whole Words Read (WWR) score.	CLS: 17 WWR: n/a
--	**Composite Score**	The sum of the individual subtest scores.	122

Note. The DIBELS Next® manual states that the Letter Naming Fluency measure does not have a strong relationship to early reading skills, but <u>does</u> have a relationship to long term reading ability. For this reason, the test developers recommend using the LNF subtest scores in conjunction with other subtest scores, particularly at the start of the school year.

Not all schools had the same types of score information available. For example, some schools only provided composite scores. Other schools included individual subtest scores as well as composite scores. Still other schools had determined a "composite level" that indicated whether the students' score was at or above benchmark, below benchmark, or well below benchmark. For

the analyses described in this report, when the composite scores were provided with missing composite levels, NCEO calculated them according to information from the test developer (see Table 15).

Table 15. DIBELS Next® Composite Score Level and Score Range

Score Level	Beginning of Year	Middle of Year
At or Above Benchmark	26+	122+
Below Benchmark	13-25	85-121
Well Below Benchmark	0-12	0-84

Source: DIBELS Next® Benchmark Goals and Composite Score (2010)
(https://dibels.uoregon.edu/docs/DIBELSNextFormerBenchmarkGoals.pdf)

Participating Students

Study participants were mainstreamed kindergarten IFEP students in selected Arizona schools and their EO peers enrolled in the same classrooms. English language learners (ELLs) enrolled in mainstream classrooms were not included in the analyses. Table 16 shows the number of students by school district, Arizona service region, school, classroom, and group.

Table 16. Number of Students Included in DIBELS Analysis by District, School, Classroom, and Group

District	Arizona Service Region	Common Core of Data District Locale	Schools	Classrooms	Group	
					IFEP	EO
1	Maricopa Count	Large Suburban	1.1	A	16	9
				B	9	16
				C	7	18
			1.2	A	12	10
				B	12	10
2	West Central	Small City	2.1	A	10	17
				B	3	36
			2.2	A	3	28
				B	2	24
3	Maricopa County	Midsize City	3.1	A	8	23
4	Maricopa County	Large City	4.1	A	5	25
				B	5	23
5	Maricopa County	Large City	5.1	A	13	14
				B	11	15
				C	19	7
Totals (5)			7	15	135	275

Note. This table includes only students who had at least one KPT score.

There were 410 students (275 EO, 135 IFEP) in the selected districts and classrooms who met these criteria and had at least one KPT score, and either a composite DIBELS Next® score or a subtest DIBELS Next® score on file. Table 17 shows the numbers of students (N = 403 total students) who had composite scores for the beginning of the year only, the middle of the year only, or at both times.

Table 17. Numbers of Students, by Group, With DIBELS Next® Composite Scores at Different Testing Times

	Group		
Testing Time	**IFEP**	**EO**	**ALL**
Beginning of Year (BOY) only	2	19	21
Middle of Year (MOY) only	5	25	30
Both BOY & MOY	127	225	352
TOTAL	134	269	403

There were 352 students (IFEP = 127, EO = 225) who had composite scores from **both** the Beginning and Middle of Year DIBELS Next® assessment periods. These "matched case" students with two sets of scores from different time points form the basis for most of the analyses in this section of the report. When this group is not the focus of analysis, it is made clear in the text. (See Appendix F for data from all students with a score at BOY, MOY, or both times.)

DIBELS Next® Composite Scores

Beginning of the Year

Figure 34 shows that on BOY DIBELS Next® composite measures, IFEP students scored at each of the three levels—*At or Above Benchmark, Below Benchmark, Well Below Benchmark* (see Appendix G for detailed sample size information).The majority of IFEP students (55.1%) scored *Well Below Benchmark*. An additional 14.2% of IFEP students scored slightly higher, but still were *Below Benchmark*. EO students' scores show a similar pattern. A majority of the EO students (51.1%) had composite scores that were *Well Below Benchmark*, with an additional 17.3% of EO students scoring slightly higher, but still *Below Benchmark*. Lower composite scores at the beginning of the year are not unexpected because the DIBELS Next® is designed to be responsive to growth in scores over a relatively brief time period (Good & Kaminski, 2011). In addition, as previously mentioned, lower beginning of the year scores may also be related to the fact that students in this study attended schools with school-wide Title I programs designed to serve large populations of low-income, at-risk learners. Kindergarten was the first formal school experience for many students.

At the beginning of the year, roughly one-third of both IFEP students (30.7%) and EO students (31.6%) scored *At or Above Benchmark*. Their letter naming skills and ability to identify initial sounds in words were at, or above expected levels for new kindergarten students who were just starting school. A Chi-square test was conducted and showed that there was not a statistically significant relationship between composite score level and group ($\chi^2 = 0.77$, p = .68), indicating that no significant difference in performance between groups was found.
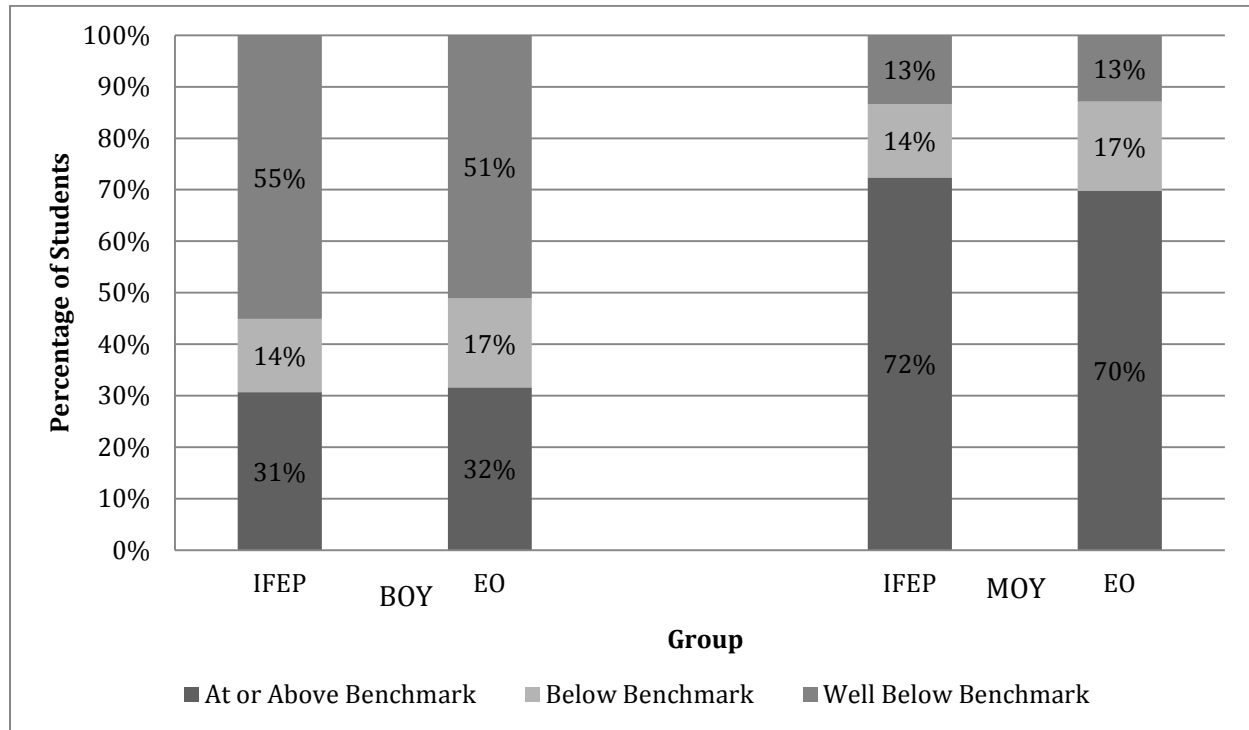
Figure 34. Percentage of IFEP and EO Students in Each DIBELS Next® Composite Score Level at the Beginning of the Year (BOY) and the Middle of the Year (MOY)

Middle of the Year

On MOY DIBELS Next® composite measures, presented in Figure 34, IFEP students again scored at each of the three levels (*At or Above Benchmark, Below Benchmark, Well Below Benchmark*). The majority of IFEP students (72.4%) scored *At or Above Benchmark*. Also, a majority of the EO students (69.8%) scored *At or Above Benchmark*. As stated previously, the MOY composite scores are created by summing the scores for the following subtests: First Sound Fluency (FSF), Letter Naming Fluency (LNF), Phoneme Segmentation Fluency (PSF), and Nonsense Word Fluency (NWF). By the MOY assessment, students presumably have had classroom instruction on at least some of these skills. A Chi-square test was conducted and showed that there was not a statistically significant relationship between composite score levels and students' IFEP or EO group membership ($\chi^2 = 0.60$, p = .74), indicating that no significant difference in performance between groups was found.

In addition to the descriptive analyses in Figure 34, NCEO ran two Chi-Square tests to examine, for "matched cases," the relationship between group membership (i.e., IFEP or EO) and the DIBELS Next® composite score level at each testing time (BOY, MOY). The results of these analyses show that there was no significant difference in DIBELS Next® composite levels for IFEP students compared to EO students at either testing time (BOY: χ^2=1.06, p= .59; MOY: χ^2=.60, p= .74). Rather, the time of testing was the important factor in improved DIBELS Next® scores, with higher scores at the middle of year testing compared to the beginning of year testing.

NCEO also examined the relationship between the time of year the test was administered and the DIBELS Next® composite score level within each group (IFEP or EO). These results showed significant relationships for both the IFEP ($\chi^2 = 53.76$, $p < .0001$) and EO ($\chi^2 = 83.80$, $p < .0001$) groups, indicating that both groups had significant growth between the two time points.

