THE CASE FOR
PLACE-BASED

They Remember What They Touch…

The Impact of Place-Based Learning in
East Feliciana Parish

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Contrary to its Spanish name, East Feliciana has never been a “happy land” for public education. Located in southeastern Louisiana, East Feliciana Parish School District was carved out as a result of consolidations, closures, mergers and chronic poor school performance. The district serves approximately 3,000 students, 2,400 of them in grades K-8. In a parish where African Americans comprise only 47.1% of the population, they represent more than 80% of the public school students; most, 84.8%, qualify for free or reduced-price lunch.

Stressed by high poverty levels, a low tax base and low teacher salaries, the district competes, most often unsuccessfully, with neighboring districts and states, and with a relatively segregated white academy system for qualified teachers and pupil resources. Consequently, at the dawn of the federal government’s landmark education reform initiative, the No Child Left Behind Act of 2001, 55.8% percent of the district’s K-8 teachers were not fully certified to teach and 80% of its students were performing below average in at least one core subject. (District Indicator Summary Results, 2000-2001) At the same time, only 31.8% of the parish’s adult population had completed high school and fewer than 5% were college graduates. With a median household income of $26,864, 26% of the parish’s children were living below the poverty level.

Testing and Accountability

Beginning in the spring of 1999, in an effort to improve education overall, Louisiana instituted the Louisiana Educational Assessment Program for the 21st Century (LEAP 21). LEAP 21 tests in English Language Arts and Mathematics were administered to students in grades 4 and 8, and in spring 2000, science and social studies tests were added. The statewide accountability program requires students to develop conceptual understanding in specific content areas and to be able to apply their knowledge in the context of the real world.

Table 1 (page 3) shows LEAP 21 scaled-score ranges for grades 4 and 8 for each of five achievement levels. Ranges are not comparable across grade levels or content areas because of variances in test content and difficulty. No 4th or 8th grade student can be promoted if he or she scores at the unsatisfactory achievement level on the LEAP 21 English Language Arts or Mathematics tests.

School year 1998-99 was the baseline year for school and district accountability. In that year, 27% of East Feliciana’s 4th graders scored at the unsatisfactory level in English Language Arts (compared to 20.7% for the state), and 44% (34.8% for the state) scored unsatisfactory in mathematics. Unless the schools made substantial progress over a short period of time, East Feliciana school district would be subject to “corrective action” and increased external control. It was within this context that Daisy Slan, district superintendent, began to seek out reform strategies to raise student achievement and the district’s persistently low test scores.
Table 1. Louisiana Educational Assessment Program Scaled Score Ranges

<table>
<thead>
<tr>
<th>Achievement Level*</th>
<th>English Language Arts Scaled-Score Range</th>
<th>Mathematics Scaled-Score Range</th>
<th>Science Scaled-Score Range</th>
<th>Social Studies Scaled-Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade 4</td>
<td>Grade 8</td>
<td>Grade 4</td>
<td>Grade 8</td>
</tr>
<tr>
<td>Advanced</td>
<td>408-500</td>
<td>402-500</td>
<td>419-500</td>
<td>398-500</td>
</tr>
<tr>
<td>Approaching Basic</td>
<td>263-300</td>
<td>269-314</td>
<td>282-314</td>
<td>296-320</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>100-262</td>
<td>100-268</td>
<td>100-281</td>
<td>100-295</td>
</tr>
</tbody>
</table>

*Advanced: Student has demonstrated superior performance beyond the proficient level of mastery
Proficient: Student has demonstrated competency over challenging subject matter and is well prepared for the next level of schooling
Basic: Student has demonstrated only the fundamental knowledge and skills needed for the next level of schooling
Approaching Basic: Student has only partially demonstrated the fundamental knowledge and skills needed for the next level of schooling
Unsatisfactory: Student has not demonstrated the fundamental knowledge and skills needed for the next level of schooling

SOURCE: LEAP21/GEE21 2001-2002 Annual Report, online at www.doe.state.la.us/lde

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School Reform Through Place-Based Learning

With funding from the National Science Foundation’s Delta Rural Systemic Initiative, East Feliciana began a place-based mathematics and science initiative, which it called Project Connect. In 1999, The Rural School and Community Trust (then the Annenberg Rural Challenge) provided additional funding and technical support to enhance and expand the implementation of Project Connect at the 4th grade level.

