



# Evaluation Brief

January 2007

Department of Shared Accountability

## Evaluation of the Implementation of Elementary English for Speakers of Other Languages Title I Funded Initiatives: Summary of Data from 2004–2005 Web-based ESOL Services Log

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### Background

The Web-based English for Speakers of Other Languages (ESOL) services data collection application was developed through collaboration with the Division of Academic Support, Federal and State Programs; the Department of Shared Accountability (DSA); and the Division of ESOL/Bilingual Programs. ESOL teachers in Title I schools provided extensive feedback in the development of the ESOL services log to improve the accuracy, format, and usability.

The purpose of the Web-based ESOL log was to facilitate the systematic collection of in-depth, reliable, and comparable data across schools on services provided to individual students in prekindergarten to Grade 5. This brief describes the implementation of the log and general trends in ESOL services provided during the 2004–2005 school year. Data linking ESOL services with student outcomes will be presented in a separate brief.

### Methodology

Eighty-one ESOL teachers serving approximately 2500 English language learners (ELLs)—convenient sample of 11 Title I schools and 7 randomly selected non-Title I schools—were expected to complete the ESOL logs from November 2004 to May 2005. For each ESOL session, teachers reported on the following variables: session date, ESOL group, number of students, minutes of instruction, curriculum guides used, model of instruction (pullout, plug-in/pull-aside, plug-in/co-teach, and consult only), or reason if session missed. The teachers also maintained an online roster of their ESOL students. The teachers were expected to update the ESOL log on a weekly basis. To ensure data quality and consistency, teachers received hands-on training, a user manual with definitions for each field, and ongoing support from DSA. The data were downloaded through a Web-based interface. The data were aggregated by month of service, by unique student

identifiers and matched with the students' data files. The resulting data set was an aggregate of the ESOL services received by an individual student per month, for the duration of the data collection period. Log entries from November 2004 and June 2005 were excluded from the analyses because the majority of teachers did not submit data. Incomplete data entries and entries associated with students whose unique identifiers and ESOL instructional levels could not be determined from the student information databases were also excluded. The final data consisted of 11,608 log entries for 1,751 students. Using the ESOL session as a unit of analysis, the data were summarized and descriptive statistics for the instructional variables were computed.

### Summary of Major Findings

The log provided a way for ESOL teachers in multiple school sites to track the amount of time they spent working with individual students and actual instructional services provided during each contact. The data showed that the majority of students received at least one ESOL session daily or every other day. The sessions lasted an average of 38 minutes, with shorter sessions for prekindergarten and kindergarten students. Beginning ESOL students received more minutes of instruction overall, compared with their intermediate and advanced peers. This finding was indicative that ESOL instruction was being targeted to the instructional level of the students.

More than half of the teachers provided ESOL services to six or fewer groups. Most of the groups consisted of fewer than 10 students.

Although MCPS grade-specific ESOL curricula were available, they were not reported universally to plan for instruction. The analyses suggest that a variety of instructional guides were used to plan instruction. More than half of the ESOL sessions in the sample (53.2%) were delivered using the pullout model only.

The plug-in/pull-aside and the plug-in/co-teach models were used almost equally (~45%) for prekindergarten sessions. The consult only model was used exclusively for only three percent of sessions recorded.

Notably, the amount of targeted instruction and the consistency in instruction were hindered by the number of missed sessions, when an entire ESOL group did not meet. On average, the students lost/missed close to a full month of ESOL sessions (12 sessions) from December 2004 to May 2005.

In addition to state and local testing, ELL meetings, and/or field trips and school assemblies ranked high on the list of reasons for missed ESOL sessions. This finding implies that the day and timing of ESOL sessions coincided with these events.

To improve its capability and accommodate more functions, the log was integrated with the Online Administrative Student Information System (OASIS) at the end of 2004–2005 school year. This integration eliminated the need to maintain a student roster and blocked off holidays on the instructional calendar. This change is expected to decrease the amount of time teachers spend entering data, reduce data entry errors, and reduce the likelihood of incomplete service records. Future versions of the ESOL log will track student absences from the sessions, as well as student mobility in classrooms within a school and across schools.