Change Over Time

To investigate changes in performance between BOY and MOY, a cross-tab analysis was conducted of changes in attainment of various performance levels (see Appendix G for detailed information). Figure 35 presents the percentages of students changing their DIBELS Next® composite score levels by one or more levels from the BOY to the MOY administrations. Comparing students' attainment of different levels (based on composite scores), as reflected in Figure 35, is appropriate even though comparing composite scores is not.
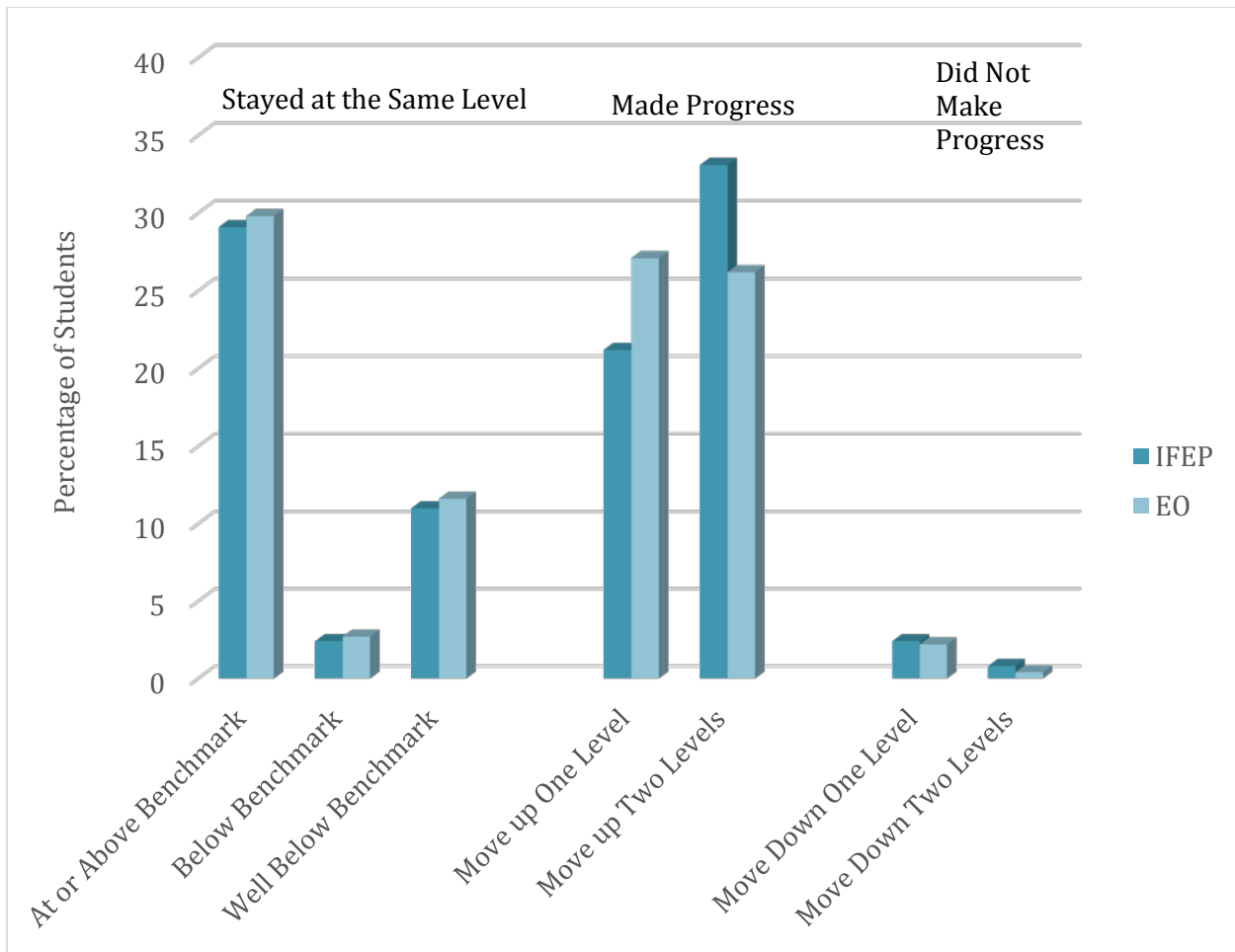
Note. The first set of three bars shows the percentage of students who stayed at the same performance level from BOY to MOY. To Make Progress, students had to have moved up one level (either from "Below Benchmark" at BOY to "At or Above Benchmark" at MOY, or from "Well Below Benchmark" at BOY to "Below Benchmark" at MOY) or two levels (from "Well Below Benchmark" at BOY to "At or Above Benchmark" at MOY). To Not Make Progress, students had to have either moved down one level (either from "At or Above Benchmark" to "Below Benchmark" or from "Below Benchmark" to "Well Below Benchmark") or moved down two levels (from "At or Above Benchmark" to "Well Below Benchmark").

Figure 35. Changes in Students' DIBELS Next® Composite Scores by Level From BOY to MOY

As seen in the Figure 35, approximately 43% of IFEP students and 44% of EO students stayed at the same level for both BOY and MOY administrations. A similar percentage of IFEP and EO students moved from scoring *Below* or *Well Below Benchmark* on the BOY test to scoring *At or Above Benchm*ark on the MOY test. Approximately 54% of IFEP students and 53% of EO students were making progress. Approximately 2/3 of IFEP students who were making progress were more likely to move from *Well Below Benchmark* at BOY test administration to *At or Above Benchmark* at MOY test administration. However, only 49% of EO students were more likely to make same progress as IFEP students.

For both IFEP and EO students, 29-30% of the students in the sample were *At or Above Benchmark* at the beginning of the year and remained *At or Above Benchmark* at the middle of

the year. Added together, the students who moved into the *At or Above Benchmark* and the students who remained there from the beginning of the year represented approximately three-quarters of all students (72.4% of IFEP students; 69.8% of EO students). The remaining students (27.6% of IFEP students; 30.2% of EO students) scored in the *Below Benchmark* and *Well Below Benchmark* levels at mid-year, demonstrating a need for continuing support with early literacy skills for about one-third of students in both groups.

Students With Missing Data

A much smaller number of students had data available for only one testing period (BOY: 21 total – 2 IFEP, 19 EO; MOY: 30 total – 5 IFEP, 25 EO). Appendix H provides information on the scores of these students to offer additional context for the interpretation of the "matched case" students' data.

A total of 51 students (7 IFEP, 44 EO) had a composite score at either the beginning of the year or the middle of the year, but not both. This meant that about 13% of students in the selected classrooms were not included in the "matched cases" analyses.

Analyses were conducted to examine the extent to which the students who had missing data for either BOY or MOY were different in their performance (either significantly lower or higher) compared to those students included in the analyses of "matched cases." Finding a significant difference might indicate that the "matched cases" analysis was biased in either a positive or negative direction. Two analyses were conducted. First, the BOY performance of students with only BOY scores was compared to the BOY performance of students with both BOY and MOY scores. Second, the MOY performance of students with only MOY scores was compared to the performance of students with both BOY and MOY scores. These analyses indicated that there were no significant differences between the students included in the "matched cases" analyses and students who were not included.

DIBELS Next® Subtest Scores

Tables 18 and 19 show the DIBELS Next® mean scores and the standard deviations for the "matched case" students (i.e., students with DIBELS Next® scores from both BOY and MOY) for each time period, respectively. The BOY means in Table 18 indicate that the average IFEP student and the average EO student were likely to score below the kindergarten benchmark goal for each subtest and on the composite score. For example, IFEP students had an FSF subtest mean of 8.3 while EO students had a mean of 7.9. Both of these means were below the benchmark goal of 10.0. All standard deviations were similar for IFEP and EO students.

Table 18. Number of Students Tested, Mean, and Standard Deviation for BOY Subtest and Composite Scores, by Group

Group	IFEP			EO*		
	N**	M**	SD**	N	M	SD
First Sound Fluency(FSF) **Benchmark: 10**	127	8.3	10.4	222	7.9	11.2
Letter Naming Fluency (LNF) **Benchmark: n/a**	127	11.1	12.9	222	11.8	14.2
Composite score **Benchmark: 26**	127	19.4	21.5	225	19.6	22.7

Notes. These numbers represent only the "matched cases" students who had both BOY and MOY composite scores.
*Three EO students had a composite test score but the school did not share the students' subtest scores. Thus the number of EO students varies in each column.
**N = Number of students tested; M = Mean score; SD = standard deviation

One-way MANOVA analyses were conducted separately, both for the beginning and middle of the year, using the matched cases data. For the beginning of the year analysis, the independent variable was the group (IFEP vs. EO) and the dependent variables were the subtest scores collected at BOY time – the FSF Score, LNF Score, and BOY Composite Score. The results of the multivariate test showed no significant differences on the BOY performance between groups (Wilks' $\lambda = .996$, $F(3,345) = .49$, $p = .692$). The multivariate eta-square (η^2) is .004.

Table 19 shows that the mean subtest or composite score of both the IFEP and EO students was typically above the benchmark goal for the middle of the year.[5] Attaining the benchmark goal for the middle of the year means that both groups of students would be likely to meet the end of the year goals given continued instructional support (Good & Kaminski, 2011).

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[5] Some subtests do not have established benchmarks. The LNF subtest is an indicator of risk for reading difficulties, and thus, has no benchmark (Good & Kaminski, 2011). Further, The NWF/WWR score does not have a benchmark at this grade level because students are typically not expected to read whole words until first grade.

Table 19. Number of Students Tested, Mean, and Standard Deviation for MOY Subtest and Composite Scores, by Group*

Group	IFEP*			EO*		
	N**	M**	SD**	N**	M**	SD**
First Sound Fluency (FSF) **Benchmark Goal: 30**	127	41.3	15.3	222	39.5	12.4
Letter Naming Fluency (LNF) **Benchmark Goal: n/a**	127	40.0	18.8	222	37.9	19.6
Phoneme Segmentation Fluency (PSF) **Benchmark Goal: 20**	127	44.2	14.4	222	42.8	19.8
Nonsense Word Fluency/Correct Letter Sounds (NWF/CLS) **Benchmark Goal: 17**	127	28.6	16.4	222	26.0	15.4
Nonsense Word Fluency/Whole Words Read (NWF/WWR) **Benchmark Goal: n/a**	127	1.8	5.3	222	2.5	5.4
Composite Score **Benchmark Goal: 122**	127	155.0	52.2	225	146.8	58.5

Notes. *These numbers represent only the "matched case" students who had <u>both</u> BOY and MOY composite scores Three EO students had a composite test score but the school did not share the students' subtest scores.
**N = Number of students tested; M = Mean score; SD = standard deviation

For the middle of the year analysis, the independent variable was again the group (IFEP vs. EO) and the dependent variables were the subtest scores collected at the MOY time – the FSF Score, LNF Score, PSF Score, NWF CLS, NWF WWR, and MOY Composite Score. The results of multivariate test again showed no significant differences on the MOY performance between groups (Wilks' λ = .965, F (6,342) = 2.03, p = .061). The multivariate eta-square (η^2) is .035.

