



# **Descriptive analyses of English language learner student enrollment data in Kentucky, Tennessee, Virginia, and West Virginia**

**Prepared by**

**Annette M. Zehler**  
**Center for Applied Linguistics**

**Chengbin Yin**  
**Center for Applied Linguistics**

**Anne Donovan**  
**Center for Applied Linguistics**

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This REL Appalachia Technical Brief updates the 2008 REL Appalachia report *Preparing to serve English language learner students: school districts with emerging English language learner communities* (Zehler et al. 2008), which covered school years 1998/99–2004/05. This brief updates the findings through 2008/09.

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## Summary

State administrators in the Regional Educational Laboratory Appalachia Region (Kentucky, Tennessee, Virginia, and West Virginia) are responding to increased enrollment of English language learner (ELL) students in grades K–12, including in school districts that previously did not enroll ELL students or enrolled only a small number of them. ELL students are students who live in a home where a language other than English is spoken and have a level of proficiency in English insufficient to fully participate in all-English instruction without the support of additional language-related instruction services.<sup>1</sup>

This technical brief describes ELL student enrollment across school districts in the four Appalachia Region states for 2005/06–2008/09, updating Zehler et al. (2008), which described this enrollment for 1998/99–2004/05. Like the 2008 report, the current brief focuses on school districts with emerging ELL student populations, but it goes beyond by examining data by grade span (kindergarten [K], 1–3, 4–6, 7–8, 9–12) and geographic locale (city, suburb, town, rural). The findings can inform state and local education officials in making policy decisions and allocating resources to help districts serve the needs of ELL students in grades K–12.

This brief addresses three research questions:

- What was the 2008/09 enrollment of ELL students in grades K–12 in Kentucky, Tennessee, Virginia, and West Virginia? How did enrollment change over 2005/06–2008/09?
- What was the 2008/09 enrollment of ELL students by grade span in Kentucky, Tennessee, Virginia, and West Virginia? How did enrollment change by grade span over 2005/06–2008/09?
- How were districts with ELL students distributed across geographic locales in 2008/09 in Kentucky, Tennessee, Virginia and West Virginia?

Using data from the Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, West Virginia Department of Education, and the National Center for Education Statistics (U.S. Department of Education 2009), the brief shows that over 2005/06–2008/09 total student enrollment was fairly stable. ELL student enrollment, however, continued to grow, though more slowly than in previous years (Zehler et al. 2008). Further, the number of districts in the region enrolling one or more ELL students increased. Key findings include:

- ELL enrollment increased in three Appalachia Region states over 2005/06–2008/09: in Kentucky, by 44.7 percent (to 14,666); in Tennessee, by 19.2 percent (to 27,428); and in Virginia, by 20.2 percent (to 86,360). In West Virginia, ELL enrollment increased during the first three years (from 1,907 to 2,368) but declined from 2007/08 to 2008/09 (to 1,668), for a decrease of 12.5 percent over the four-year period.
- The number of districts enrolling ELL students increased between 2005/06 and 2008/09 in two states: in Kentucky, from 97 of 176 districts to 140 of 174 districts;

and in Virginia, from 122 of 132 districts to 127. During the same period, the number of districts enrolling ELL students decreased from 38 of 57 districts to 35 in West Virginia.

- Some districts had substantial year-to-year increases in ELL student enrollment, defined as an increase of at least 50 percent over the previous year. Over 2005/06–2008/09, 63–90 districts had substantial increases in ELL enrollment for the three consecutive-year comparisons. Most of these districts had fewer than 50 ELL students; districts with 50 or more ELL students tended not to have substantial enrollment increases.
- ELL enrollment as a proportion of total enrollment was higher for grades K–6 than for grades 7–12 in all four states. ELL enrollment as a proportion of total enrollment increased for all grade spans across the four years in Kentucky, Tennessee, and Virginia and in the Appalachia Region overall. In West Virginia, annual enrollment increases from 2005/06 through 2007/08 were followed by a decrease from 2007/08 to 2008/09 for all five grade spans.
- Approximately half of districts with ELL students were rural: 50.0 percent in Kentucky, 55.8 percent in Tennessee, 57.0 percent in Virginia, and 42.9 percent in West Virginia.

Changes in assessments used to identify ELL students could have affected the enrollment data. Kentucky changed its assessment in 2006/07, and some districts in Virginia might have implemented a new proficiency assessment in 2008/09 (a year earlier than required).

#### Note

1. There is no consensus definition for English language learners, who are also referred to as limited English proficient students. The authors' definition is based on the core definition in the No Child Left Behind Act of 2001 and the description of limited English proficient persons in the U.S. Department of Education Departmental Directive, June 15, 2005: "[Limited English proficient] persons are those whose proficiency in speaking, reading, writing, or understanding English . . . is such that it would deny or limit their meaningful access to programs and services provided by the Department if language assistance were not provided" (p. 2).

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# Technical brief

## Why this brief?

Immigration patterns across the United States are changing, and regions of the country unaccustomed to populations from different lingual and cultural backgrounds are now seeing an increase in immigrant families (Capps, Fix, and Passel 2002; Jensen 2006; Johnson 2011; Johnson and Strange 2009). As a result, state administrators in the Regional Educational Laboratory Appalachia Region (Kentucky, Tennessee, Virginia, and West Virginia) are responding to increased enrollments of English language learner (ELL) students.<sup>1</sup> ELL students live in a home where a language other than English is spoken and have a level of English proficiency insufficient to fully participate in all-English instruction without the support of additional language-related instruction services.<sup>2</sup>

This technical brief describes ELL enrollment from 2005/06 through 2008/09 in Kentucky, Tennessee, Virginia, and West Virginia. The analyses update Zehler et al. (2008), which described these states' ELL enrollment

for 1998/99–2004/05. Zehler et al. (2008) showed that ELL enrollment increased in all four states over the six-year period and that the increase ranged from 93.7 percent in West Virginia to 315.2 percent in Kentucky. Given continued changes in enrollment in the region and the availability of four more years of data, state coordinators for ELL student services requested updated analyses to inform the states on more recent patterns of ELL enrollment. As in the 2008 report, the requested analyses focus on districts with emerging ELL populations and especially on districts that had no or few ELL students in 2005/06. At the request of the state administrators, this brief also includes analyses of ELL enrollment by grade span (kindergarten [K], 1–3, 4–6, 7–8, 9–12) and by geographic locale (city, suburb, town, rural). State administrators can use this information to guide decisions on the content and allocation of state resources to help districts build capacity for serving ELL students. (See box 1 for definitions of key terms.)

### BOX 1

#### Key terms

*English language learner (ELL) students* live in a home where a language other than English is spoken and have a level of proficiency in English insufficient to fully participate in all-English instruction without the support of additional language-related instruction services. Educators and practitioners prefer this term and use it in place of the federal term “limited English proficient students.”

*Grade span* refers to one K–12 grade level or two or more combined grade

levels that are identified for analysis of grade-level data. This study addresses five grade spans: kindergarten, 1–3, 4–6, 7–8, and 9–12.

*Level of ELL student representation* is ELL enrollment measured as a percentage of the total student enrollment in a school district. This study uses seven levels of ELL representation: no ELL students, less than 1.0 percent of total enrollment, 1.0–4.9 percent, 5.0–9.9 percent, 10.0–19.9 percent, 20.0–29.9 percent, and 30.0 percent or more.

*Limited English proficient* is the term used in the federal No Child Left

Behind Act of 2001 for students who live in a home where a language other than English is spoken and have a level of proficiency in English insufficient to fully participate in all-English instruction without the support of additional language-related instruction services. See *English language learner*.

