

Portland, Oregon

This case study focused a second and third grade blended classroom that used the Bridges in Mathematics Grade 2 curriculum. The blended classroom varied in size over the four year period from 11 second and 12 third grade students in 2000-2001 to 12 second and 12 third grad students in 2001-2002, 10 second and 15 third grade students in 2003-2003 and 12 second and 10 third grade students in 2003-2004. The same teacher taught all four classes. She had over 21 years of teaching experience and had used the Bridges curriculum for five years. Each blended class used the Bridges curriculum for the entire school year and some of the instruction was supplemented with *Opening Eyes to Mathematics*, a grades 3-4 program that is also published by The Math Learning Center. The students in the 2002-2—3 and 2003-2004 blended classes also helped field test the Bridges Grade 3 curriculum when it was under development.

The blended class is part of Russell Elementary School, a public K-5 school that is in the Parkrose School District in urban Portland, Oregon. At the time of this study, the school had an enrollment of about 395 students. Approximately 47% of the Russell Elementary students were eligible to participate in the free and reduced price lunch program. The ethnic make up of the school was approximately 72% white and 28% minority (mostly Asian and Hispanic). The district had 4 elementary schools, a middle school, a high school, and an enrollment of about 3,598 students. In the fall of 2003, Russell Elementary became a Title I school. They also changed their name to the Russell Academy of Academic Achievement.

It was the first time that any of the second grade students in the blended class used the Bridges curriculum, except for the students in the 2003-2004 class. These students were exposed to Bridges as first graders when the first grade teachers at Russell Academy implemented the Bridges curriculum during the 2002-2003 school year. Almost all of the third grade students in the blended class were in the class the previous school year as second graders and, as a result, had used the Bridges curriculum for two consecutive years. The exceptions were one student in the 2001-2002 blended class and three students in the 2002-2003 blended class who were not in the class the previous school year and did not use the Bridges curriculum as second graders. In addition, a third grade student from the 2003-2004 blended class was not in the class the previous year, but did use the Bridges curriculum as a second grader at another school. Most of the other second and third grade teachers in the district used a more traditional mathematics curriculum during the time period of this case study. Many of the second grade teachers also used *Box It or Bag It Mathematics*, a K-2 curriculum that is also published by The Math Learning Center.

Assessment

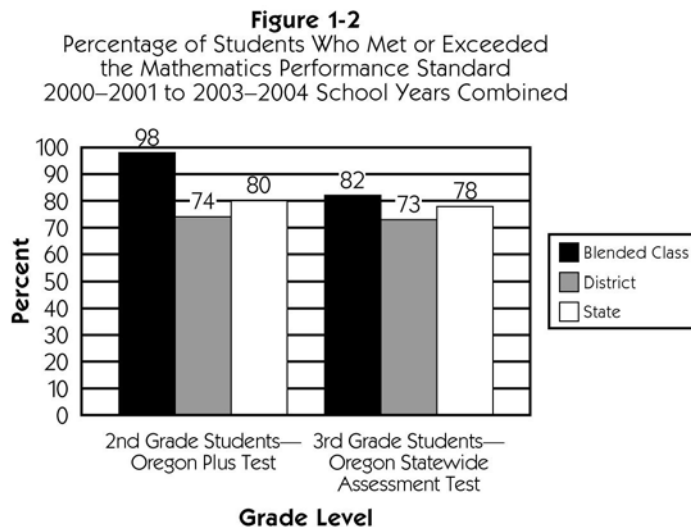
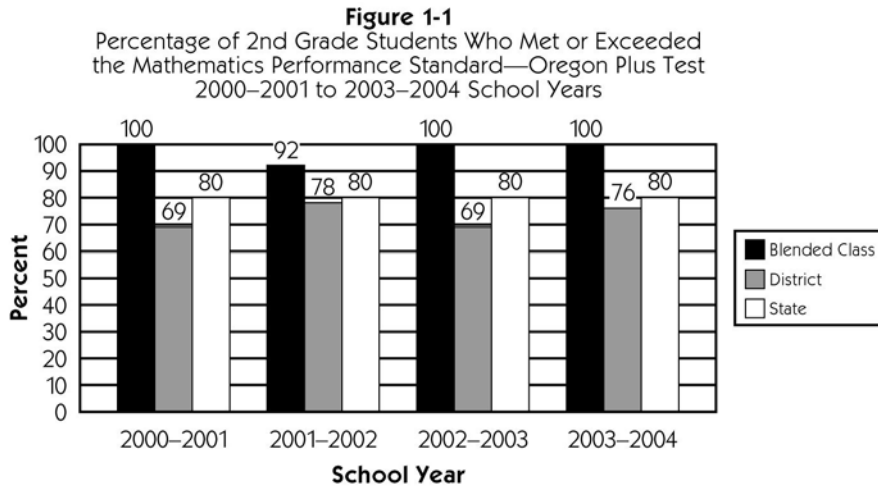
The district assessed third grade mathematics achievement with the mathematics section of the state developed Oregon Statewide Assessment Test. To assess second grade mathematics achievement, they used the mathematics section of the Oregon Plus Test, a test developed by a private evaluation company. Both instruments are criterion-referenced tests that are based on the Oregon Content Standards. There were three performance levels on the tests: met the standard, exceeded the standard, and did not yet meet the standard. Both tests were administered in early April.