Repeated Measures

A repeated measures test was conducted to examine whether there were significant differences between group means for the FSF and LNF tests. The adjusted means are shown in Table 20. The results of the repeated measures analysis indicated that there was no significant difference in the means by group membership (i.e., IFEP vs. EO) across the two test administrations. Again, the time of the year that tests were administered played the biggest role in the observed differences in the means (F = 156.38, $p < .0001$, Cohen's f^2=2.069 for FSF; F = 891.82, $p < .0001$, Cohen's f^2=1.099 for LNF). Significantly, higher means were observed at the middle of year compared to the beginning of year.

Table 20. Least Squares Means of the FSF and LNF Subtests by Time of Year and Group

Subtests		Group		Time of Year	
		IFEP	**EO**	**BOY**	**MOY**
FSF	M	25.01	23.02	8.04	39.99
	SD	0.94	0.68	0.71	0.71
LNF	M	25.63	24.53	11.40	38.75
	SD	1.26	0.91	0.90	0.90

Note. SAS proc mixed procedures were used because the spacing between the two test administrations may not have been equal across all students.

Conclusions

Question One. Does the AZELLA Kindergarten Placement Test appropriately classify IFEP students by their ability to access instruction in the classroom?

As part of this project, we conducted classroom observations and gathered teacher reported data about students as well as work samples from high-performing IFEPs and EOs and low-performing IFEPs and EOs. The observations, SIS analysis, and work samples showed that IFEP students are performing about the same as their EO peers. The data generally showed that most IFEP students and most of their peers are performing at grade level in reading, writing, and math and should be ready to move to mainstream classroom in the first grade.

Question Two. Once placed in a non-ELL classroom, are Initially Fluent English Proficient (IFEP) students performing on par with English Only (EO) students in that classroom?

This project analyzed the available DIBELS Next® reading assessment data from the participating Arizona schools and districts. The analysis highlights the finding that, overall, IFEP students and their EO peers in mainstream kindergarten classrooms performed similarly to each other on the beginning and middle of the year formative reading assessments. The data indicated that most of the students in each group were on track to meet the Benchmark Goals for the spring DIBELS Next® administration.

Overall, the findings from both evaluation questions indicated that IFEP students and their EO peers were performing similarly in mainstream kindergarten classrooms. The data generally showed that most IFEP students and most of their peers were performing at grade level in reading, writing, and math, indicating that they should be ready to move to mainstream classrooms in the first grade.

Appendix A. Primary Home Language Other Than English Survey

State of Arizona
Department of Education
Office of English Language Acquisition Services

Primary Home Language Other Than English (PHLOTE)
Home Language Survey
(Effective April 4, 2011)

These questions are in compliance with Arizona Administrative Code, R7-2-306(B)(1), (2)(a-c).

Responses to these statements will be used to determine whether the student will be assessed for English Language Proficiency.

1. **What is the primary language used in the home regardless of the language spoken by the student?** _____

2. **What is the language most often spoken by the student?** _____

3. **What is the language that the student first acquired?** _____

Student Name _____ Student ID _____

Date of Birth _____ SAIS ID _____

Parent/Guardian Signature _____ Date _____

District or Charter _____

School _____

Please provide a copy of the Home Language Survey to the ELL Coordinator/Main Contact on site.

In SAIS, please indicate the student's home or primary language.

1535 West Jefferson Street, Phoenix, Arizona 85007 · 602-542-0753 · www.azed.gov/oelas

Appendix B. Study Instruments

Student Information Sheet – Phase 1

Student's First Name_____ First initial for Last Name _____

Gender (circle one): male female

Language Status (circle one): native English speaker   IFEP   ELL
Home Language(s):_____

Is this student repeating kindergarten (circle): yes   no

When did this student enroll in this class:
____ the first day of school   ____ within the first week of school   ____ within the first month of school
____ other – please explain: _____

How many days has this student attended school?   ____ days of ___ days enrolled
How many times has this student been tardy? _____

Language(s) spoken with other students <u>in the classroom</u> when students are <u>working independently on assigned tasks or projects</u>. Please circle one frequency per language; write additional languages spoken on blank line(s).
   1. English   always   often   sometimes   never
   2. _____   always   often   sometimes   never
   3. _____   always   often   sometimes   never

Language(s) spoken with other students <u>on the playground</u> when students are <u>playing independently</u>. Please circle one frequency per language; write additional languages spoken on blank line(s).
   1. English   always   often   sometimes   never
   2. _____   always   often   sometimes   never
   3. _____   always   often   sometimes   never

1) <u>Phonological awareness skills</u>. Please CIRCLE the level of mastery for each subskill.
          M = Mastery   **A** = Making adequate progress   **B** = Little or no concept understanding

M A B   **Recognizes how many words are in a short sentence**
M A B   **Segments and blends words of at least three syllables**
M A B   **Understands the concept of rhyming**
M A B   **Recognizes and generates rhyming words**
M A B   **Isolates the beginning or ending sounds in words**
M A B   **Segments and blends sounds in a word with three sounds**
M A B   **Changes a sound in a word to make a new word**

2) <u>Reading skills</u>. Please CIRCLE the level of mastery for each subskill.
          M = Mastery   **A** = Making adequate progress   **B** = Little or no concept understanding

M A B   **Recognizes and names all uppercase and lowercase letters of the alphabet**
                 If A or B circled, please indicate how many letters the child recognizes and names
                 _____ / 26 upper case letters   _____ / 28 lower case (includes gothic a and g)
M A B   **Reads simple one-syllable and high frequency words (i.e., sight words)**
                 Please also check the highest range of <u>word reading ability</u> for this student:
                            ____ 0-5 _____ 6-10 _____11-20 _____more than 20 words

3) <u>Reading level</u>. Please indicate the **highest reading ability** for this student.
       _____ Pre-emergent (working on letter ID and developing concepts of print)
       _____ Early Emergent (picture support, repetitive text, natural language, controlled high frequency words, 1 line of text per page)
       _____ Emergent (some picture support, predictable text, more complex sentence structures, more than 1 line of text per page)

_____ Early Fluent (more pages, longer sentences with more complex structure; richer vocabulary, more descriptive text)
_____ Fluent (has made the shift from learning to read to reading to learn)

4) <u>Writing skills</u>. Please CIRCLE the level of mastery for each subskill.
         M = Mastery   **A** = Making adequate progress   **B** = Little or no concept understanding

M A B   **Writes beginning consonant and short vowel letter sound for objects presented in picture form** (sound to symbol association).
         If A or B circled, please check the highest sound to symbol association:
              _____ 0-5   _____ 6-10   _____11-15   _____16-20

M A B   **Independently <u>writes</u> grade-level appropriate high frequency (HF)/sight words**
         Please also check the **highest range of HF/sight <u>word writing ability</u>** for this student:
              ____0 _____1-5 _____6-10 _____11-15 _____15-20 _____20+

5) <u>Writing level</u>. Please check the **highest level of writing ability** for this student.
       _____ Pre-writing (scribble, mock letters, letter strings)
       _____ Early emergent (groups of letters with spaces between to resemble words)
       _____ Emergent (picture labeling, copies environmental print, uses first letter of word to represent word)
       _____ Pre-fluent (uses beginning and ending sounds, includes some medial sounds, print conventions apparent)
       _____ Fluent (writing simple to more complex sentences; most people can easily read this writing)

6) <u>Math skills.</u>
M A B   <u>**Recognizes**</u> **numbers from 0-20 in and out of order**
         If A or B selected, indicate highest number of symbols recognized
                  ___ 0-2 _____ 3-5 _____6-10   11-14 _____15-18
M A B   **Correctly <u>writes</u> numbers from 0-20 out of order from auditory prompt**
         If A or B selected, indicate highest number of symbols correctly written
                  ___ 0-2 _____ 3-5 _____6-10   11-14 _____15-18
M A B   **Counts aloud by 1s to 100**
         If A or B selected, indicate highest number student can count aloud by 1s accurately _____
M A B   **Counts aloud by 5s to 100**
         If A or B selected, indicate highest number student can count aloud by 5s accurately _____
M A B   **Counts aloud by 10s to 100**
         If A or B selected, indicate highest number student can count aloud by 10s accurately _____
M A B   **Counts 20 objects 1:1**
         If A or B selected, indicate highest number student can count 1:1 with accuracy
         _____ fewer than 5   _____6-10   _____11-14   15-20   _____ above 20
M A B   **Recognizes and names basic shapes (circle, square, triangle, rectangle, diamond, heart)**
M A B   **Represents grade level appropriate <u>addition</u> with manipulatives, verbally, and/or in writing**
M A B   **Represents grade level appropriate <u>subtraction</u> with manipulatives, verbally, and/or in writing**

7) Social/behavioral skills. Please circle one level of frequency per question.