*Substantial increase in ELL enrollment* is defined as a 50 percent or greater increase in ELL enrollment from one year to the next, calculated as a proportion of total enrollment, or as enrollment of one or more ELL students where none was enrolled in the prior year.

### Identifying English language learners

How school districts identify ELL students varies by state. In all four Appalachia Region states, the process begins with a home language survey. Upon entry into a school district, the parents (or student) complete a brief survey on the languages used in the home.

When the home language survey indicates a language other than English, the school district will have the student take an English language proficiency assessment to determine whether the student has sufficient skills in English to fully participate in classroom instruction. The language proficiency assessments can examine skills in English listening, speaking, reading, and writing, though each might not include all four skill areas.

School districts help students identified by the assessment as English language learners to become more proficient in English and learn academic content. The districts assess the students annually to determine whether they have gained sufficient proficiency in English to exit from ELL status and services. The identification process can also include a measure of academic achievement and other factors, such as teacher judgment (Zehler et al. 2003). See appendix A for the criteria used to determine

whether a student was an English language learner.

### Research questions

This brief examines data on the number of ELL students in districts in the Appalachia Region states and how these students are distributed across districts. Three research questions guided the study:

- What was the 2008/09 enrollment of ELL students in grades K–12 in Kentucky, Tennessee, Virginia, and West Virginia? How did enrollment change over 2005/06–2008/09?
- What was the 2008/09 enrollment of ELL students by grade span in Kentucky, Tennessee, Virginia, and West Virginia? How did enrollment change over 2005/06–2008/09?
- How were districts with ELL students distributed across geographic locales in 2008/09 in Kentucky, Tennessee, Virginia and West Virginia?

Data sources included state departments of education and the National Center for Education Statistics Common Core of Data. (See box 2 for a summary of the data and methodology and appendix B for more detail.)

#### BOX 2

### Data and methodology

#### Data sources

*Kentucky.* The Kentucky Department of Education provided student-level databases of English language learner (ELL) students for 2006/07–2008/09. Variables included school name, district name, grade, race/ethnicity, and language. Parallel student-level data were not available for 2005/06. The data on ELL student enrollments for 2005/06

and total enrollment data for 2005/06–2008/09 were drawn from the National Center for Education Statistics Common Core of Data database. This database provides only a district total of students identified as ELL students and does not provide grade-level counts, so the state had no data available for grade-level summaries of ELL enrollments for 2005/06.

*Tennessee.* The Tennessee Department of Education provided district-level data on ELL enrollment and

total enrollment for 2006/07–2008/09 and state-level summaries of ELL enrollment by grade for 2007/08 and 2008/09 for districts receiving federal funds to support services for ELL students through Title III of the No Child Left Behind Act of 2001. The district-level data files suppressed any cells with five or fewer students, though the state provided data summaries based on all the data, including suppressed cells. District-level data on the number of ELL students by grade were not available.

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## BOX 2 (CONTINUED)

**Data and methodology**

*Virginia.* The Virginia Department of Education provided district-level data on ELL enrollment and total enrollment by grade for 2005/06–2008/09.

*West Virginia.* The West Virginia Department of Education provided district-level data on ELL enrollment and total enrollment by grade for 2005/06–2008/09.

*Geographic locale.* The geographic locale (city, suburb, town, or rural) of districts enrolling ELL students in 2008/09 were obtained from the National Center for Education Statistics Common Core of Data for 2008/09 for districts that enrolled at least one ELL student (U.S. Department of Education 2009).

*Methodology*

Three sets of analyses were conducted to analyze trends and changes in student enrollment. In the first set, district-level K–12 enrollment data and ELL student enrollment data were summed across districts to obtain total K–12 enrollment and enrollment of ELL students for each study state for 2005/06–2008/09. ELL student enrollment as a percentage of total enrollment was calculated to obtain the level of ELL student representation in each state.

In the second set of analyses, the level of ELL student enrollment in each district in each state for 2005/06–2008/09 was calculated as the proportion of ELL students to the total number of students and was classified into seven levels: 0 percent (no ELL students), less than 1.0 percent, 1.0–4.9 percent, 5.0–9.9 percent, 10.0–19.9 percent, 20.0–29.9 percent, and 30.0 percent or more.

The median number of ELL students at a given enrollment level was also obtained, because it is less sensitive than the mean to extreme numbers and is thus a better indicator of the size of the ELL student enrollments in the districts at a given representation level.

The third set of analyses involved calculations to identify districts that had a substantial increase in ELL student enrollments from one year to the next. In these analyses, a substantial increase was defined either as a 50 percent or greater increase from one year to the next in ELL student enrollment as a proportion of total enrollment or as enrollment of one or more ELL students where none was present in the prior year. Districts with fewer ELL students can more easily meet this criterion, so the analysis was conducted separately for districts with 1–49 ELL students and those with 50 or more ELL students. This cutpoint

was selected to distinguish districts where there were either very small numbers of ELL students enrolled overall or where the number enrolled across schools in the district was likely to result in small numbers of ELL students in any one grade or school.

To calculate the enrollments of ELL students by grade level in 2008/09 and the changes in grade-level enrollments over 2005/06–2008/09, grades K–12 were clustered into five grade spans: kindergarten, 1–3, 4–6, 7–8, and 9–12. The number of ELL students as a proportion of the total number of students was calculated for each grade span for each state in each year.

To examine the geographic locales of districts enrolling ELL students in 2008/09, locale codes (city, suburb, town, and rural, as defined by the National Center for Education Statistics with the U.S. Census Bureau) were obtained from the Common Core of Data for 2008/09 for districts that enrolled at least one ELL student. The number of districts in each geographic locale and the proportion that these districts represented of the total number of districts that enrolled at least one ELL student were calculated for each locale. The median ELL student enrollment was also calculated for districts within each locale.

**Findings**

Over 2005/06–2008/09, total student enrollment in the Appalachia Region remained fairly stable. ELL enrollment, however, grew in each

state except West Virginia. In two states—Kentucky and Virginia—the number of districts enrolling one or more ELL students increased.

ELL representation in all grade spans increased. ELL students were enrolled in all grade spans, but the proportion of total enrollment was highest in the kindergarten and elementary (1–3 and 4–6) grade spans. Approximately half (42.9–55.8 percent) the districts that enrolled ELL students in each state were rural. The detailed findings are below, organized by research question.<sup>3</sup>

### English language learner student enrollment, 2005/06–2008/09

***K–12 English language learner student enrollment and total enrollment by state.*** In 2008/09, public schools in the four Appalachia Region states enrolled 130,122 ELL students, or 4.2 percent of the region’s total K–12 enrollment. The number of ELL students in the region grew over 2005/06–2008/09. Increases in ELL enrollment in Kentucky, Tennessee, and Virginia ranged from 19.2 percent to 44.7 percent (table 1).<sup>4</sup> By contrast, in West Virginia ELL enrollments fell 12.5 percent over the period,<sup>5</sup>

after an increase of 24.2 percent over the prior three years.

***English language learner student representation by district.*** The analyses define ELL student representation as the proportion of students in the district who are ELL students (see appendix B). District representation of ELL students is divided into seven levels, ranging from 0 percent (no ELL students) to 30.0 percent or more.

In 2008/09, there were 499 school districts in the Appalachia Region. Of these, 77 (15.4 percent) had no ELL students, and 422 (84.6 percent) had at least one. In more 226 of the 422 districts with ELL students (53.6 percent), ELL students represented less than 1 percent of the total enrollment.