According to Dr. Knight Roddy, district director for place-based learning, Project Connect initially focused on improving science instruction by connecting the schools and the community in new and important ways. He hoped this strategy would point the way for changes in other subject areas as well. Using the environment as the theme of their place-based learning, students studied local soil, rocks and minerals, ecology, topography, weather, biodiversity, and water quality. Nature trails and butterfly gardens were built. Over time, the focus of place-based work has expanded to include local geography and history as a meaningful context to teach science, mathematics, social studies and language arts. The work has involved mainly K-8 teachers and students, content area facilitators, principals, and central office personnel. Local community partners come from a wide range of organizations and agencies, including the Watershed Alliance, the Extension Service, and area universities.

Schools and Students Served

East Feliciana began using place-based education in its five elementary and middle schools: Clinton Middle, Jackson Middle, Clinton Elementary, Jackson Elementary and Slaughter Elementary. These five schools serve approximately 2,000 students in grades K-8. Dr. Knight Roddy reports that over the last three years, approximately 1,800 East Feliciana students have participated in place-based learning. Table 2 (page 4) gives a summary of selected indicators for each of the five schools during the 1998-1999 academic year, the year prior to the implementation of place-based learning.
Table 2. Summary Indicators for East Feliciana Elementary and Middle Schools 1998-1999

<table>
<thead>
<tr>
<th>School</th>
<th>Student Data</th>
<th>Teacher Data</th>
<th>Performance Label</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number K-8</td>
<td>% Black</td>
<td>% Sp.Ed.</td>
</tr>
<tr>
<td>Clinton ES</td>
<td>488</td>
<td>92.49</td>
<td>8.06</td>
</tr>
<tr>
<td>Clinton MS</td>
<td>445</td>
<td>90.23</td>
<td>11.46</td>
</tr>
<tr>
<td>Jackson ES</td>
<td>735</td>
<td>75.20</td>
<td>13.05</td>
</tr>
<tr>
<td>Jackson MS</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Slaughter ES</td>
<td>256</td>
<td>35.02</td>
<td>10.47</td>
</tr>
</tbody>
</table>

1 From the 1999-2000 school year.
2 Jackson Middle School was established in 1999-2000. In that year, it enrolled 279 students, 75.27% of whom were African American; 77.03% were in poverty and 13.78% in special education. Only 50% of the teachers were certified.

Teachers Served

Three consecutive summer training programs were offered to East Feliciana’s elementary teachers, focusing on content knowledge and place-based learning. Project Connect I was offered in July 2000, and focused on local natural resources and standards-based science assessment. Project Connect II was held in July 2001 and built on Project Connect I by demonstrating to teachers how mathematics, science, and technology could be integrated in the study of local natural resources. Project Connect III was offered in June 2002, and focused on local geography and history. Over the course of these three programs, 52 different teachers were trained. Ten of them were involved in Project Connect I and II, and received approximately 132 hours of place-based training. The remaining 42 were involved in Project Connect I, II or III, and received up to 72 hours of training.

Following Project Connect I, an interdisciplinary district leadership team composed of science, mathematics and language arts facilitators formed to design and present place-based units and teacher workshops collaboratively. This team received additional training in place-based learning through a site visit to Lubec, Maine, and through participation in the Roger Tory Peterson Institute’s “Teaming with Nature Program.” They returned to help design and conduct trainings for the teachers in Project Connect II. Teachers who were unable to attend the trainings have embraced place-based learning as a result of two school-year workshops and subsequent support of the district’s science and place-based learning facilitators. The greatest impact of teacher training has been seen at Slaughter Elementary School where three of the leadership team members teach.

In addition to increasing their knowledge and skills in place-based learning, leadership team members have gained valuable workshop planning, instruction and administration skills, not only during the summer programs, but also through meeting and conference presentations. Every administrator, supervisor and school board member was introduced to the concept and local examples of place-based learning. Consequently, the local support structure for place-based learning has gained in depth.

Changes in Student Achievement 1998-2002

LEAP 21 District-wide Results

Table 3 (page 5) shows changes in LEAP 21 test scores for East Feliciana’s 4th grade classes from 1998-1999 to 2001-2002. The indicator for students performing at the unsatisfactory level provides a measure of progress. As place-based learning became more interdisciplinary over time, English Language Arts and social studies data are provided along with mathematics and science data.
In 1998-99, the baseline year for LEAP 21, 27.3% of the district’s 4th grade students performed at the unsatisfactory level in English Language Arts. When the district introduced place-based learning in 1999, the percentage had increased to 32.6%. In the year after place-based learning was introduced, the number of students scoring at the unsatisfactory level in English Language Arts decreased by seven percentage points from year 1999 – 2000 to 25.4%. By 2001-2002, the percentage had decreased to 18.4, a full 13.2 points from 1999-2000. Over the same period, the percentage of students scoring unsatisfactory in the state decreased by only 6.5 points (from 20.7% to 14.2%). The gap between the district and the state narrowed from 12.9 percentage points to 4.2.