Independently finishes most tasks	always	often	sometimes	never
Takes turns and shares in the classroom	always	often	sometimes	never
Exhibits age-appropriate problem-solving skills	always	often	sometimes	never
Sits still and pays attention	always	often	sometimes	never
Is sensitive to the feelings of other students	always	often	sometimes	never
Communicates needs and wants in English	always	often	sometimes	never
Exhibits disruptive behavior in class	always	often	sometimes	never

Academically, how does this student compare to his/her grade level peers? Please circle 1 answer.
                Far below   Slightly below   Same   Slightly above   Far above

Socially, how does this student compare to his/her grade level peers? Please circle 1 answer.
                Far below   Slightly below   Same   Slightly above   Far above

Student Information Sheet – Phase 2

School_____

Teacher's Initials_____

Student's First Name_____   First initial for Last Name _____

SAIS Number_____

Gender (circle one): male   female

Language Status (circle one): English Only   IFEP   ELL

If the student is IFEP, do you think the student has been appropriately identified? (circle one): yes   no

How many days has this student attended school?   _____ days of ____ days enrolled

How many times has this student been tardy? _____

1) <u>Phonological awareness skills</u>. Please CIRCLE the level of mastery for each subskill.
        M = Mastery   **A** = Making adequate progress   **B** = Little or no concept understanding

M A B   **Recognizes how many words are in a short sentence**
M A B   **Segments and blends words of at least three syllables**
M A B   **Understands the concept of rhyming**
M A B   **Recognizes and generates rhyming words**
M A B   **Isolates the beginning or ending sounds in words**
M A B   **Segments and blends sounds in a word with three sounds**
M A B   **Changes a sound in a word to make a new word**

2) <u>Reading skills</u>. Please CIRCLE the level of mastery for each subskill.
        M = Mastery   **A** = Making adequate progress   **B** = Little or no concept understanding

M A B   **Recognizes and names all uppercase and lowercase letters of the alphabet**
        If A or B circled, please indicate how many letters the child recognizes and names
        _____ / 26 upper case letters   _____ / 28 lower case (includes gothic a and g)
M A B   **Reads simple one-syllable and high frequency words (i.e., sight words)**
        Please also check the highest range of <u>word reading ability</u> for this student:
        _____ 0-5 _____ 6-10 _____11-20 _____more than 20 words

3) <u>Reading level</u>. Please indicate the **<u>highest reading ability</u>** for this student.
    _____ Pre-emergent (working on letter ID and developing concepts of print)
    _____ Early Emergent (picture support, repetitive text, natural language, controlled high frequency words, 1 line of text per page)
    _____ Emergent (some picture support, predictable text, more complex sentence structures, more than 1 line of text per page)
    _____ Early Fluent (more pages, longer sentences with more complex structure; richer vocabulary, more descriptive text)
    _____ Fluent (has made the shift from learning to read to reading to learn)

4) <u>Writing skills</u>. Please CIRCLE the level of mastery for each subskill.
        M = Mastery   **A** = Making adequate progress   **B** = Little or no concept understanding

M A B   **Writes beginning consonant and short vowel letter sound for objects presented in picture form** (sound to symbol association).
        If A or B circled, please check the highest sound to symbol association:
        _____ 0-5   _____ 6-10   _____11-15   _____16-20

M A B   **Independently <u>writes</u> grade-level appropriate high frequency (HF)/sight words**

Please also check the **highest range of HF/sight <u>word writing ability</u>** for this student:
____0 _____1-5 _____6-10 _____11-15 _____15-20 _____20+

5) <u>Writing level</u>. Please check the **<u>highest level of writing ability</u>** for this student.

_____ Pre-writing (scribble, mock letters, letter strings)

_____ Early emergent (groups of letters with spaces between to resemble words)

_____ Emergent (picture labeling, copies environmental print, uses first letter of word to represent word)

_____ Pre-fluent (uses beginning and ending sounds, includes some medial sounds, print conventions apparent)

_____ Fluent (writing simple to more complex sentences; most people can easily read this writing)

6) <u>Math skills.</u>

M A B **<u>Recognizes</u> numbers from 0-20 in and out of order**
If A or B selected, indicate highest number of symbols recognized
___ 0-2 _____ 3-5 _____6-10 _____ 11-14 _____15-18

M A B **Correctly <u>writes</u> numbers from 0-20 out of order from auditory prompt**
If A or B selected, indicate highest number of symbols correctly written
___ 0-2 _____ 3-5 _____6-10 _____ 11-14 _____15-18

M A B **Recognizes and names basic shapes (circle, square, triangle, rectangle, diamond, heart)**

M A B **Represents grade level appropriate <u>addition</u> with manipulatives, verbally, and/or in writing**

M A B **Represents grade level appropriate <u>subtraction</u> with manipulatives, verbally, and/or in writing**

7) Social/behavioral skills. Please circle one level of frequency per question.

Independently finishes most tasks	always	often	sometimes	never
Takes turns and shares in the classroom	always	often	sometimes	never
Exhibits age-appropriate problem-solving skills	always	often	sometimes	never
Sits still and pays attention	always	often	sometimes	never
Is sensitive to the feelings of other students	always	often	sometimes	never
Communicates needs and wants in English	always	often	sometimes	never

Academically, how does this student compare to his/her grade level peers? Please circle 1 answer.
Far below   Slightly below   Same   Slightly above   Far above

Socially, how does this student compare to his/her grade level peers? Please circle 1 answer.
Far below   Slightly below   Same   Slightly above   Far above

Is this student ready for Grade 1? (circle one): yes   no

If no, please explain why:_____

Teacher Interview Protocol – Phase 1

Which of the following describes the Kindergarten class we observed?
  a. full-day
  b. morning half-day class
  c. afternoon half-day class
  d. other (specify)

How many hours per day does your class typically meet? _____

How many days per week does your class typically meet? _____

As of today's date, how many boys and girls are in your class?
   a. _____ boys
   b. _____ girls

As of today's date, how many students in your class are considered one of the following:
   a. native English speaker (not tested with the KPT)
   b. initial fluent English proficient (IFEP)
   c. English language learner (ELL)

What district-level assessments for reading does your class use?
   a. DIBELS
   b. Galileo
   c. AIMS-web
   d. Other: _____

What district-level assessments for math does your class use?
   a. Galileo
   b. AIMS-web
   c. Other: _____

In a typical day, how much time does your class spend in the following activities?
   a. teacher-directed whole class activities
   b. teacher-directed small group activities
   c. teacher-directed individual activities
   d. child-selected activities

How much time per day would you estimate that you spend on classroom discipline and handling disruptive behavior?
   a. less than ½ hour per day
   b. ½ hour to less than 1 hour a day
   c. 1 hour to 2 hours per day
   d. 2 or more hours per day

Tell us a little about the lesson we observed today. What were your goals for the lesson?

What standards were you addressing?

For each student in your class, we asked you some questions in advance. We'd like to look at that information now. Do you have any questions about any of those questions?

Are there any of the questions that you would like to highlight for us?

Questions about the teacher:

How many years have you taught Kindergarten? _____

How many years have you taught at this school? _____

What other grades have you taught? _____

Do you have the SEI endorsement? (yes   no)

How many years have you taught students who are ELLs? _____

What other certifications do you have? _____

Is there anything else you would like to add?

Teacher Interview Protocol – Phase 2

Date: _____

School: _____

Teacher's initials: _____

Which of the following describes the Kindergarten class we observed?
- e.   full-day
- f.   morning half-day class
- g.   afternoon half-day class
- h.   other (specify)

As of today's date, how many boys and girls are in your class?
- c.   _____ boys
- d.   _____ girls

As of today's date, how many students in your class are considered one of the following:
- d.   native English speaker (not tested with the KPT)
- e.   initial fluent English proficient (IFEP)
- f.   English language learner (ELL)

Tell us a little about the lesson we observed today. What were your goals for the lesson?

Are there any IFEP students in your classroom who were identified incorrectly? If so, how many? Tell us about those students.

Are there any other students in your classroom who should have been identified as IFEPs? If so, how many? Tell us about those students.

We would also like to collect some samples of your four students' work. We are asking you to provide the following:
1) One sample of a low-achieving IFEP student's work

2) One sample of a low-achieving English Only student's work
3) One sample of a high-achieving IFEP student's work
4) One sample of a high-achieving English Only student's work

What makes these samples of high-/low-achieving work?

Are there any differences to note between the two sets of samples, and are any of these differences specific to language?

Do you have anything else you would like to add?

Questions about the teacher (<u>only if the teacher was not interviewed during Phase 1</u>):

How many years have you taught Kindergarten? _____

How many years have you taught at this school? _____

What other grades have you taught? _____

Do you have the SEI endorsement? (yes   no)

How many years have you taught students who are ELLs? _____

What other certifications do you have? _____

Is there anything else you would like to add?