These overall numbers hide the diversity in the distribution of ELL students across states. The share of districts enrolling one or more ELL students in 2008/09 ranged from 61.4 percent in West Virginia to 96.2 percent in Virginia (table 2). ELL students represented less than 1.0 percent of total enrollment for 84

TABLE 1  
English language learner student enrollment by Appalachia Region state, 2005/06–2008/09

State	2005/06			2006/07			2007/08			2008/09			Percentage change over 2005/06–2008/09	
	Total enrollment	English language learner students Number	Percent	Total enrollment	English language learner students Number	Percent	Total enrollment	English language learner students Number	Percent	Total enrollment	English language learner students Number	Percent	Total enrollment	English language learner students
Kentucky	641,685	10,138	1.6	646,543	11,047	1.7	648,628	13,245	2.0	650,008	14,666	2.3	1.3	44.7
Tennessee	na	na	na	980,032	23,009	2.3	967,039	25,670	2.7	971,175	27,428	2.8	–0.9	19.2
Virginia	1,194,758	71,842	6.0	1,200,986	77,628	6.5	1,203,125	83,705	7.0	1,205,956	86,360	7.2	0.9	20.2
West Virginia	271,408	1,907	0.7	271,250	2,148	0.8	270,290	2,368	0.9	269,579	1,668	0.6	–0.7	–12.5

na is not available.

*Note:* Total enrollment was for grades K–12 for Kentucky, Virginia, and West Virginia and grades preK–12 for Tennessee. Kentucky changed its language proficiency assessment (used to identify English language learner students) in 2006/07, and some districts in Virginia may have implemented a new language proficiency assessment (used to identify English language learner students) in 2008/09; however, no information was available on how many or which districts used the new assessment.

*Source:* Authors’ analysis based on data from Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education; U.S. Department of Education (2009).



TABLE 2

**Number and percentage of districts, by English language learner student enrollment and Appalachia Region state, 2008/09**

District enrollment level	Kentucky		Tennessee		Virginia		West Virginia		Appalachia Region	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No English language learner students	34	19.5	16	11.8	5	3.8	22	38.6	77	15.4
Less than 1.0 percent	84	48.3	62	45.6	50	37.9	30	52.6	226	45.3
1.0–4.9 percent	48	27.6	44	32.3	53	40.2	5	8.8	150	30.1
5.0–9.9 percent	6	3.4	11	8.1	13	9.9	0	0.0	30	6.0
10.0–19.9 percent	2	1.2	2	1.5	5	3.8	0	0.0	9	1.8
20.0–29.9 percent	0	0.0	0	0.0	4	3.0	0	0.0	4	0.8
30.0 percent or more	0	0.0	0	0.0	2	1.5	0	0.0	2	0.4
Level cannot be determined	0	—	1	0.7	0	—	0	—	1	0.2
One or more English language learner students	140	80.5	120	88.2	127	96.2	35	61.4	422	84.6
Total	174	100.0	136	100.0	132	100.0	57	100.0	499	100.0

— is not applicable.

*Note:* Total enrollment was for grades K–12 for Kentucky, Virginia, and West Virginia and grades preK–12 for Tennessee. Kentucky changed its language proficiency assessment (used to identify English language learner students) in 2006/07, and some districts in Virginia may have implemented a new language proficiency assessment (used to identify English language learner students) in 2008/09; however, no information was available on how many or which districts used the new assessment. The data for the number of English language learner students were suppressed for Tennessee districts with five or fewer students. For most of these districts, based on the total population, it was possible to classify the district English language learner student population as less than 1 percent. For one school district, five students would represent 1 percent or more of the total population; this district was listed as missing since the data were not available.

*Source:* Authors' analysis based on data from Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education; U.S. Department of Education (2009).

of the 140 districts enrolling ELL students in Kentucky (60.0 percent), 62 of 120 in Tennessee (51.7 percent), 50 of 127 in Virginia (39.4 percent), and 30 of 35 in West Virginia (85.7 percent).

For districts where ELL students constituted less than 1.0 percent of the district enrollment, the median number of ELL students per district with one or more ELL students ranged from 4 to 17. In Virginia, 77 of 127 districts (60.6 percent) had 1.0 percent or more ELL students in their total enrollment.

The states experienced somewhat differing patterns of change in ELL student representation in their districts.

*Kentucky.* Over 2005/06–2008/09, the number of school districts with ELL students in Kentucky increased 44.3 percent overall, from 97

to 140 districts, and at all levels of ELL student representation (table 3). However, the majority of districts with ELL students had less than 1.0 percent ELL student enrollment in all years.

*Tennessee.* Over 2006/07–2008/09, the median number of ELL students per district increased for three of the seven representation levels (table 4). The jump in the 2008/09 median at the 10.0–19.9 percent level came about when one metropolitan district with large numbers of ELL students moved into that level during that year.

*Virginia.* Virginia is the only state in the region with districts where ELL students represent 20.0 percent or more of the student population (table 5). The median number of students per district was greater than those for the

TABLE 3

**Number and percentage of districts and median number of English language learner students in grades K–12 in Kentucky, by level of English language learner student representation, 2005/06–2008/09**

District enrollment level	2005/06			2006/07			2007/08			2008/09		
	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students
No English language learner students	79	44.9	—	47	26.9	—	41	23.6	—	34	19.5	—
Less than 1.0 percent	60	34.1	8	79	45.1	6	83	47.7	7	84	48.3	6
1.0–4.9 percent	32	18.2	30	43	24.6	33	43	24.7	36	48	27.6	42
5.0–9.9 percent	4	2.3	545	4	2.3	565	5	2.9	529	6	3.4	730
10.0–19.9 percent	1	0.6	168	2	1.1	276	2	1.1	309	2	1.2	327
20.0–29.9 percent	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0
30.0 percent or more	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0
One or more English language learner students	97	55.1	18	128	73.1	17	133	76.4	18	140	80.5	18
Total	176	100.0	—	175	100.0	—	174	100.0	—	174	100.0	—

— is not applicable.

Note: Kentucky changed its language proficiency assessment (used to identify English language learner students) in 2006/07.

Source: Authors' analysis based on data from Kentucky Department of Education; U.S. Department of Education (2009).

TABLE 4

**Number and percentage of districts and median number of English language learner students in grades preK–12 in Tennessee, by level of English language learner student representation, 2006/07–2008/09**

District enrollment level	2006/07			2007/08			2008/09		
	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students
No English language learner students	16	11.8	—	19	14.0	—	16	11.8	—
Less than 1.0 percent	61	44.9	18	58	42.6	14	62	45.6	17
1.0–4.9 percent	44	32.4	93	44	32.4	87	44	32.3	107
5.0–9.9 percent	11	8.1	210	12	8.8	212	11	8.1	239
10.0–19.9 percent	1	0.7	64	2	1.5	145	2	1.5	3,835
20.0–29.9 percent	0	0.0	0	0	0.0	0	0	0.0	0
30.0 percent or more	0	0.0	0	0	0.0	0	0	0.0	0
Missing data	3 <sup>a</sup>	2.2	—	1	0.7	—	1	0.7	—
One or more English language learner students	119	87.5	46	117	86.0	42	120	88.2	46
Total	136	100.0	—	136	100.0	—	136	100	—

— is not applicable.

a. Includes two districts for which the level cannot be determined and one district with missing data.

Note: Data were not available for 2005/06 and missing for one district in 2006/07. Further, Tennessee suppressed data cells for school systems with five or fewer ELL students; this affected 16 districts in 2006/07, 11 in 2007/08, and 16 in 2008/09. Five students would constitute 1 percent or more of the total student population in 2 districts in 2006/07, 1 district in 2007/08, and 1 district in 2008/09. These districts were considered to be missing data for the purposes of classifying the level of English language learner student representation, but they were counted in the total number of districts with one or more English language learner students.

Source: Authors' analysis based on data from Tennessee Department of Education; U.S. Department of Education (2009).