## Discussion of Findings

### Grouping of Students for ESOL Instruction

Three fifths (60.4%) of the teachers in the sample provided ESOL services to six or fewer ESOL groups. Most of these ESOL groups (89.8%) were made up of 10 students or fewer. A small proportion of students (fewer than 5%) received services from more than one ESOL group or teacher. There was no discernable pattern in the data on how students were grouped for instruction (Appendix Table A1).

### Amount of ESOL Instruction

Overall, the students received an average of 14 sessions per month, and the average duration of each session was 38 minutes but this varied by grade and ESOL level<sup>1</sup> (Figure 1). At each grade level, sessions for beginning ESOL students lasted longer than for

intermediate and advanced ESOL students. Also, with the exception of Grades 2 and 4 students in the sample, sessions for the advanced ESOL students were shorter than for their intermediate peers.

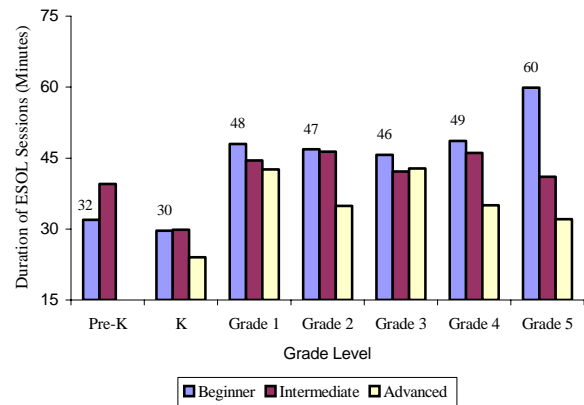


Figure 1. Mean duration of ESOL sessions by grade and ESOL level.

While more than 50% of the sessions lasted for 30 minutes, the average duration for Grades 1–5 was longer than 40 minutes. Also, the pre-K and kindergarten ESOL sessions were, on average, shorter than 30 minutes (Appendix Table A2 and A3).

Accordingly, the beginning ESOL students received 72 hours of instruction (4,302.02 minutes) from December 2004 to May 2005 compared with 61 and 52 hours for their intermediate and advanced peers (3,637.42 and 3,064.33 minutes, respectively). Given their fewer and shorter sessions, prekindergarten and kindergarten received less minutes of instruction overall (Figure 2). Missed sessions decreased the total minutes of instruction recorded for Grade 2–5 students.

### Use of Instructional Guides

For beginning students, the use of the ESOL (20.5%), Reading/Language arts (R/LA) (20.8%) or both the ESOL and R/LA (19.9%) instructional guides was fairly evenly distributed.

<sup>1</sup> Beginning or ESOL level 1, intermediate or ESOL level 2, or advanced or ESOL level 3, (MCPS [n.d.]).

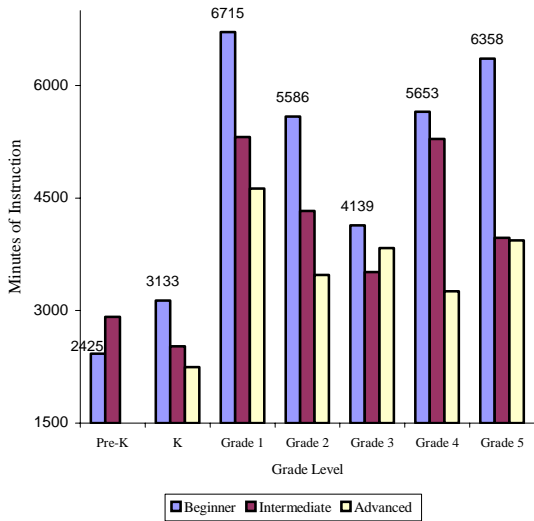


Figure 2. Mean minutes of ESOL instruction from December 2004 to May 2005 by grade and ESOL level.

The R/LA guide was the primary guide used to plan instruction for 29.5% of intermediate students. The ESOL (27.3%) or both the ESOL and R/LA (29.4%) guides were used to the same extent to plan ESOL instruction for advanced students (Appendix Table A4).