Appendix C. Classroom Size
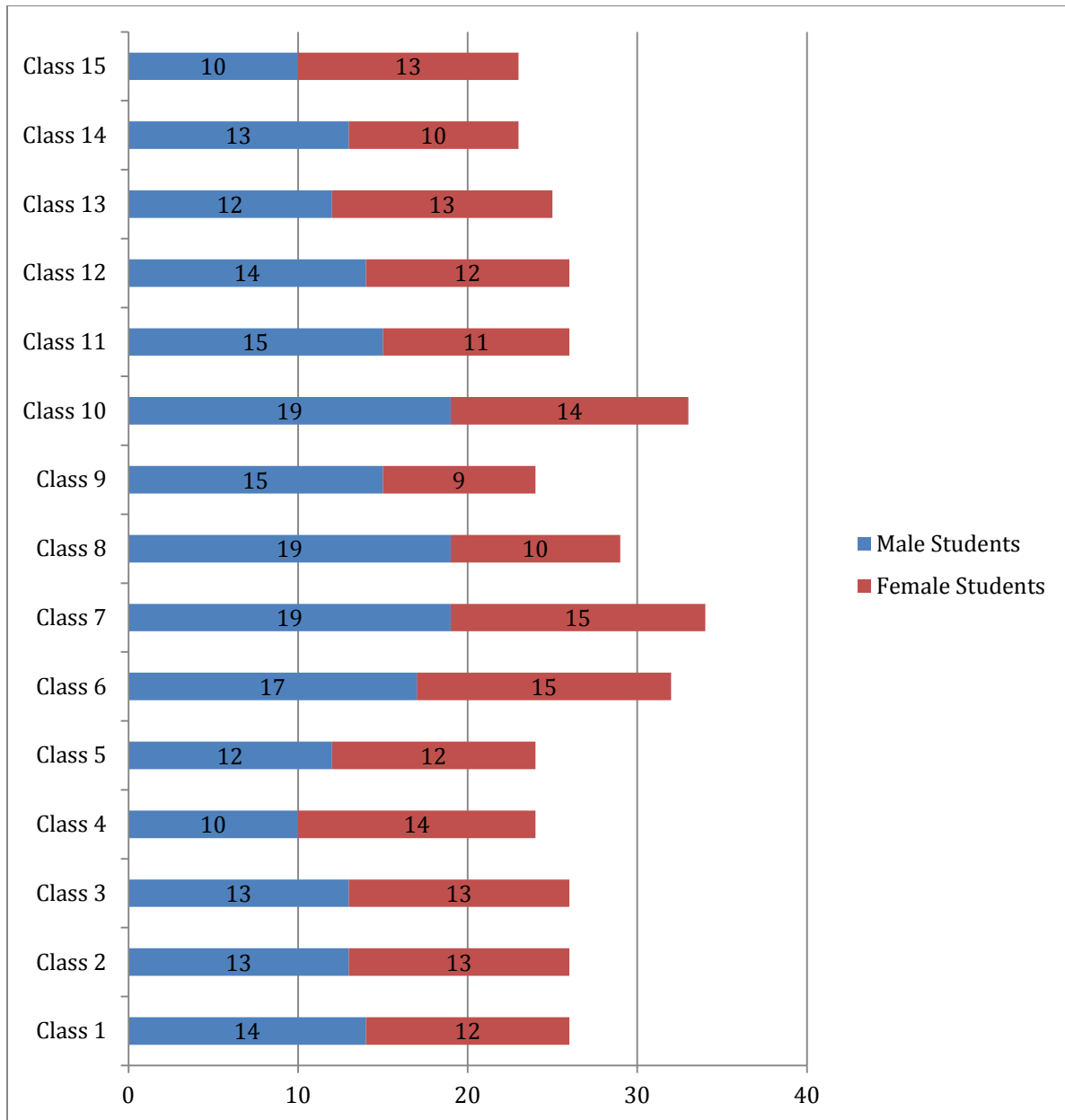
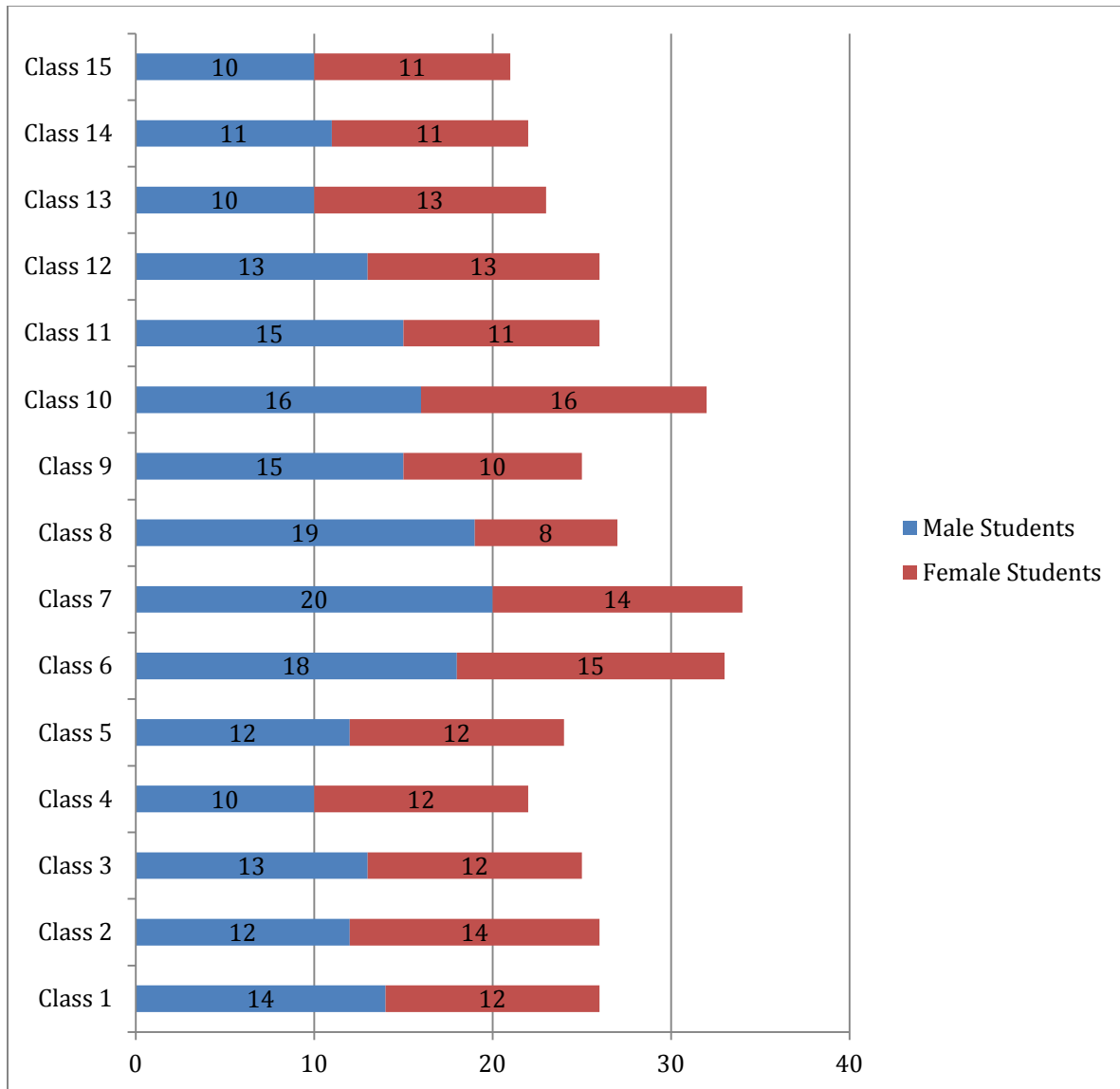**Figure 1. Class Size by Gender, Phase 1**

Figure 2. Class Size by Gender, Phase 2

Appendix D. Student Work Samples

High-Achieving EO

I am with mr Kusin

Me and my Kusin

arn at the Park

⑦

High English

High-Achieving IFEP

I MA SI B!

I aS IB wit n MI

FaM Ieg! (I)
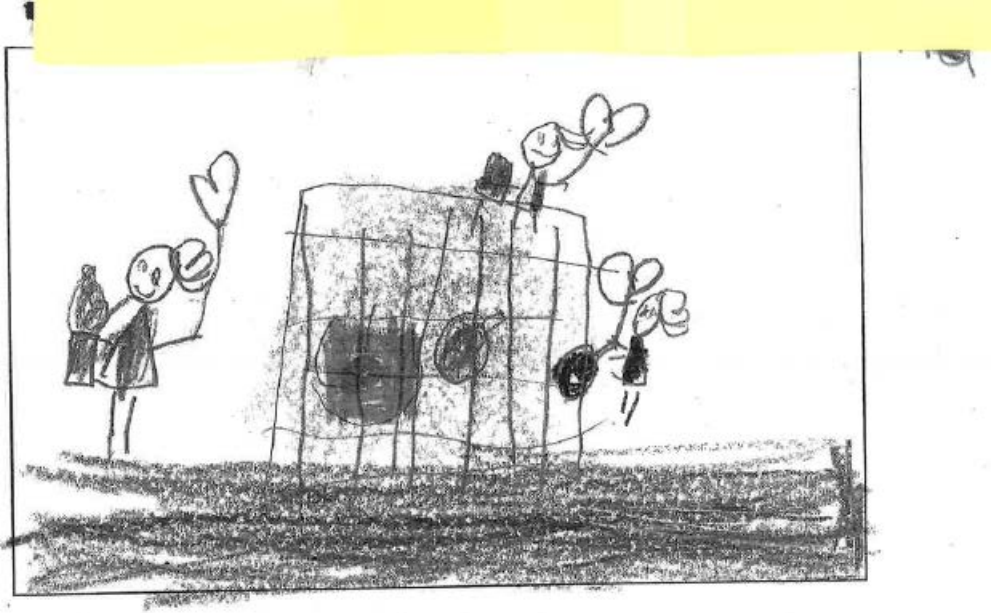
High IFEP

I am outside!
I outside
with my
family!

Wilson Fundations' | ©2011 Wilson Language Training Corporation
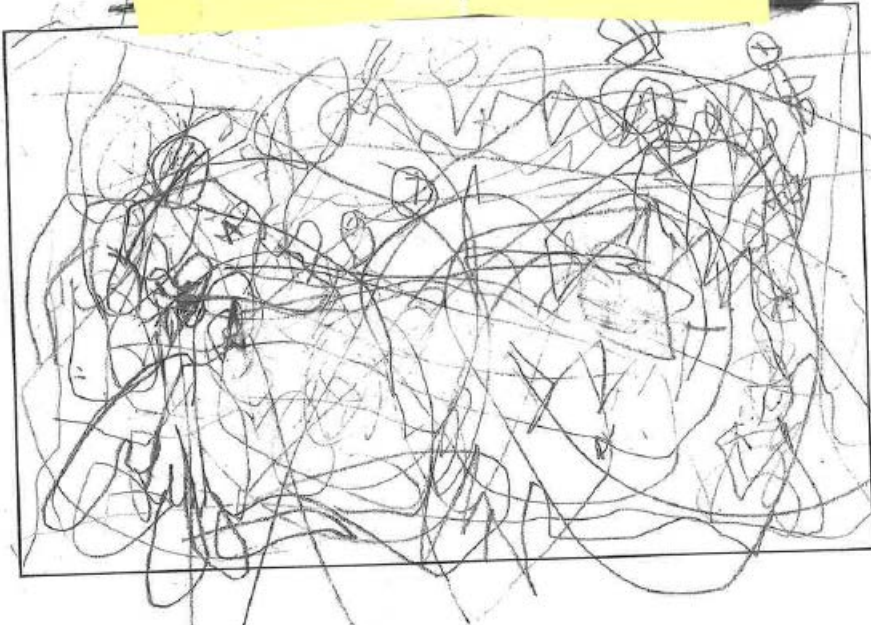
Low-Achieving EO

④

The armies
are shooting.