TABLE 5

**Number and percentage of districts and median number of English language learner students in grades K–12 in Virginia, by level of English language learner student representation, 2005/06–2008/09**

District enrollment level	2005/06			2006/07			2007/08			2008/09		
	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students
No English language learner students	10	7.6	—	7	5.3	—	7	5.3	—	5	3.8	—
Less than 1.0 percent	60	45.5	16	49	37.1	12	51	38.6	13	50	37.9	15
1.0–4.9 percent	43	32.6	131	55	41.7	102	51	38.6	109	53	40.2	104
5.0–9.9 percent	10	7.6	300	12	9.1	404	13	9.8	423	13	9.8	439
10.0–19.9 percent	4	3.0	5,161	4	3.0	6,182	4	3.0	524	5	3.8	502
20.0–29.9 percent	4	3.0	2,078	3	2.3	2,176	4	3.0	3,467	4	3.0	3,816
30.0 percent or more	1	0.8	1,548	2	1.5	1,958	2	1.5	1,930	2	1.5	2,020
One or more English language learner students	122	92.4	40.5	125	94.7	45	125	94.7	46	127	96.2	47
Total	132	100.0	—	132	100.0	—	132	100.0	—	132	100	—

— is not applicable.

Note: Some districts in Virginia might have implemented a new language proficiency assessment (used to identify English language learner students) in 2008/09; however, no information on how many or which districts used the new assessment was available.

Source: Authors' analysis based on data from Virginia Department of Education.

TABLE 6

**Number and percentage of districts and median number of English language learner students in grades K–12 in West Virginia, by level of English language learner student representation, 2005/06–2008/09**

District enrollment level	2005/06			2006/07			2007/08			2008/09		
	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students
No English language learner students	19	33.3	—	22	38.6	—	19	33.3	—	22	38.6	—
Less than 1.0 percent	32	56.1	4	29	50.9	6	32	56.1	6	30	52.6	4
1.0–4.9 percent	6	10.5	267	6	10.5	364	6	10.5	397	5	8.8	260
5.0–9.9 percent	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0
10.0–19.9 percent	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0
20.0–29.9 percent	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0
30.0 percent or more	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0
One or more English language learner students	38	66.7	7	35	61.4	9	38	66.7	8	35	61.4	5
Total	57	100.0	—	57	100.0	—	57	100.0	—	57	100.0	—

— is not applicable.

Source: Authors' analysis based on data from West Virginia Department of Education.

other states. In each study year, ELL students accounted for 1.0 percent or more of the total enrollment for the majority of districts enrolling ELL students.

*West Virginia.* Over 2005/06–2008/09, the number of districts with ELL students fluctuated between 35 and 38 (table 6). Similarly, the median number of ELL students per district rose in 2006/07 and 2007/08 but fell in 2008/09. No district enrolled 5.0 percent or more ELL students for the entire four-year period. In each of the four years, 84.2–85.7 percent of districts enrolling one or more ELL students had less than 1.0 percent ELL student enrollment.

***Districts experiencing an increase in English language learner student enrollment.*** Districts that

are enrolling ELL students as a new population or that are experiencing increases in initially small enrollment might face substantial challenges in building capacity to serve ELL students. Challenges include identifying enough staff with appropriate expertise to help ELL students, defining instruction services appropriate to ELL students' needs, and developing ways to communicate with parents or guardians who also might not be proficient in English (Bérubé 2000; Capps et al. 2005; Zehler et al. 2008).

The analyses examined changes in ELL student enrollment for each school year from 2005/06 through 2008/09 to identify districts that experienced a substantial increase in enrollment (see box 1) and then to identify districts with emerging ELL populations that might be especially challenged to build the capacity to

TABLE 7

### Districts with 1–49 English language learner students that experienced a substantial, consecutive-year increase in English language learner students, by Appalachia Region state, 2005/06–2008/09

State	English language learner students in 2005/06 to 2006/07			English language learner students in 2006/07 to 2007/08			English language learner students in 2007/08 to 2008/09		
	Number of districts enrolling 1–49	Number of districts with substantial increase	Median number in districts with substantial increase	Number of districts enrolling 1–49	Number of districts with substantial increase	Median number of districts with substantial increase	Number of districts enrolling 1–49	Number of districts with substantial increase	Median number in districts with substantial increase
Kentucky <sup>a</sup>	104	60	6	106	34	7	109	28	6
Tennessee <sup>b</sup>	na	na	na	69	8	21	71	11	22
Virginia <sup>c</sup>	66	17	9	66	7	14	65	11	10
West Virginia	27	6	8	29	10	4	29	7	2

na is not available.

*Note:* A substantial increase is an increase of at least 50 percent over the previous year in the level of English language learner student enrollment (as a percentage of the total student population in the district) or enrollment of one or more English language learner students in a district with none in the previous year. Total enrollment included grades K–12 for Kentucky, Virginia, and West Virginia and grades preK–12 in Tennessee. Districts with 1–49 English language learner students were identified based on the second year of the comparison.

a. Kentucky changed its language proficiency assessment (used to identify English language learner students) in 2006/07.

b. For 2006/07–2008/09, Tennessee suppressed data cells for school systems with five or fewer English language learner students (16 districts in 2006/07, 11 districts in 2007/08, and 16 districts in 2008/09). When a suppressed cell followed a year in which no English language learner students were enrolled, the district could be identified as experiencing a substantial increase; however, when the comparison for a district included two suppressed cells or a suppressed cell in the first year, the district could not be included in the analysis for change.

c. Some districts in Virginia might have implemented a new language proficiency assessment (used to identify English language learner students) in 2008/09; however, no information on how many or which districts used the new assessment was available.

*Source:* Authors' analysis based on data from Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education; U.S. Department of Education (2009).

TABLE 8

**Districts with 50 or more English language learner students that experienced a substantial, consecutive-year increase in English language learner students, by Appalachia Region state, 2005/06–2008/09**

State	English language learner students in 2005/06 to 2006/07			English language learner students in 2006/07 to 2007/08			English language learner students in 2007/08 to 2008/09		
	Number of districts enrolling 50	Number of districts with substantial increase	Median number in districts with substantial increase	Number of districts enrolling 50	Number of districts with substantial increase	Median number in districts with substantial increase	Number of districts enrolling 50	Number of districts with substantial increase	Median number in districts with substantial increase
Kentucky <sup>a</sup>	24	4	251	27	3	70	31	1	87
Tennessee	na	na	na	48	0	—	49	2	97
Virginia <sup>b</sup>	59	3	75	59	0	—	62	3	110
West Virginia	8	0	—	9	1	54	6	0	—

na is not available.

— is not applicable.

*Note:* A substantial increase is an increase of at least 50 percent over the previous year in the level of English language learner student enrollment (as a percentage of the total student population in the district) or enrollment of one or more English language learner students in a district with none in the previous year. Total enrollment included grades K–12 for Kentucky, Virginia, and West Virginia and preK–12 in Tennessee. Districts with 50 or more English language learner students were identified based on the second year of the comparison.

a. Kentucky changed its language proficiency assessment (used to identify English language learner students) in 2006/07.

b. Some districts in Virginia might have implemented a new language proficiency assessment (used to identify English language learner students) in 2008/09; however, no information on how many or which districts used the new assessment was available.

*Source:* Authors' analysis based on data from Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education; U.S. Department of Education (2009).

provide services for these students. Tables 7 and 8 present the findings separately for districts with fewer than 50 ELL students and 50 or more.

From 2005/06 through 2008/09, between 63 and 90 districts were identified as having substantial year-to-year increases for the three consecutive-year comparisons. The majority of these districts had fewer than 50 ELL students from 2005/06 through 2008/09. Between 2007/08 and 2008/09, for example, 57 of the 63 districts with substantial increases had fewer than 50 ELL students.