The ESOL guide was the primary instructional guide for 29.2% of Grade 1 and 37.7% of Grade 2 sessions. The R/LA was the primary instructional guide used to plan instruction for 39.0% of prekindergarten and 30.0% of kindergarten sessions. A combination of the ESOL and R/LA was the primary guide for 62.8% of Grade 3 instruction, 33.1% of Grade 4, and 27.1% of Grade 5 (Appendix Table A5).

### Models of ESOL Instruction

The pullout model was used for 68% of ESOL instructional time (Figure 3). More than half of the recorded sessions (53.2%) were delivered using only the pullout model. Taking all sessions in the sample into account, the percentages of instructional time used for each model varied by grade, as illustrated in Figure 4. As the percentage of time allotted to the pullout model increased, less use of the plug-in/co-teach or plug-in/pull-aside models was observed and vice-versa.

Compared to Grades 1–5, a slightly lower percentage of time was used for the pullout model (58.0%), with consequent increases in the uses of the plug-in/pull-aside (25%) and the plug-in/co-teach (12.0%) models in kindergarten.

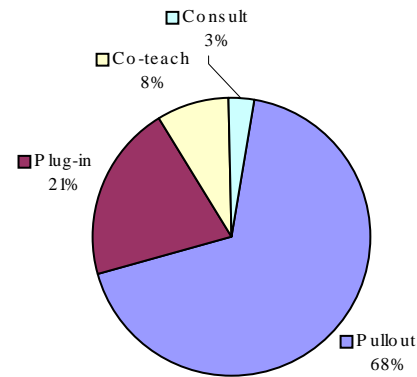


Figure 3. For all sessions in the sample, percentage of instructional time for each instructional model.

Conversely, there was minimal use of the pullout model (<10%) and more intense use of the plug-in/pull-aside (40.0%) and the plug-in/co-teach (49.0%) models in prekindergarten (Figure 4). These patterns did not vary from month to month.

The only choice for the use of the consult only model was 100%. As such, the consult only model was used exclusively (100%) for about 3% ( $n=284$ ) of the sessions in the sample.

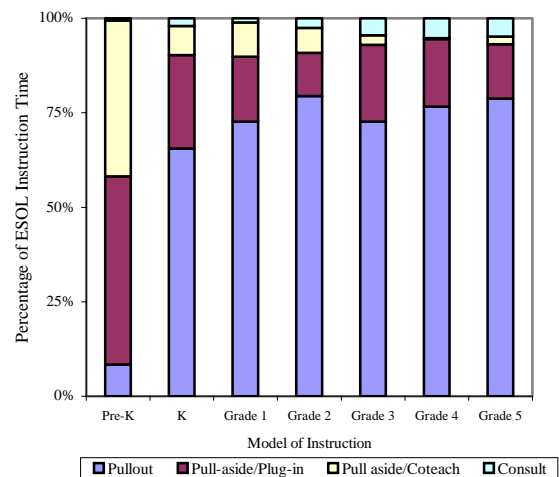


Figure 4. Percentage of ESOL instructional time used for each model of instruction by grade level.

The consult only support may include modeling appropriate instructional strategies in the non-ESOL classroom. It also includes providing input and advice

at grade level team meetings about instructional strategies, activities, and materials that benefit ELLs, facilitate language learning, and promote a multicultural curriculum (Division of ESOL/Bilingual Programs and Department of Shared Accountability, 2004). Feedback from teachers completing the logs indicated a lack of clarity and consistency on how to enter data pertaining to the use of the consultative model. Therefore, the data on the consult only model may not be complete.

Unlike the use of the other models, the extent of use of the plug-in/co-teach and consult models varied slightly by ESOL level. Less use of the pull-aside/co-teach and higher use of the consult only model was observed for advanced-level students (Appendix Figure 4a).

### Consistency in ESOL Instruction

ESOL instruction was interrupted and reduced due to missed sessions. More than 20% of ESOL service records represented missed sessions. ESOL instruction was interrupted most often during the months of February, March, and April 2005 due to state and local testing. The students missed an average of three ESOL sessions per month.

From December 2004 to May 2005, the students in the sample missed an average of 11 sessions. During the month of April, the students in the sample missed an average of seven ESOL sessions (Appendix Table A6).