Low English

Low-Achieving IFEP

The
dinosaur
and me.

⑤

LOW IFEP

High-Achieving EO

First, we Bild Snoo Bos.

Next, we Pit the Bos on the Chuter.

Then, we Pit the Orns.

Last, we have a Snoman.

High-Achieving IFEP

Name _____
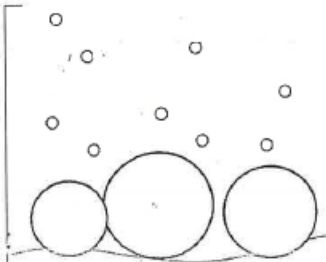
First, rot snowbos.

Next, bil the snobos.

Then, yuo put the has.
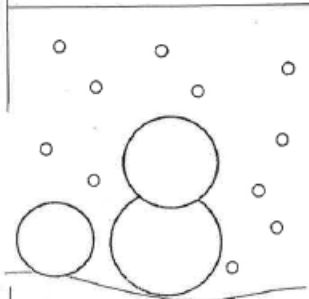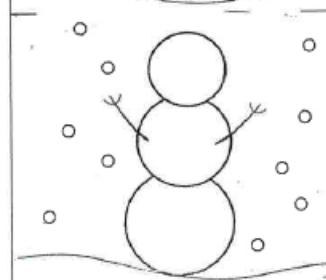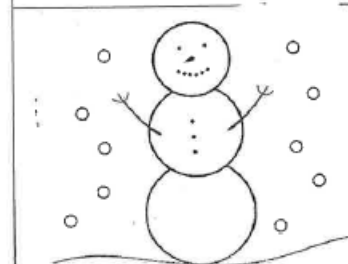
Last, yuo have a snonmen.

Low-Achieving EO

6. What did you learn from "Spiders"?

I feat that

Spiders

70
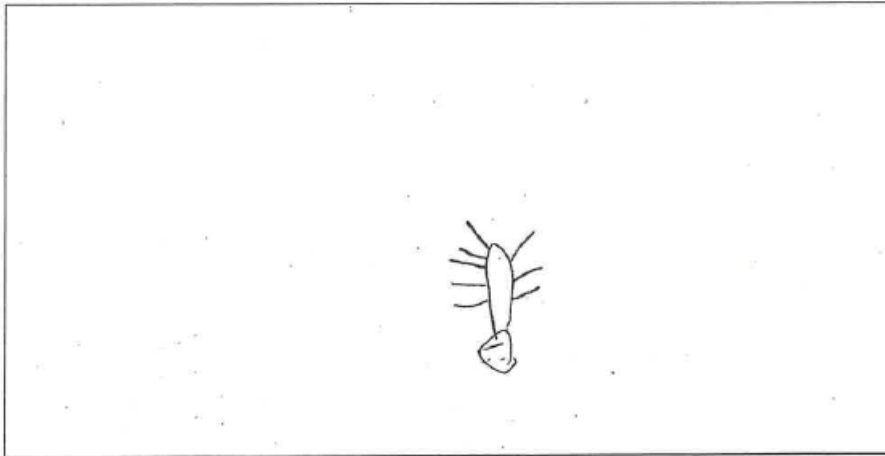
Low-Achieving IFEP

6. What did you learn from "Spiders"?

I loarned

71

First She s wold
gold. It wuz Shine
Then She s wold
Budrfliy. It wuz
fune Becuz the

High-Achieving IFEP

First she swold a daze.

I was werd. Then she

swold a budrfii. Last she popt

t a ranbow.
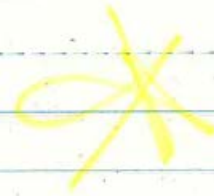
Low-Achieving EO

Medium-High-Achieving (the Lowest) IFEP

First Sho swold a
clovr. It was funo.
Then she swald a
taze. Last – she popt
it a ran home.
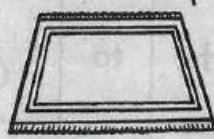
High-Achieving EO

Change One Sound

Directions: Say the name for each picture. Write the sounds you hear. Use the word family at the beginning of each row to help you spell. Read the rhyming words.

1. —op   hop   mop   top

2. —ug   hug   rug   jug

3. —en   hen   men   pen

4. —ap   cap   map   stap

76

High-Achieving IFEP

Change One Sound

Directions: Say the name for each picture. Write the sounds you hear. Use the word family at the beginning of each row to help you spell. Read the rhyming words.

1. **hop**

   hop   mop   top

2. **hug**

   hug   rug   jug

3. **hen**

   hen   men   pen

4. **Cap**

   Cap   map   tap

77

Low-Achieving EO

Di... ...n picture. ... ...ear. Use the word family at the beginning of each row to help you spell. Read the rhyming words.

1.			
-op			
	hofi	mo	top

2.			
-ug			
	whug	phv	jier

with some help

3.			
-en			
	neg	nnter	iotr

Independently

4.			
-ap			
	trd	ten	tnhe

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Low-Achieving IFEP

e Sound

Directions. Say the name for each picture. Write the sounds you hear. Use the word family at the beginning of each row to help you spell. Read the rhyming words.

1.	**-op**		
		pvn mop top	
2.	**-ug**		
		n MAt tug	
3.	**-en**		
		hen men pen	
4.	**-ap**		
		cap MAp tAp	

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Name:

will you come with me

Will you come with
me?

the cat is in thehat

The cat is in the

ilike to see my mom hat.

I like to see my

she can _go to the car mom.

she can go to the.

car.

Name: High IFEP

will you come with me

Will you come with me?

the cat is in thehat

The cat is in the hat.

ilike to see my mom

I like to see my mom.

she can   go to the car

She can go to the car.

Name:

will you come with me

the cat is in thehat

ilike to see my mom

she can   go to the car

Name:

will you come with me

I wtll You Come wtth me?

the cat is in thehat

Ohecat is in fhebat

ilike to see my mom

Ilike to see my momo

she can   go to the car

Shecdn g oto the cars

Appendix E. Sample Size of SIS Responses

Table E1. Number of Students on Each Background Information by Group

		IFEP	EO
Variable		**N**	**N**
Gender	Male	55	85
	Female	54	94
Is the student repeating kindergarten?	Yes	4	3
	No	104	169
	Missing	1	7
When did the student enroll in this class?	The first day of school	85	143
	Within the first week of school	3	11
	Within the first month of school	5	5
	Other	13	17
	Missing	3	3

Table E2. Number of Students on Attendance, Enrollment, and Being Tardy by Group

Group	# Days Attended		# Days Enrolled		# Days Being Tardy	
	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2
IFEP	109	109	109	109	108	109
EO	179	179	179	179	172	179

Table E3. Language Use by EO and IFEP Students

		IFEP	EO
Variable		**N**	**N**
Frequency of spoken English with other students in the classroom	Always	101	170
	Often	7	5
	Sometimes	1	3
	Never	0	0
	Missing	0	1
Frequency of spoken English with other students on the playground	Always	91	168
	Often	14	5
	Sometimes	2	3
	Never	0	0
	Missing	2	3

Table E4. Phonological Awareness Skills at Phases 1 and 2 by EO and IFEP Students

Item	Level	Phase 1					Phase 2				
		Group				All	Group				All
		IFEP		EO			IFEP		EO		
		N	Col%	N	Col%	N	N	Col%	N	Col%	N
Recognizes how many words are in a short sentence	Mastered	52	47.7	72	40.2	124	96	88.1	128	71.5	224
	MAP	50	45.9	74	41.3	124	13	11.9	39	21.8	52
	L/NCU	4	3.7	17	9.5	21	0	0.0	12	6.7	12
	Missing	3	2.7	16	9.0	19					
Segments and blends words of at least three syllables	Mastered	46	42.2	85	47.5	131	88	80.7	114	63.7	202
	MAP	50	45.9	71	39.7	121	19	17.4	49	27.4	68
	L/NCU	13	11.9	22	12.3	35	2	1.8	16	8.9	18
	Missing	0	0.0	1	0.6	1					
Understands the concept of rhyming	Mastered	34	31.2	57	31.8	91	82	75.2	108	60.3	190
	MAP	58	53.2	92	51.4	150	19	17.4	54	30.2	73
	L/NCU	17	15.6	29	16.2	46	8	7.3	17	9.5	25
	Missing	0	0.0	1	0.6	1					
Recognizes and generates rhyming words	Mastered	27	24.8	48	26.8	75	78	71.6	94	52.5	172
	MAP	64	58.7	97	54.2	161	21	19.3	61	34.1	82
	L/NCU	18	16.5	33	18.4	51	10	9.2	24	13.4	34
	Missing	0	0.0	1	0.6	1					
Isolates the beginning or ending sounds in words	Mastered	56	51.4	89	49.7	145	89	81.7	124	69.3	213
	MAP	45	41.3	70	39.1	115	19	17.4	45	25.1	64
	L/NCU	8	7.3	19	10.6	27	1	0.9	10	5.6	11
	Missing	0	0.0	1	0.6	1					
Segments and blends sounds in a word with three sounds	Mastered	58	53.2	92	51.4	150	90	82.6	122	68.2	212
	MAP	44	40.4	61	34.1	105	17	15.6	45	25.1	62
	L/NCU	7	6.4	25	14.0	32	2	1.8	12	6.7	14
	Missing	0	0.0	1	0.6	1					
Changes a sound in a word to make a new word new word	Mastered	28	25.7	66	36.9	94	81	74.3	99	55.3	180
	MAP	66	60.6	77	43.0	143	25	22.9	62	34.6	87
	L/NCU	15	13.8	35	19.6	50	3	2.8	17	9.5	20
	Missing	0	0.0	1	0.6	1	0	0.0	1	0.6	1