The definition of substantial increase used in this brief favors districts with fewer ELL students and is less likely to identify districts with a large enrollment of ELL students that experience substantial increases, despite being less than 50 percent.<sup>6</sup> While large districts with substantial increases might also face challenges in serving ELL students, they are more likely to already

understand the needs of ELL students; to have staffing, programs, and resources in place; and to have knowledge of legislative requirements (Capps et al. 2005; Zehler et al. 2008). Smaller districts, even with only one ELL student enrolling, face the challenge of building such capacity to serve the new student population.

Districts enrolling ELL students when there were none in the previous year are among those with substantial increases. These were 40 such districts in 2006/07 (44.4 percent of the 90 total districts), 19 in 2007/08 (30.2 percent of the 63 total), and 21 in 2008/09 (33.3 percent of the 63 total).<sup>7</sup> Kentucky districts accounted for 35 of the 40 districts identified in 2006/07, and 10 of the 19 in 2007/08, a finding consistent with the increase in districts enrolling ELL students observed for the state. For 2008/09, no single state had a majority of the 21 districts identified.

### Enrollment of English language learner students by grade span, 2005/06–2008/09

Knowing the grade levels of ELL students can help state administrators determine the resources and assistance that districts might need. Enrollment by grade level has implications for staffing and the content of professional development for teachers, among other resources. ELL students in middle or high school have very different needs for assistance with English language proficiency and academic achievement than do ELL students in kindergarten (Short and Fitzsimmons 2007). The analyses examined five grade spans—kindergarten, 1–3, 4–6, 7–8, and 9–12—all of which include ELL students. In 2008/09, ELL student enrollment was higher for kindergarten and elementary (1–3, 4–6) grade spans than for secondary (7–8, 9–12) grade spans in all four states (table 9).

For Kentucky, Tennessee, and Virginia, the percentage of ELL student enrollment increased in all grade spans across the study years (tables 10–12). For West Virginia, while the actual number of ELL students increased

for all grade spans from 2005/06 through 2007/08, some enrollment percentages remained the same (table 13). In 2008/09, the number and percentage of ELL student enrollment decreased for all five grade spans.

### Geographic locales of districts enrolling English language learner students, 2008/09

The analyses examined the geographic locale of districts that enrolled one or more ELL students, using the categories of city, suburb, town, and rural (box 3).<sup>8</sup> For each state, most districts are categorized as rural (table 14), and rural districts accounted for 42.9–56.7 percent of districts with any ELL student enrollment. Across the region, 224 districts (53.1 percent) with one or more ELL students enrolled were rural.<sup>9</sup> The second most common locale category for districts enrolling ELL students was towns, ranging from 17.3 percent in Virginia to 34.3 percent in West Virginia.

The challenges faced by districts with emerging ELL student populations might be greater in rural areas, especially in more remote ones,

TABLE 9

### Total enrollment and number and percentage of English language learner students, by Appalachia Region state and grade span, 2008/09

Grade span	Kentucky			Tennessee <sup>a</sup>			Virginia			West Virginia		
	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students
K	50,638	2,331	4.6	76,156	5,694	7.5	90,086	6,510	7.2	20,919	146	0.7
1–3	155,842	5,716	3.7	227,814	11,573	5.1	279,011	30,455	10.9	62,532	503	0.8
4–6	148,016	2,969	2.0	220,067	6,145	2.8	271,966	21,422	7.9	61,014	382	0.6
7–8	98,925	1,435	1.5	143,648	2,861	2.0	184,328	11,171	6.1	41,862	228	0.5
9–12	196,587	2,215	1.1	287,401	4,418	1.5	380,565	16,802	4.4	83,252	409	0.5
K–12	650,008	14,666	2.3	955,086	30,691 <sup>b</sup>	3.2	1,205,956	86,360	7.2	269,579	1,668	0.6

a. Tennessee data for English language learner students by grade span were available only for Title III districts (districts that receive federal funds to support services for English language learner students through Title III of the No Child Left Behind Act of 2001). These districts account for more than 95 percent of English language learner students in the state. These data are compared with the total enrollment per grade span obtained on October 1 of the school year.

b. Grade-level data were available only at a state summary level rather than aggregated from district-level data and so may be inconsistent with aggregated data.

Source: Authors' analysis based on data from Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education; U.S. Department of Education (2009).

TABLE 10

**Kentucky total enrollment and number and percentage of English language learner students, by grade span, 2006/07–2008/09**

Grade span	2006/07			2007/08			2008/09		
	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students
K	50,631	1,625	3.2	50,104	2,056	4.1	50,638	2,331	4.6
1–3	152,494	3,852	2.5	155,360	4,850	3.1	155,842	5,716	3.7
4–6	144,807	2,519	1.7	146,530	2,839	1.9	148,016	2,969	2.0
7–8	99,501	1,144	1.1	99,404	1,395	1.4	98,925	1,435	1.5
9–12	199,110	1,877	0.9	197,230	2,104	1.1	196,587	2,215	1.1
K–12	646,543	11,017	1.7	648,628	13,244	2.0	650,008	14,666	2.3

Note: Data were not available for 2005/06. Kentucky changed its language proficiency assessment (used to identify English language learner students) in 2006/07.

Source: Authors' analysis based on data from Kentucky Department of Education; U.S. Department of Education 2009.

TABLE 11

**Tennessee total enrollment and number and percentage of English language learner students, by grade span, 2007/08 and 2008/09**

Grade span	2007/08			2008/09		
	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students
K	75,282	5,124	6.8	76,140	5,694	7.5
1–3	224,739	10,676	4.8	227,758	11,573	5.1
4–6	212,130	5,702	2.7	220,000	6,145	2.8
7–8	142,033	2,709	1.9	143,597	2,861	2.0
9–12	281,724	4,033	1.4	286,549	4,418	1.5
K–12	935,908	28,244	3.0	954,044	30,691	3.2

Note: Data were not available for 2005/06 and 2006/07. Tennessee data for English language learner students by grade span are available only for Title III districts (districts that receive federal funds to support services for ELL students through Title III of the No Child Left Behind Act of 2001). These districts account for more than 95 percent of English language learner students in the state. These data are compared with the total enrollments per grade span in the state obtained on October 1 of the school year.

Source: Authors' analysis based on data from Tennessee Department of Education; U.S. Department of Education 2009.

where districts can be far from sources of professional development and other resources that could help them build capacity to serve ELL students (Bérubé 2000; Capps et al. 2002, 2005).

To identify the prevalence of districts in more remote areas with ELL students, enrollment data were analyzed using more detailed

rural subcategories. This analysis found that in 2008/09, 135 (60.3 percent) of the 224 rural districts enrolling one or more ELL students were in rural–remote or rural–distant locales. Rural districts enrolled 16,034 ELL students, including 4,071 in rural–distant districts and 1,027 in rural–remote districts.<sup>10</sup>

TABLE 12

**Virginia total enrollment and number and percentage of English language learner students, by grade span, 2005/06–2008/09**

Grade span	2005/06			2006/07			2007/08			2008/09		
	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students
K	89,812	4,765	5.3	89,950	5,527	6.1	89,815	6,274	7.0	90,086	6,510	7.2
1–3	268,789	24,248	9.0	273,534	26,577	9.7	276,112	29,234	10.6	279,011	30,455	10.9
4–6	272,354	18,400	6.8	269,683	19,963	7.4	269,966	21,186	7.8	271,966	21,422	7.9
7–8	191,134	9,229	4.8	188,726	9,755	5.2	186,410	10,647	5.7	184,328	11,171	6.1
9–12	372,669	15,200	4.1	379,093	15,806	4.2	380,822	16,364	4.3	380,565	16,802	4.4
K–12	1,194,758	71,842	6.0	1,200,986	77,628	6.5	1,203,125	83,705	7.0	1,205,956	86,360	7.2

Note: Some districts in Virginia might have implemented a new language proficiency assessment (used to identify English language learner students) in 2008/09; however, no information on how many or which districts used the new assessment was available.