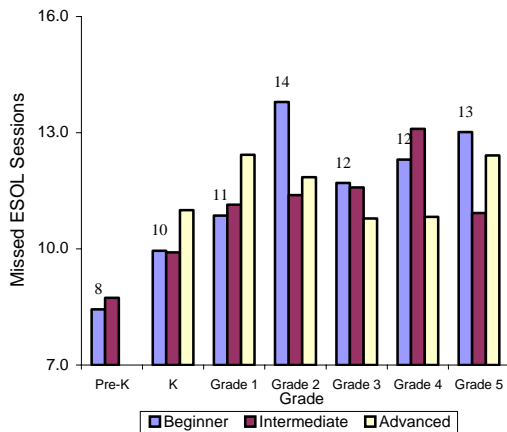


Figure 5. Mean missed ESOL sessions from December 2004 to May 2005 by grade and ESOL level.

The majority of missed sessions were due to state and local testing—the Comprehensive Tests of Basic Skills (CTBS), Gifted and Talented (GT) global screening, Maryland State Assessment (MSA), and IDEA

Proficiency Test (IPT) (26%)—or the ELL committee meetings (20.6%). The testing schedule impacted beginning ESOL students in Grades 2 and 5 the most. On average, these students missed more ESOL sessions than their intermediate or advanced peers (Figure 5).

### Recommendations

- Conduct analyses that link ESOL services data to student achievement.
  - a. Examine the impact of ESOL instruction on achievement of ESOL students and exited ESOL students, as measured by performance on state and local assessments.
  - b. Examine the impact of more instructional time on the progress of beginning (level 1) students on English language acquisition and proficiency in reading and mathematics.
- Continue to review and revise the instructional variables included in the ESOL log. To enable the researchers to assess the effectiveness of ESOL instruction more accurately, inclusion of the following instructional variables is recommended:
  - a. How class time is allocated across ESOL standards/curriculum units among students at various grade and instructional levels.<sup>2</sup>
  - b. Student activity during ESOL instruction (e.g., read alouds, quick writes, analyzing stories).
  - c. Teacher activity during ESOL lessons (e.g., oral practice, vocabulary building, assessing, checking for understanding).
  - d. Resources—core and supplementary texts used by students and teachers.
  - e. The subjects and specials (i.e. music, art, PE) the ESOL students miss when receiving ESOL instruction.
- Provide new teachers with continuous and readily available training on the use of the ESOL log. This

<sup>2</sup> Alignment between content taught and content assessed predicts 50% of variation in students' assessment scores (Blank and Hill, 2004).

training could include an online module on OASIS.

- Increase teachers' understanding and use of the ESOL services log by targeting training to components about which teachers expressed a lack of clarity, such as grouping of students and the use of consult only model.
- Collect ESOL services data from the start of each school year.
- Validate the self-reported ESOL services data through observational studies.
- Minimize missed ESOL sessions. Develop a mechanism for teachers and administrators to examine how the testing calendar and the scheduling of ELL committee meetings, EMT meetings, and assemblies impact ESOL instruction. This mechanism should include soliciting school-level feedback on feasible ways to make ESOL instruction more consistent.
- Develop a mechanism for teachers and administrators within each school to review and use their ESOL services data. This will allow teachers to collaborate, as well as reflect on their own instructional strategies.

teachers for completing the logs and providing extensive feedback for improving the accuracy and usability of the ESOL log.

## References

Division of ESOL/Bilingual Programs and Department of Shared Accountability (2004). *2004–2005 ESOL services log and student roster guide*.