MAP = Making Adequate Progress; L/NCU = Little or No Conceptual Understanding

Table E5. Reading Skills at Phases 1 and 2 by EO and IFEP Students

Item	Level	Phase 1					Phase 2				
		Group				All	Group				All
		IFEP		EO			IFEP		EO		
		N	Col%	N	Col%	N	N	Col%	N	Col%	N
Recognizes and names all uppercase and lowercase letters of the alphabet	Mastered	67	61.5	107	59.8	174	94	86.2	138	77.1	232
	MAP	38	34.9	55	30.7	93	14	12.8	31	17.3	45
	L/NCU	3	2.8	15	8.4	18	0	0.0	7	3.9	7
	Missing	1	0.9	2	1.1	3	1	0.9	3	1.7	4
Reads simple one-syllable and high frequency words	Mastered	22	20.2	60	33.5	82	78	71.6	96	53.63	174
	MAP	42	38.5	63	35.2	105	24	22.0	61	34.08	85
	L/NCU	7	6.4	17	9.5	24	6	5.5	17	9.5	23
	Missing	38	34.9	39	21.8	77	1	0.9	5	2.79	6
Range of word reading ability[1]	0-5 words	4	3.7	37	20.7	41	0	0.0	9	5.0	9
	6-10 words	15	13.8	37	20.7	52	6	5.5	19	10.6	25
	11-20 words	28	25.7	22	12.3	50	17	15.6	24	13.4	41
	More than 20 words	50	45.9	72	40.2	122	85	78.0	123	68.7	208
	Missing	12	11.0	11	6.2	23	1	0.9	4	2.2	5
Reading level	Pre-emergent	6	5.5	27	15.1	33	0	0.0	10	5.6	10
	Early Emergent	33	30.3	68	38.0	101	16	14.7	42	23.5	58
	Emergent	53	48.6	59	33.0	112	41	37.6	72	40.2	113
	Early Fluent	14	12.8	17	9.5	31	45	41.3	44	24.6	89
	Fluent	2	1.8	7	3.9	9	7	6.4	11	6.2	18
	Missing	1	0.9	1	0.6	2					

[1] The range of words for "More than 20 words" was entered for students marked by their teachers as Mastered on "Reads simple one-syllable and high frequency words."

MAP = Making Adequate Progress; L/NCU = Little or No Conceptual Understanding

Table E6. Writing Skills at Phases 1 and 2 by EO and IFEP Students

Item	Level	Phase 1					Phase 2				
		Group				All	Group				All
		IFEP		EO			IFEP		EO		
		N	Col%	N	Col%	N	N	Col%	N	Col%	N
Writes beginning consonant and short vowel letter sound for objects presented in picture form (sound to symbol association)	Mastered	51	46.8	78	43.6	129	90	82.6	105	58.7	195
	MAP	51	46.8	72	40.2	123	16	14.7	61	34.1	77
	L/NCU	6	5.5	27	15.1	33	3	2.8	13	7.3	16
	Missing	1	0.9	2	1.1	3					
Number of highest sound to symbol association	0-5 words	12	11.0	28	15.6	40	2	1.8	10	5.6	12
	6-10 words	10	9.2	34	19.0	44	1	0.9	17	9.5	18
	11-15 words	12	11.0	20	11.2	32	4	3.7	19	10.6	23
	16-20 words	65	59.6	86	48.0	151	102	93.6	132	73.7	234
	Missing	10	9.2	11	6.2	21	0	0.0	1	0.6	1
Independently writes grade-level appropriate high frequency high frequency/sight words	Mastered	18	16.5	46	25.7	64	62	56.9	61	34.1	123
	MAP	72	66.1	89	49.7	161	37	33.9	93	52.0	130
	L/NCU	17	15.6	41	22.9	58	8	7.3	22	12.3	30
	Missing	2	1.8	3	1.7	5	2	1.8	3	1.7	5
Number of highest range of high frequency/sight word writing ability	0 words	0	0	13	7.3	13.0	0	0.0	4	2.2	4
	1-5 words	26	23.9	50	27.9	76.0	8	7.3	21	11.7	29
	6-10 words	25	22.9	32	17.9	57.0	9	8.3	23	12.9	32
	11-15 words	15	13.8	17	9.5	32.0	10	9.2	19	10.6	29
	15-20 words	29	26.6	53	29.6	82.0	70	64.2	70	39.1	140
	20+ words	1	0.9	3	1.7	4.0	11	10.1	39	21.8	50
	Missing	13	11.9	11	6.2	24.0	1	0.9	3	1.7	4
Writing level	Pre-emergent	5	4.6	38	21.2	43	2	1.8	17	9.5	19
	Early Emergent	29	26.6	58	32.4	87	5	4.6	38	21.2	43
	Emergent	28	25.7	33	18.4	61	41	37.6	51	28.5	92
	Early Fluent	30	27.5	36	20.1	66	17	15.6	45	25.1	62
	Fluent	16	14.7	13	7.3	29	43	39.5	28	15.6	71
	Missing	1	0.9	1	0.6	2	1	0.9	0	0	1

MAP = Making Adequate Progress; L/NCU = Little or No Conceptual Understanding

Table E7. Math Skills at Phases 1 and 2 by EO and IFEP Students

Item	Level	Phase 1					Phase 2				
		ELL Status				All	ELL Status				All
		IFEP		EO			IFEP		EO		
		N	Col%	N	Col%	N	N	Col%	N	Col%	N
Recognizes numbers from 0-20 in and out of order	Mastered	52	47.7	90	50.3	142	89	81.7	119	66.5	208
	MAP	43	39.5	47	26.3	90	12	11.0	27	15.1	39
	L/NCU	6	5.5	18	10.1	24	1	0.9	12	6.7	13
	Missing	8	7.3	24	13.4	32	7	6.4	21	11.7	28
Highest number of symbols recognized	0-2 numbers	1	0.9	3	1.7	4	0	0.0	2	1.1	2
	3-5 numbers	3	2.8	8	4.5	11	1	0.9	3	1.7	4
	6-10 numbers	14	12.8	29	16.2	43	3	2.8	11	6.2	14
	11-14 numbers	18	16.5	19	10.6	37	6	5.5	9	5.0	15
	15-18 numbers	60	55.1	101	56.4	161	92	84.4	138	77.1	230
	Missing	13	11.9	19	10.6	32	7	6.4	16	8.94	23
Correctly writes numbers from 0-20 out of order from auditory prompt	Mastered	45	41.3	76	42.5	121	90	82.6	116	64.8	206
	MAP	49	45.0	52	29.1	101	11	10.1	30	16.8	41
	L/NCU	8	7.3	17	9.5	25	1	0.9	12	6.7	13
	Missing	7	6.4	34	19.0	41	7	6.4	21	11.7	28
Highest number of symbols correctly written	0-2 numbers	0	0.0	6	3.4	6	0	0.0	2	1.1	2
	3-5 numbers	3	2.8	6	3.4	9	1	0.9	6	3.4	7
	6-10 numbers	13	11.9	14	7.8	27	3	2.8	14	7.8	17
	11-14 numbers	20	18.4	15	8.4	35	6	5.5	11	6.2	17
	15-18 numbers	51	46.8	86	48.0	137	97	89.0	140	78.2	237
	Missing	22	20.2	52	29.1	74	2	1.8	6	3.4	8
Recognizes and names basic shapes	Mastered	57	52.3	110	61.5	167	94	86.2	148	82.7	242
	MAP	39	35.8	47	26.3	86	15	13.8	27	15.1	42
	L/NCU	3	2.8	5	2.8	8	0	0.0	3	1.7	3
	Missing	10	9.2	17	9.5	27	0	0.0	1	0.6	1
Represents grade level appropriate addition with manipulatives, verbally, and/or in writing	Mastered	28	25.7	47	26.3	75	76	69.7	114	63.7	190
	MAP	62	56.9	89	49.7	151	32	29.4	55	30.7	87
	L/NCU	13	11.9	20	11.2	33	1	0.9	9	5.0	10
	Missing	6	5.5	23	12.9	29	0	0.0	1	0.6	1
Represents grade level appropriate subtraction with manipulatives, verbally, and/or in writing	Mastered	13	11.9	33	18.4	46	32	29.4	56	31.3	88
	MAP	40	36.7	80	44.7	120	28	25.7	59	33.0	87
	L/NCU	10	9.2	23	12.9	33	1	0.9	9	5.0	10
	Missing	46	42.2	43	24.0	89	48	44.0	55	30.7	103

MAP = Making Adequate Progress; L/NCU = Little or No Conceptual Understanding

Table E8. Social/Behavioral Skills at Phases 1 and 2 by EO and IFEP Students

Item	Level	Phase 1 Group IFEP N	Phase 1 Group IFEP Col%	Phase 1 Group EO N	Phase 1 Group EO Col%	Phase 1 All N	Phase 2 Group IFEP N	Phase 2 Group IFEP Col%	Phase 2 Group EO N	Phase 2 Group EO Col%	Phase 2 All N
Independently finishes most tasks	Always	48	44.0	65	36.3	113	78	71.6	74	41.3	152
	Often	32	29.4	49	27.4	81	20	18.4	57	31.8	77
	Sometimes	21	19.3	52	29.1	73	7	6.4	38	21.2	45
	Never	7	6.4	13	7.3	20	4	3.7	10	5.6	14
	Missing	1	0.9	0	0	1					
Takes turns and shares in the classroom	Always	48	44.0	67	37.4	115	81	74.3	76	42.5	157
	Often	43	39.5	82	45.8	125	22	20.2	72	40.2	94
	Sometimes	15	13.8	28	15.6	43	6	5.5	30	16.8	36
	Never	2	1.8	2	1.1	4	0	0.0	1	0.6	1
	Missing	1	0.92	0	0	1					
Exhibits age-appropriate problem-solving skills	Always	41	37.6	48	26.8	89	77	70.6	63	35.2	140
	Often	46	42.2	80	44.7	126	24	22.0	75	41.9	99
	Sometimes	18	16.5	45	25.1	63	8	7.3	37	20.7	45
	Never	2	1.8	6	3.4	8	0	0.0	4	2.2	4
	Missing	2	1.8	0	0	2					
Sits still and pays attention	Always	40	36.7	56	31.3	96	70	64.2	53	29.6	123
	Often	41	37.6	53	29.6	94	17	15.6	63	35.2	80
	Sometimes	22	20.2	66	36.9	88	20	18.4	61	34.1	81
	Never	4	3.7	4	2.2	8	2	1.8	1	0.6	3
	Missing	2	1.83	0	0	2	0	0	1	0.56	1
Is sensitive to the feelings of other students	Always	49	45.0	74	41.3	123	84	77.1	86	48.0	170
	Often	44	40.4	77	43.0	121	19	17.4	62	34.6	81
	Sometimes	14	12.8	27	15.1	41	6	5.5	30	16.8	36
	Never	1	0.9	1	0.6	2	0	0.0	1	0.6	1
	Missing	1	0.9	0	0	1					
Communicates needs and wants in English	Always	103	94.5	172	96.1	275	106	97.3	172	96.1	278
	Often	4	3.7	4	2.2	8	2	1.8	4	2.2	6
	Sometimes	0	0.0	3	1.7	3	1	0.9	3	1.7	4
	Never										
	Missing	2	1.8	0	0.0	2					