Source: Authors' analysis based on data from Virginia Department of Education.

TABLE 13

**West Virginia total enrollment and number and percentage of English language learner students, by grade span, 2005/06–2008/09**

Grade span	2005/06			2006/07			2007/08			2008/09		
	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students	Total enrollment	Number of English language learner students	Percent of English language learner students
K	21,426	108	0.5	21,088	160	0.8	21,300	168	0.8	20,919	146	0.7
1–3	60,768	510	0.8	61,603	518	0.8	61,765	630	1.0	62,532	503	0.8
4–6	61,905	468	0.8	61,199	521	0.9	60,642	575	0.9	61,014	382	0.6
7–8	43,832	285	0.7	42,994	316	0.7	42,593	355	0.8	41,862	228	0.5
9–12	83,477	536	0.6	84,366	633	0.8	83,990	640	0.8	83,252	409	0.5
K–12	271,408	1,907	0.7	271,250	2,148	0.8	270,290	2,368	0.9	269,579	1,668	0.6

Source: Authors' analysis based on data from West Virginia Department of Education.

**Study strengths and limitations**

This technical brief's strengths lie in its descriptions of ELL enrollment across the Appalachian Region states and across several years to identify patterns. The analyses of data by grade span and geographic locale help indicate where building capacity to serve ELL students might be most needed. For example, districts will need to develop different instruction services

and supports for ELL students who newly enter school districts in middle school than for those newly entering districts in kindergarten. The enrollment data by grade span can inform state administrators about where to provide additional, grade-specific assistance to districts. Similarly, the analysis by geographic locale can help administrators see where districts face particular challenges in gaining access to



## BOX 3

**Geographic locale categories**

Following the National Center for Education Statistics Common Core of Data (U.S. Department of Education 2009), this brief primarily uses four overarching locale categories—city, suburb, town, and rural—created by collapsing the 12 detailed locale codes, as follows:

*City*

- 11—city, large: territory inside an urbanized area and inside a principal city with population of 250,000 or more.
- 12—city, midsize: territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.
- 13—city, small: territory inside an urbanized area and inside a principal city with population less than 100,000.

*Suburb*

- 21—suburb, large: territory outside a principal city and inside an urbanized area with population of 250,000 or more.
- 22—suburb, midsize: territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
- 23—suburb, small: territory outside a principal city and inside an urbanized area with population less than 100,000.

*Town*

- 31—town, fringe: territory inside an urban cluster<sup>1</sup> that is less than or equal to 10 miles from an urbanized area.
- 32—town, distant: territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.
- 33—town, remote: territory inside an urban cluster that is more than 35 miles from an urbanized area.

*Rural*

- 41—rural, fringe: census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
- 42—rural, distant: census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.
- 43—rural, remote: census-defined rural territory that is more than 25 miles from an urbanized area and is more than 10 miles from an urban cluster.

*Note*

1. An urban cluster is a new statistical geographic entity introduced in the 2000 Census, consisting of a central core and adjacent densely settled area that together contain a population of 2,500–49,999.

*Source:* U.S. Department of Education 2009.

sources of professional development and other resources that could help build capacity to serve ELL students.

The limitations in the study are related to the available data. In Kentucky, the language proficiency assessment changed in 2006/07; therefore, changes in the state's distribution of ELL student populations between 2005/06 and 2006/07 should be interpreted with caution. The data might have been affected by assessment changes in Virginia, too. As part of an anticipated transition to the new assessment, some Virginia districts might have implemented it early, in 2008/09. However, data on the prevalence of early implementation were not available, and it is unclear how much the

new assessment would have affected student ELL classification. Also in Virginia, entries indicating no ELL student enrollment could represent either no ELL students enrolled or missing data, which was recorded as no ELL student enrollment. If so, total ELL enrollment data might undercount the actual number of ELL students.

**Implications of the findings**

In Zehler et al. (2008), findings indicated rapid growth in ELL enrollment for all four states from 1998/99 to 2004/05, ranging from 93.7 percent in West Virginia to 315.2 percent in Kentucky. The findings of this updated brief show that the ELL student population

TABLE 14

**Number and percentage of districts with English language learner students and median number of English language learner students, by geographic locale and Appalachia Region state, 2008/09**

Geographic locale	Kentucky			Tennessee			Virginia			West Virginia		
	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students	Number of districts	Percent of districts	Median number of English language learner students
City	8	5.7	283	11	9.2	349	15	11.8	589	4	11.4	28
Suburb	16	11.4	28	10	8.3	157	18	14.2	275	4	11.4	22
Town	46	32.9	30	32	26.7	45	22	17.3	21	12	34.3	6
Rural	70	50.0	10	67	55.8	29	72	56.7	33	15	42.9	4
Total	140	100.0	18	120	100.0	46	127	100.0	47	35	100.0	5

Note: Geographic locales for districts are from the National Center for Education Statistics Common Core of Data. The numbers of districts in each state are Kentucky, 174; Tennessee, 136; Virginia, 132; and West Virginia, 57. Tennessee suppressed data for districts with five or fewer ELL students. Districts with suppressed data were included in the count for geographic locale but excluded in the calculation of the median. The resulting numbers of districts for the calculation of the medians for Tennessee are: city, 11; suburb, 9; town, 27; and rural, 57.

Source: Authors' analysis based on data from Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education, and U.S. Department of Education (2009).

has continued to grow for three of the states (44.7 percent in Kentucky, 19.2 percent in Tennessee, and 20.2 percent in Virginia) from 2005/06 through 2008/09. In West Virginia, the ELL student population increased 24.2 percent over the first three years but fell in 2008/09, resulting in an overall decrease of 12.5 percent. These findings suggest that districts will need to continue building capacity to address the needs of ELL students in all grades.

The four states enrolled ELL students in all grade spans. In Kentucky, Tennessee, and Virginia, ELL students as a percentage of all students increased in all five grade spans over the four study years. In all four states, ELL students made up higher percentages of kindergarten and elementary grade spans (grades 1–3 and 4–6) than secondary grade spans (grades 7–8 and 9–12). These findings suggest that even districts with small numbers of ELL students could be serving students at a number of K–12 grades. If so, the districts might need to develop instruction services and help teachers work with the issues presented by

students at each grade span. For example, as noted above, newly enrolled ELL students in grades 7–12 can face steep challenges in gaining English language proficiency and in meeting the academic requirements necessary for graduation.

Addressing the needs of ELL students could be especially challenging for districts with emerging ELL student populations. The analysis found that 63–90 districts had substantial increases in their ELL student population in the three year-to-year comparisons from 2005/06 to 2008/09. Kentucky had the most such districts in each year-to-year comparison. Districts with substantial increases tended to have smaller ELL enrollments (1–49 ELL students). These districts might not have specialized staff or resources in place, and district and school staffs might not have experience working with learners from different language and cultural backgrounds to draw on (Capps et al. 2005; Zehler et al. 2008). Thus, these districts might find themselves challenged by the need to develop capacity quickly so that they

can serve their new or expanding ELL student populations.

Further, 53.1 percent of the region's districts that enrolled one or more ELL students were in rural areas. For such districts, it might

be especially challenging to gain access to staff with expertise, sources of professional development for teachers, and other resources, given their distance from town centers (Bérubé 2000; Capps et al. 2002, 2005).