Blank, R. K. and Hill, S. (2004). Analyzing instructional content and practices using data to improve alignment of science instruction with standards. *The Science Teacher*. Retrieved July 20, 2006, from [http://hub.mspnet.org/media2004SciTeacher.pdf?media\\_00000001017.pdf](http://hub.mspnet.org/media2004SciTeacher.pdf?media_00000001017.pdf)

MCPS. (n.d.). *ESOL instructional (language proficiency) levels: Elementary*. Retrieved on August 22, 2006 from <http://www.montgomeryschoolsmd.org/curriculum/esol/elem/ESOL%20Instructional.pdf>

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**Evaluation of the Implementation of the Elementary English for Speakers of  
Other Languages (ESOL) Program in Title I Schools : Summary of Data from  
2004–2005 Web-based ESOL Services Log**

**Appendix**

Table A1  
Means and Standard Deviations for Number of Sessions, Duration of ESOL Sessions,  
Students per ESOL Group, and Number of Missed Sessions per Month

Characteristic		Number of Sessions			Duration		Students per ESOL Group		Missed Sessions	
		N	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
ESOL Level	1	556	13.4	6.99	39.7	29.55	6	3.14	4.0	3.21
	2	688	13.6	6.79	35.7	24.90	6	3.23	4.1	3.05
	3	501	14.6	6.46	40.6	29.52	5	2.81	3.6	2.77
Grade	Pre-K	317	11.5	6.20	28.2	10.43	8	3.56	2.6	2.90
	K	438	13.2	7.43	28.8	14.00	6	2.89	2.5	2.44
	1	301	14.4	7.09	47.5	32.41	5	2.41	4.2	3.08
	2	234	15.0	6.44	42.1	31.01	6	3.26	4.6	2.94
	3	187	14.8	5.64	50.6	37.94	6	2.96	4.0	3.30
	4	138	15.0	6.09	43.3	32.97	4	2.63	4.3	2.83
Month	December	135	13.5	8.07	30.3	17.00	8	3.81	1.2	3.02
	January	1211	14.1	6.63	40.3	28.51	6	2.98	2.5	2.49
	February	232	11.8	6.56	38.2	27.60	5	2.61	2.4	2.68
	March	81	14.5	6.81	37.3	27.80	4	2.42	5.4	4.23
	April	70	15.1	6.04	23.5	28.07	4	3.73	9.3	5.66
	May	22	15.9	6.59	37.6	24.66	4	1.98	3.4	2.07

Table A2  
Means and Standard Deviations for Total\* Number of ESOL Sessions,  
Number of Missed ESOL Sessions and Minutes of Instruction by Grade

Grade	N	Sessions		Missed Sessions		Total Minutes of Instruction	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Pre-K	330	68.4	82.5	11.5	5.84	1964.6	3916.12
K	460	85.7	95.8	12.3	5.96	2256.6	3650.46
1	319	117.3	66.8	11.4	4.76	5264.4	1657.79
2	244	87.0	88.9	12.1	5.94	3673.7	1833.61
3	192	73.4	114.9	12.1	6.54	3659.2	4156.33
4	138	86.2	80.5	8.6	5.91	4177.6	2863.51
5	130	96.2	73.4	10.3	5.45	4313.2	3113.64

Note: \*Aggregated data for six months, from December 2004 to May 2005.



Table A3  
Means and Standard Deviations for Total Number of ESOL Sessions,  
Number of Missed ESOL Sessions, and Total Minutes of Instruction\* by ESOL Level

ESOL Level	N	Sessions		Missed Sessions		Total Minutes of Instruction	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1	580	93.1	59.46	11.4	5.92	4302.2	3492.11
2	716	87.8	51.93	11.0	5.73	3637.4	2871.50
3	517	84.6	55.02	11.6	6.08	3064.3	3055.15

Note: \*Aggregate data for six months, from December 2004 to May 2005.

Table A4  
Percentage of ESOL Sessions in Which a Specified  
Instructional Guide Was Used by Grade and ESOL Level