Table E9. General Questions on Performance by EO and IFEP Students

Item	Level	Phase 1					Phase 2				
		Group				All	Group				All
		IFEP		EO			IFEP		EO		
		N	Col%	N	Col%	N	N	Col%	N	Col%	N
Academically, how does this student compare to his/her grade level peers	Far Above	4	3.7	7	3.9	11	9	8.3	8	4.5	17
	Slightly Above	31	28.4	25	14.0	56	29	26.6	27	15.1	56
	Same	47	43.1	90	50.3	137	54	49.5	91	50.8	145
	Slightly below	16	14.7	33	18.4	49	11	10.1	35	19.6	46
	Far below	10	9.2	23	12.9	33	6	5.5	18	10.1	24
	Missing	1	0.9	1	0.6	2					
Socially, how does this student compare to his/her grade level peers	Far Above	2	1.8	3	1.7	5	3	2.8	4	2.2	7
	Slightly Above	13	11.9	7	3.9	20	15	13.8	7	3.9	22
	Same	79	72.5	137	76.5	216	84	77.1	135	75.4	219
	Slightly below	11	10.1	25	14.0	36	4	3.7	23	12.9	27
	Far below	3	2.8	7	3.9	10	2	1.8	10	5.6	12
	Missing	1	0.9	0	0.0	1	1	0.9	0	0.0	1
Is the student ready for Grade 1?	Yes						96	88.1	149	83.2	245
	No						6	5.5	15	8.4	21
	Missing						7	6.4	15	8.4	22

Appendix F. Students With BOY or MOY Composite Score(s)

The "matched cases" data in the paper are based on 225 EO and 127 IFEP students. There were 275 EO and 135 IFEP students who had a composite score either at the beginning of the year (BOY) or middle of the year (MOY), or at both times. Tables A1-A4 show the data for all students with BOY, MOY, or both times data.

Table F1. Number (N), Mean (M), and Standard Deviation (SD) of BOY Reading Subtest Scores of All Students With a Score at BOY, MOY, or Both

Group	IFEP (N=129)		EO		
	M	SD	N	M	SD
First Sound Fluency (FSF)	8.4	10.3	241	8.0	11.5
Letter Naming Fluency (LNF)	11.0	12.9	241	12.0	14.5
Composite Score	19.4	21.3	244	20.0	23.3

Note. Three EO students had a composite test score but the school did not provide the students' subtest scores. Thus, the number of EO students varies in each column.

Table F2. Number of Students, by Group, in Each BOY DIBELS Next® Composite Score Level for All Students With a Score at BOY

DIBELS Next® Composite Score Level	Group			
	IFEP		EO	
	N	Col%	N	Col%
At or Above Benchmark	39	30.2	77	31.6
Below Benchmark	20	15.5	43	17.6
Well Below Benchmark	70	54.3	124	50.8

Table F3. Number (N), Mean (M), and Standard Deviation (SD) of MOY Subtest Scores for All Students With a Score at MOY

DIBELS Next® Subtest	Group				
	IFEP (N=132)		EO		
	M	SD	N	M	SD
First Sound Fluency (FSF)	41.5	12.3	247	38.4	16.0
Letter Naming Fluency (LNF)	40.2	19.3	247	37.2	18.9
Phoneme Segmentation Fluency (PSF)	44.6	14.3	247	42.0	20.3
Nonsense Word Fluency/Correct Letter Sounds (NWF/CLS)	28.7	16.3	247	25.2	15.6
Nonsense Word Fluency/Whole Words Read (NWF/WWR)	1.7	5.2	247	2.3	5.2
Composite Score	156.0	51.6	250	143.4	60.0

Note. Three EO students had a composite test score but the school did not share the students' subtest scores.

Table F4. Number of Students, by Group, in Each MOY DIBELS Next® Composite Score Level for All Students With a Score at MOY

DIBELS Next® Composite Score Level	IFEP		EO	
	N	Col%	N	Col%
At or Above Benchmark	97	73.5	169	67.6
Below Benchmark	18	13.6	43	17.2
Well Below Benchmark	17	12.9	38	15.2

Appendix G. Sample Size Information for DIBELS Next®

Table G1. Percentage of Students, by Group, in Each DIBELS Next® Composite Score Level at the Beginning of the Year (BOY) and the Middle of the Year (MOY)

Testing Time	DIBELS Next® Composite Score Level	Group	
		IFEP (N=127)	EO (N=225)
Beginning of the Year	At or Above Benchmark	30.7	31.6
	Below Benchmark	14.2	17.3
	Well Below Benchmark	55.1	51.1
Middle of the Year	At or Above Benchmark	72.4	69.8
	Below Benchmark	14.2	17.3
	Well Below Benchmark	13.4	12.9

Note. These numbers represent only the "matched case" students who had <u>both</u> BOY and MOY composite scores. The numbers in the parentheses are the percentages of students at the particular composite level within a group.

Table G2. Number and Percentage[1] of Students, by Group, in Each DIBELS Next® Composite Score Level at the Beginning of the Year (BOY) and Middle of the Year (MOY)

Group	BOY Composite Score Level	MOY Composite Score Level					
		At or Above Benchmark		Below Benchmark		Well Below Benchmark	
		N	%	N	%	N	%
IFEP (n=127)	At or Above Benchmark	37	29.1	1	0.8	1	0.8
	Below Benchmark	13	10.2	3	2.4	2	1.6
	Well Below Benchmark	42	33.1	14	11.0	14	11.0
EO (n=225)	At or Above Benchmark	67	29.8	3	1.3	1	0.4
	Below Benchmark	31	13.8	6	2.7	2	0.9
	Well Below Benchmark	59	26.2	30	13.3	26	11.6

[1] The percentages were calculated by using the total of students in each group as the denominator. Thus, all the percentages within a group sum up to 100%.

Appendix H. Students With Missing Data

DIBELS scores for students with data only at one time (either BOY or MOY) are presented in Tables E1-E4.

Table H1. Number of Students With Only BOY Scores, by Group, in Each DIBELS Next® Composite Score Level

DIBELS Next® Composite Score Level	Group			
	IFEP		EO	
	N	Col %	N	Col%
At or Above Benchmark	0	0.0	6	31.6
Below Benchmark	2	100.0	4	21.0
Well Below Benchmark	0	0.0	9	47.4
Total	2		19	

Note. These numbers represent the students who had <u>only</u> BOY composite scores and thus were not included in the "matched cases" analyses.

Table H2. Number of Students With Only MOY Scores, by Group, in Each DIBELS Next® Composite Score Level

DIBELS Next® Composite Score Level	Group			
	IFEP		EO	
	N	Col %	N	Col%
At or Above Benchmark	5	100.0	12	48.0
Below Benchmark	0	0.0	4	16.0
Well Below Benchmark	0	0.0	9	36.0
Total	5		25	

Note. These numbers represent the students who had <u>only</u> MOY composite scores and thus were not included in the "matched cases" analyses.

Table H3. Number Tested, Mean, and Standard Deviation of Students With Only BOY Subtest and Composite Scores, by Group

Subtest	Group					
	IFEP			EO		
	N	M	SD	N	M	SD
First Sound Fluency (FSF) Benchmark Goal: 10	2	13.5	7.8	19	8.5	14.6
Letter Naming Fluency (LNF) Benchmark Goal: n/a	2	2.5	3.5	19	15.1	17.6
Composite Score Benchmark Goal: 26	2	16.0	4.2	19	23.6	29.7

Note. These numbers represent the students who had <u>only</u> BOY composite scores.

Table H4. Number and Percentage Tested, Mean, and Standard Deviation of Students <u>With Only MOY Subtest and Composite Scores</u>, by Group

Subtest	Group					
	IFEP			EO		
	N	M	SD	N	M	SD
First Sound Fluency (FSF) **Benchmark Goal: 30**	5	48.0	3.7	25	28.8	19.0
Letter Naming Fluency (LNF) **Benchmark Goal: n/a**	5	45.8	9.0	25	30.9	19.2
Phoneme Segmentation Fluency (PSF) **Benchmark Goal: 20**	5	54.4	8.0	25	35.6	23.3
Nonsense Word Fluency/Correct Letter Sounds (NWF/CLS) **Benchmark Goal: 17**	5	33.4	12.4	25	17.8	15.5
Nonsense Word Fluency/Whole Words Read (NWF/WWR) **Benchmark Goal: n/a**	5	1.0	2.2	25	0.8	2.5
Composite Score **Benchmark Goal: 122**	5	181.6	22.9	25	113.0	66.1

Notes. These numbers represent the students who had <u>only</u> MOY composite scores.