## Appendix A. Criteria for identifying English language learner students

English language learner (ELL) students live in a home where a language other than English is spoken and have a level of proficiency in English insufficient to fully participate in all-English instruction without the support of additional language-related instruction services. School districts identify ELL students<sup>11</sup> through established criteria that vary by state. In the No Child Left Behind Act of 2001, ELL students are referred to as limited English proficient students, and states report data on the number of students identified as limited English proficient to the U.S. Department of Education.

### Home language survey

In all four states, the process of identifying a student begins with a home language survey. The parents (or the student) complete a brief survey at entry into the district to provide information on the languages spoken in the home.

### Determining English language learner (limited English proficient) status

If the home language survey indicates that a language other than English is spoken in the home, the student's level of English language proficiency is assessed. The proficiency assessments examine the student's level of ability in English listening, speaking, reading, and writing.

The four states use different English language proficiency assessments and performance criteria. For two states, the assessments have recently changed. For example, Kentucky has been using the WIDA—Assessment Placement Test and Assessing Comprehension and Communication in English State-to-State

for English Language Learners (ACCESS for ELLs<sup>®</sup>) assessments since 2006/07. Before that, districts in Kentucky could use either the Language Assessment Scales or the IDEA Proficiency Test. In Virginia, for the four study years, individual school districts selected an assessment from a state-approved list. Virginia adopted the WIDA ACCESS for ELLs assessment during the 2008/09 school year and in that year offered the districts the option of using the WIDA ACCESS for ELLs. (Full statewide implementation began in 2009/10.) Tennessee has used the English Language Development Assessment since 2006/07; thus, this was the assessment used for identifying students for the three years of Tennessee data included in this brief. West Virginia uses the West Virginia Test of English Language Learning. There were no changes in assessments in Tennessee and West Virginia over 2005/06–2008/09.

### Determining exit from English language learner (limited English proficient) status

ELL students receive instruction services to help them become proficient in English and benefit from academic instruction presented in English. The districts assess the students annually to determine whether they have become proficient enough in English to exit from ELL (limited English proficient) status and from ELL student services.

Kentucky, Tennessee, and Virginia used performance on the annually administered state oral proficiency assessment to determine exit from ELL (limited English proficient) status. In West Virginia, exit was determined based on performance on both the English language proficiency assessment and the West Virginia Educational Standards Test, the state standardized achievement test (table A1).

TABLE A1

**Identification of students for English language learner (limited English proficient) status in Kentucky, Tennessee, Virginia, and West Virginia, 2008/09**

State	Criteria for entry into and exit from English language learner (limited English proficient) status
Kentucky	<p>Identification at entry</p> <ul style="list-style-type: none"> <li>• Home language survey—responses indicate a language other than English is the language most frequently spoken at home or the first language learned by the student.<sup>a</sup></li> <li>• WIDA—ACCESS for ELLs Placement Test—overall composite score below 5.0.</li> </ul> <p>Exit from status</p> <ul style="list-style-type: none"> <li>• WIDA—ACCESS for ELLs—5.0 or higher overall composite score on Tier B or Tier C and 4.0 or higher Literacy score on Tier B or Tier C.</li> </ul>
Tennessee	<p>Identification at entry</p> <ul style="list-style-type: none"> <li>• Home language survey—responses indicate a language other than English is the first language spoken, the language spoken most often by the students, or the language spoken in the home.<sup>a</sup></li> <li>• Initial identification through the TELPA screener.</li> <li>• Annual assessment with ELDA—below composite score of 5.</li> </ul> <p>Exit from status</p> <ul style="list-style-type: none"> <li>• ELDA—composite 5.0 or composite 4.0, with reading subtest composite 4.0 or 5.0 and recommendation from the student's teachers.</li> </ul>
Virginia	<p>Identification at entry</p> <ul style="list-style-type: none"> <li>• Home language survey—responses indicate a language other than English is the first language spoken, the language spoken most often by the students, or the language spoken in the home.<sup>b</sup></li> <li>• Virginia allows school divisions to have the flexibility in their choice of English language proficiency screener.</li> </ul> <p>Exit from status</p> <ul style="list-style-type: none"> <li>• WIDA—ACCESS for ELLs—for kindergarten, composite score of 5.0 or above and literacy score of 5.0 or above, accountability proficiency level; for grades 1–12, composite score of 5.0 or above and literacy score 5.0 or above on Tier C.</li> </ul>
West Virginia	<p>Identification at entry</p> <ul style="list-style-type: none"> <li>• Home language survey—responses indicate a language other than English is the native language, home language, or primary language of the student.<sup>c</sup></li> <li>• WESTELL—below level 5.</li> </ul> <p>Exit from status</p> <ul style="list-style-type: none"> <li>• WESTELL—level 5 for two consecutive years or proficient for two consecutive years on the alternate assessment and scores at mastery level on reading language arts assessment (grades 3–8 and 10) or reading language arts end-of-course exams (grades 9 and 11) or scores at mastery level on the alternate assessment.</li> </ul>

ELDA is English Language Development Assessment; TELPA is Tennessee English Language Placement Assessment; WESTELL is West Virginia Test of English Language Learning; WESTEST is West Virginia Educational Standards Test; WIDA—ACCESS for ELLs is World-class Instructional Design and Assessment (Consortium)—Assessing Comprehension and Communication in English State-to-State for English Language Learners.

a. State specifies the language-use questions to be included on the home language survey.

b. State provides guidance to school divisions on identifying questions under the provisions of Title VI of the Civil Rights Act of 1964.

c. State does not specify questions for districts to ask on home language surveys.

Source: Authors' compilation from data provided by the Kentucky Department of Education, Tennessee Department of Education, Virginia Department of Education, and West Virginia Department of Education.

## Appendix B. Data sources and methodology

This appendix describes the data sources and methodology for the study.

### Data sources

Data sources for each state are described below.

**Kentucky.** The Kentucky Department of Education provided student-level databases of English language learner (ELL) students for 2006/07–2008/09. Variables included school name, district name, grade, race/ethnicity, and language. Student-level identifiers were deleted from the files after assuring that only unique individual student records were included. (See below for additional procedures undertaken to ensure confidentiality of the student information.) These data were aggregated to the district level. Parallel student-level data were not available for 2005/06. The data on ELL student enrollments for 2005/06 and total enrollment data for 2005/06–2008/09 were drawn from the U.S. Department of Education’s Common Core of Data database. This database provides only a district total of students identified as ELL students and does not provide grade-level counts, so the state had no data available for grade-level summaries of ELL enrollments for 2005/06.

**Tennessee.** The Tennessee Department of Education provided district-level data on ELL enrollment and total enrollment for 2006/07–2008/09 and state-level summaries of ELL enrollment by grade for 2007/08 and 2008/09 for districts receiving federal funds to support services for ELL students through Title III of the No Child Left Behind Act of 2001. The district-level data files suppressed any cells with five or fewer students, though the state provided data summaries based on all the data, including suppressed cells. District-level data on the number of ELL students by grade were not available. The state-level summaries, which used student counts from Title

III districts only, represented approximately 95 percent of Tennessee’s districts with ELL students. No data were available in electronic form for 2005/06. While district-level data on ELL enrollment were available in electronic form for 2006/07, no grade-level data on ELL enrollment were available for that school year. The Common Core of Data did not include data on the number of Tennessee ELL students for 2005/06, but it did by district for 2006/07. The database does not provide grade-level ELL data.

**Virginia.** The Virginia Department of Education provided district-level data on ELL enrollment and total enrollment by grade for 2005/06–2008/09.

**West Virginia.** The West Virginia Department of Education provided district-level data on ELL enrollment and total enrollment by grade for 2005/06–2008/09.