Proportion of ESOL Sessions		Pre-K		K		Grade 1		Grade 2		Grade 3		Grade 4		Grade 5	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
ESOL	<25	281	84.6	305	66.7	182	57.1	128	53.6	160	87.9	111	83.5	99	79.2
	26-50	0	0.0	41	9.0	19	6.0	10	4.2	7	3.8	2	1.5	12	9.6
	51-75	10	3.0	6	1.3	23	7.2	11	4.6	0	0.0	2	1.5	1	0.8
	>75	41	12.3	105	23.0	95	29.8	90	37.7	15	8.2	18	13.5	13	10.4
R/LA	<25	156	47.0	281	62.3	234	72.9	211	87.6	157	85.8	83	62.4	83	66.4
	26-50	23	6.9	21	4.7	33	10.3	15	6.2	2	1.1	13	9.8	12	9.6
	51-75	24	7.2	14	3.1	23	7.2	2	0.8	2	1.1	7	5.3	0	0.0
	>75	129	38.9	135	29.9	31	9.7	13	5.4	22	12.0	30	22.6	30	24.0
Both ESOL and R/LA	<25	219	66.4	370	81.5	197	61.4	182	75.5	49	26.8	60	45.1	74	59.2
	26-50	24	7.3	17	3.7	29	9.0	14	5.8	7	3.8	14	10.5	12	9.6
	51-75	23	7.0	23	5.1	32	10.0	5	2.1	12	6.6	15	11.3	5	4.0
	>75	64	19.4	44	9.7	63	19.6	40	16.6	115	62.8	44	33.1	34	27.2
Other	<25	291	87.7	338	74.0	243	75.7	155	64.3	163	89.1	115	86.5	92	73.6
	26-50	1	0.3	10	2.2	52	16.2	20	8.3	6	3.3	7	5.3	0	0.0
	51-75	0	0.0	12	2.6	12	3.7	21	8.7	4	2.2	2	1.5	18	14.4
	>75	40	12.0	97	21.2	14	4.4	45	18.7	10	5.5	9	6.8	15	12.0

Table A5  
 Monthly Variation December 2004 to May 2005 in Use of  
 Specified Instructional Guide: Percentage of Sessions by Grade

Grade	Guide	Month											
		December		January		February		March		April		May	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Pre-K	ESOL			15.3	0.3	22.4	0.4	0.0	0.0	5.4	0.2	71.4	0.0
	R/LA	91.0	0.3	43.6	0.4	41.7	0.5	66.7	0.6	33.3	0.5	0.0	0.0
	Both	0.0	0.0	29.7	0.4	13.8	0.3	33.3	0.6	1.0	0.0	28.6	0.0
	Other	9.0	0.3	11.4	0.3	22.2	0.4	0.0	0.0	60.3	0.5	0.0	0.0
K	ESOL	38.5	0.5	25.3	0.4	14.5	0.3	56.5	0.5	6.0	0.2	74.9	0.4
	R/LA	2.3	0.1	37.9	0.4	58.3	0.4	22.8	0.3	84.7	0.3	3.0	0.0
	Both	6.7	0.2	18.9	0.3	17.2	0.3	7.2	0.2	0.0	0.0	4.5	0.1
	Other	52.4	0.5	17.9	0.4	10.0	0.3	13.5	0.3	9.3	0.3	17.6	0.4
01	ESOL	19.5	0.2	38.7	0.5	34.4	0.4	36.2	0.4	22.7	0.3	21.9	0.3
	R/LA	34.0	0.3	16.4	0.3	24.8	0.3	18.4	0.3	15.5	0.3	2.3	0.1
	Both	31.9	0.2	32.8	0.4	23.3	0.3	23.0	0.3	43.4	0.4	57.6	0.3
	Other	14.6	0.2	12.1	0.3	17.5	0.3	22.4	0.2	18.3	0.2	18.3	0.3
02	ESOL	69.3	0.5	48.9	0.5	16.9	0.3	28.9	0.3	16.2	0.4	26.4	0.5
	R/LA	16.5	0.4	8.9	0.3	7.6	0.2	3.2	0.1	7.0	0.1	25.9	0.3
	Both	14.2	0.4	23.2	0.4	27.0	0.3	8.7	0.2	37.6	0.4	28.1	0.3
	Other	0.0	0.0	19.0	0.3	48.5	0.4	59.2	0.3	39.2	0.4	19.7	0.2
03	ESOL	10.5	0.2	10.6	0.3	8.5	0.3	16.7	0.4	0.0	0.0	20.8	--
	R/LA	11.1	0.3	16.9	0.4	8.1	0.1	0.0	0.0	0.0	0.0	0.0	--
	Both	78.4	0.3	64.2	0.4	76.9	0.3	60.2	0.5	53.7	0.4	79.2	--
	Other	0.0	0.0	8.3	0.3	6.5	0.1	23.2	0.4	46.3	0.4	0.0	--
04	ESOL	13.9	0.2	15.4	0.3	12.6	0.3	28.6	0.5	0.0	0.0	--	--
	R/LA	52.8	0.5	29.5	0.4	29.7	0.4	33.4	0.4	0.0	0.0	--	--
	Both	25.0	0.4	44.7	0.5	54.9	0.4	28.1	0.4	65.3	0.5	--	--
	Other	8.3	0.2	10.4	0.3	2.8	0.1	9.9	0.3	34.7	0.5	--	--
05	ESOL	50.0	0.0	13.5	0.3	10.3	0.2	15.2	0.2	0.0	0.0	37.8	0.4
	R/LA	0.0	0.0	32.6	0.4	18.9	0.3	50.0	0.7	50.0	0.7	0.0	0.0
	Both	50.0	0.0	34.9	0.4	34.2	0.4	34.8	0.5	0.0	0.0	28.9	0.3
	Other	0.0	0.0	19.1	0.4	36.6	0.4	0.0	0.0	50.0	0.7	33.3	0.6