Outcome

Over the past four school years, the second grade students from the blended class performed very well on the mathematics section of the Oregon Plus Test (see Figure 1-1). All 11 (100%) of the second grade students from the 2000-2001 blended class met or exceeded the mathematics performance standard on the test compared with 69% of the district ($N = 178$) and 80% of the state ($N = 9,544$) second grade students who took the test. In the 2001-2002 school year, 11 (92%) of the 12 second grade students from the blended class met or exceeded the mathematics performance standard on the test compared with 78% of the district ($N = 269$) and 80% of the state ($N = 9,106$) second grade students tested. All 10 (100%) of the second grade students from the 2002-2003 blended class met or exceeded the mathematics performance standard on the test compared with 69% of the district ($N = 254$) and 80% of the state ($N = 9,106$ estimated) second grade students who took the test. In the 2003-2004 school year, all 12 (100%) of second grade students from blended class met or exceeded the mathematics performance standard on the test compared with 76% of the district ($N = 279$) and 80% of the state ($N = 9,105$) second grade students tested. When the results for the four school years are combined, 44 (98%) of the 45 second grade students from the blended class



met or exceeded the mathematics performance standard on the test (see Figure 1-2). In comparison, 74% of the district and 80% of the state second grade students who took the test during this same time period met or exceeded the mathematics performance standard (see Figure 1-2).



During the past 4 school years, the third grade students from the blended class also performed very well on the mathematics section of their test, the Oregon Statewide Assessment Test (see Figure 1-3). Eight (67%) of the 12 third grade students from the 2000-2001 blended class met or exceeded the mathematics performance standard on the test compared with 73% of the district (N = 259) and 75% of the state (N = 39,848) third grade students tested. In the 2001-2002 school year, all 12 (100%) of the third grade students from the blended class met or exceeded the mathematics performance standard on the test compared with 70% of the district (N = 266) and 77% of the state (N = 39,070) third grade students who took the test. Ten (67%) of the 15 third grade students from the 2002-2003 blended class met or exceeded the mathematics performance standard on the test compared with 73% of the district (N = 290) and 78% of the state (N = 40,565) third grade students tested. In the 2003-2004 school year, all 12 (100%) of the third grade students from the blended class met or exceeded the mathematics performance standard on the test compared with 77% of the district (N = 255) and 82% of the state (N = 40,748) third grade students who took the test. When the results for the four school years are combined, 40 (82%) of the 49 third grade students from the blended class met or exceeded the mathematics performance standard on the test compared with 73% of the district and 78% of the state third grade students tested (see Figure 1-2).



Figure 1-3
Percentage of 3rd Grade Students Who Met or Exceeded
the Mathematics Performance Standard—Oregon Statewide
Assessment Test 2000–2001 to 2003–2004 School Years