### Ensuring data confidentiality

All original state data files and analytic files were on a secure server to ensure that only approved study staff had access. Additional procedures were implemented to meet state requirements for use of the data. For Kentucky, researchers signed notarized statements of confidentiality and nondisclosure, as required by the state’s department of education. The state provided access to the data through a secure site. The analysts stripped all individually identifiable information from the files, and the individual records were aggregated to the district level to create analytic files. As noted, Tennessee provided a district-level database that suppressed cells for districts with five or fewer students. Virginia required notarized signatures on a restricted-use-of-data agreement and provided access to the district-level data file through a secure site. West Virginia provided district-level data, and the data files were uploaded to a secure server at the Center for Applied Linguistics.

### Data limitations

Two states had changes in their English language proficiency assessments used to identify students as limited English proficient. The number of ELL students enrolled is the result of a formal process for identifying students as limited English proficient and in need of ELL instruction services. Central to this process is the use of an English language proficiency assessment. In 2006/07, Kentucky changed its assessment. At the end of the study period, Virginia was about to implement a new assessment. The state gave districts the option in 2008/09 of using the new assessment in the year before its implementation, and some districts might have used it. These changes could have affected reported enrollments of ELL students in Kentucky and Virginia, and some changes might be due to the assessments rather than actual changes in the population.

Further, data were drawn from two sources in Kentucky and Tennessee: state department of education databases and the U.S. Department of Education Common Core of Data. Some gaps in the data remained in the final state datasets: grade-level data on ELL enrollment were not available for Kentucky for 2005/06. Tennessee enrollment data were not available for 2005/06, and grade-level data for Tennessee were not available for 2006/07. The grade-level data on ELL students in Tennessee for 2007/08 and 2008/09 were based on counts from a separate report of districts receiving federal funds for ELL student services through Title III of the No Child Left Behind Act of 2001. These districts represented 95 percent of all districts with ELL students. Thus, not all districts were included, and the counts by grade level did not include all ELL students at each grade. In Virginia, blank cells (as opposed to cells with “zero” values) were used to indicate where no ELL students were present. These cells might have included missing data cells so Virginia’s total ELL student enrollment data might include some undercounting.

### Analyses of English language learner student enrollment in 2008/09 and changes in the enrollments in 2005/06–2008/09

Three sets of analyses were conducted to analyze trends and changes in student enrollment. In the first set, district-level K–12 enrollment data and ELL student enrollment data were summed across districts to obtain total K–12 enrollment and enrollment of ELL students for each study state for 2005/06–2008/09. ELL student enrollment as a percentage of total enrollment was calculated to obtain the level of ELL student representation in each state.

In the second set of analyses, district-level calculations were conducted. The level of ELL student enrollment in each district in each state for 2005/06–2008/09 was calculated as the proportion of ELL students to the total number of students and was classified into seven levels: 0 percent (no ELL students), less than 1.0 percent, 1.0–4.9 percent, 5.0–9.9 percent, 10.0–19.9 percent, 20.0–29.9 percent, and 30.0 percent or more. These levels of representation were the same as those used in Zehler et al. (2008), which reported on ELL student enrollments in the Appalachia Region for 1998/99–2004/05. In the earlier study, however, districts with 10.0 percent or more ELL students were collapsed into one level. The current study added levels to show differences in higher levels of representation for one of the states and to clarify the highest levels of representation in the other three states.

The median number of ELL students at a given enrollment level was also obtained, because it is less sensitive than the mean to extreme numbers and is thus a better indicator of the size of the ELL student enrollments in the districts at a given representation level. The median district ELL student enrollment—rather than the median total enrollment—was anticipated to be more informative for the state administrators for ELL student services.

The third set of analyses involved calculations to identify districts that had a substantial increase in ELL student enrollment from one year to the next as an indication of the extent to which these increases might challenge their ability to provide services. The focus was to identify districts with emerging ELL student populations, where the challenges in building capacity might be greater than in districts that experience increases to an already large ELL student enrollment. In these analyses, a substantial increase was defined either as a 50 percent or greater increase from one year to the next in ELL student enrollment as a proportion of total enrollment or as enrollment of one or more ELL students where none was present in the prior year. Districts with fewer ELL students can more easily meet this criterion, so the analysis was conducted separately for districts with 1–49 ELL students and those with 50 or more ELL students. This cutpoint was selected to distinguish districts where there were either very small numbers of ELL students enrolled overall or where the number enrolled across schools in the district was likely to result in small numbers of ELL students in any one grade or school. This is the same cutpoint used in Zehler et al. (2008). The median ELL student enrollment was calculated for the districts identified with substantial change in each state in each year, for those with 1–49 ELL students and for those with 50 or more ELL students.

#### **Enrollment of English language learner students by grade level in 2008/09 and changes in grade-level enrollment over 2005/06–2008/09**

Grades K–12 were clustered into five grade spans: kindergarten, 1–3, 4–6, 7–8, and 9–12, based on the grade spans that the state administrators said they would find most useful in reporting on ELL students. Each state suggested a set of grade spans. The final grade spans were those with the greatest commonality across the four states. Total enrollment and ELL student enrollment were obtained for the grade-level groups in each state for 2005/06–2008/09. The number of ELL students as a proportion of the total number of students was calculated for each grade span for each state in each year.

#### **Geographic locales of districts enrolling English language learner students in 2008/09**

For each study state, locale codes for four broad geographic locales (city, suburb, town, and rural, as defined by the National Center for Education Statistics with the U.S. Census Bureau) were obtained from the Common Core of Data for 2008/09 for districts that enrolled at least one ELL student. The number of districts in each geographic locale and the proportion that these districts represented of the total number of districts that enrolled at least one ELL student were calculated for each locale. The median ELL student enrollment was also calculated for districts within each locale.



## Notes

1. “Limited English proficient” is the term used in the No Child Left Behind Act of 2001 federal legislation; however, educators and practitioners prefer the term “English language learner” or “English learner.” This technical brief uses the term “English language learner.”
2. There is no consensus definition for English language learner students, who are also referred to as limited English proficient students. The authors’ definition is based on the core definition in the No Child Left Behind Act of 2001 and the description of limited English proficient persons in the U.S. Department of Education Departmental Directive, June 15, 2005: “[Limited English proficient] persons are those whose proficiency in speaking, reading, writing, or understanding English . . . is such that it would deny or limit their meaningful access to programs and services provided by the Department if language assistance were not provided” (p. 2).
3. At times, the discussion of findings includes the results of calculations using data from the tables, but the results are not displayed in the table.
4. Tennessee data for 2005/06 were not available. However, comparing the years 2006/07 to 2008/09, Tennessee data showed the same pattern of increased enrollment of ELL students together with a small decrease in the total enrollment.
5. No changes in the criteria for identifying ELL students or as students exiting students from ELL status coincided with this decrease in enrollment.
6. A small school district with one ELL student in the first year and two ELL students in the second year would meet the criteria as being a substantial increase. However, a district with 75 ELL students in the first year and 140 ELL students in the second year would not meet this threshold, even though it is a large increase.
7. For the analyses for 2006/07, only Kentucky, Virginia, and West Virginia had available data.
8. Geographic locale categories are based on the locale codes used by the U.S. Department of Education, National Center for Education Statistics. The Common Core of Data includes the locale code for each school district. There are 12 detailed locale codes that can be collapsed into the four overarching codes of city, suburb, town, and rural (see box 2).
9. This pattern is consistent with the four-state region overall, where 57 percent of all districts are located in rural locales.
10. This analysis is not presented in table 14.
11. “Limited English proficient” is the term used in the No Child Left Behind Act of 2001 federal legislation; however, educators and practitioners prefer the term “English language learner” or “English learner.” This technical brief uses the term “English language learner,” but the federal term “limited English proficient” is included in this appendix since it describes how states respond to the federal requirement to identify students who meet the federal criteria for limited English proficient status.

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