Note: -- No data

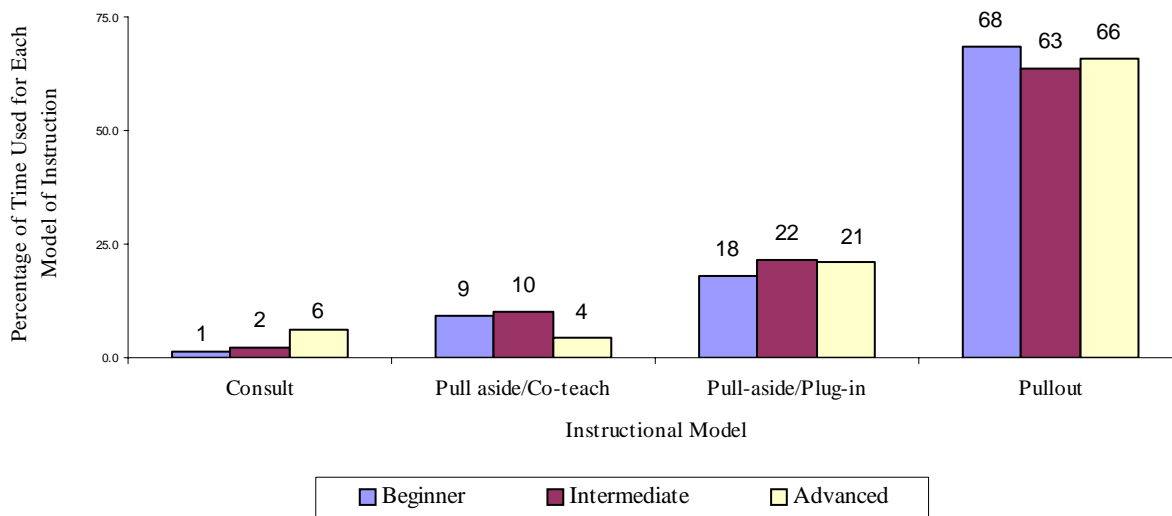


Figure 4a. Proportion of time used for each model of instruction by ESOL level

Table A6  
Most Common Reasons for Missed ESOL Sessions

Reason for Missed ESOL Sessions	<i>N</i>	%
ELL committee meeting	2147	20.6
Assembly/field trip	2091	20.0
Educational Management Team (EMT)/Individualized Educational Plan (IEP) meeting	1236	11.8
School-sponsored event	1118	10.7
Testing - CTBS	724	6.9
Team planning/staff development	711	6.8
Testing - GT	518	5.0
Testing - IPT	499	4.8
Testing - MSA	258	2.5
Testing - MCPSAP	248	2.4
Testing - MAP-R	181	1.7
Testing - SDRT 4	145	1.4
Other-not specified	125	1.2
ESOL meeting or training	112	1.1
Teacher attending conference/convention	18	0.9
Teacher out sick	86	0.8
Half day	65	0.6
Delay in start	40	0.4
Holiday	30	0.3
Kindergarten orientation	13	0.1
Total	10365	100