Similar gains were seen in mathematics, science and social studies (See Figure 1 and Figure 2). In mathematics, there was a 14.1-point decline for East Feliciana students who performed at the unsatisfactory level, from 39% in 1999-00 to 24.9% in 2001-02 (compared to a 3.6 point decline in the state as a whole). The gap between the district and the state narrowed from 9.3 to 4.9 points.

In science, East Feliciana’s 4th graders posted an 8.1-point decrease in the number of students scoring unsatisfactory between 1999-00 and 2001-02 while in the state overall, there was a 3.7-point decrease. In 2000-01, East Feliciana’s 4th graders tied the overall state performance in science. In social studies, there was an 11.3-point decrease in the number of students scoring unsatisfactory compared to a 3.2-point decrease for the state overall.

**LEAP 21 Individual School Results**

Tables 4 through 6 show year-by-year 4th grade student achievement by school as compared to that of 4th graders throughout the state from 1998-1999 to 2001-2002.
Table 4. Percent of Clinton Elementary and State Fourth Graders Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-202

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Arts</td>
<td>26.8</td>
<td>20.7</td>
<td>29.0</td>
<td>19.7</td>
<td>28.4</td>
<td>16.4</td>
<td>23.4</td>
<td>14.2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>40.2</td>
<td>34.8</td>
<td>39.8</td>
<td>28.3</td>
<td>37.3</td>
<td>23.3</td>
<td>22.5</td>
<td>24.7</td>
</tr>
<tr>
<td>Science</td>
<td>N/A</td>
<td>N/A</td>
<td>32.3</td>
<td>18.2</td>
<td>15.7</td>
<td>15.2</td>
<td>18.9</td>
<td>14.5</td>
</tr>
<tr>
<td>Social Studies</td>
<td>N/A</td>
<td>N/A</td>
<td>38.7</td>
<td>23.8</td>
<td>35.3</td>
<td>21.1</td>
<td>29.7</td>
<td>20.6</td>
</tr>
</tbody>
</table>

SOURCE: Louisiana Department of Education website, www.state.la.us/lde

At Clinton Elementary School, the greatest gains were in mathematics and science, the initial focus areas for their place-based learning initiative. In mathematics, the percentage of students scoring unsatisfactory decreased by 17.3 points, from 39.8 in 1999-2000 to 22.5 in 2001-2002. Statewide, the percentage dropped by only 3.6 points. In science, the percentage of Clinton students scoring unsatisfactory decreased by 13.4 points, from 32.3% to 18.9% while the state percentage dropped by only 3.7 points. (See Figure 3 and Figure 4)

From 1999-2000 to 2001-2002, Jackson Elementary showed substantial decreases in the percentages of 4th graders scoring unsatisfactory on the LEAP 21 English Language Arts and social studies tests, but slight increases in mathematics and science. Superintendent Slan attributes this to the school’s relative instability. Originally a K-8 school, it was restructured as an elementary school in 1999-2000. Additionally, the school experienced an exceptionally high teacher turnover rate making it virtually impossible to sustain school-wide innovation of any kind. Table 5 (page 7) shows year-by-year LEAP 21 score changes from 1998-1999 to 2001-2002.

SOURCE: Louisiana Department of Education website, www.state.la.us/lde
Table 5. Percent of Jackson Elementary and State Fourth Graders Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-2002

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>1998-99 School</th>
<th>1999-00 School</th>
<th>2000-01 School</th>
<th>2001-02 School</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language</td>
<td>31.0</td>
<td>20.7</td>
<td>19.7</td>
<td>18.3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>57.7</td>
<td>34.8</td>
<td>28.3</td>
<td>24.7</td>
</tr>
<tr>
<td>Science</td>
<td>N/A</td>
<td>N/A</td>
<td>27.8</td>
<td>28.2</td>
</tr>
<tr>
<td>Social Studies</td>
<td>N/A</td>
<td>N/A</td>
<td>49.4</td>
<td>33.8</td>
</tr>
</tbody>
</table>

SOURCE: Louisiana Department of Education website, www.state.la.us/lde

The greatest individual school success in East Feliciana is clearly Slaughter Elementary School where three of the place-based leadership team members teach. Table 6 shows year-by-year changes in LEAP 21 scores from 1998-1999 to 2001-2002.

Table 6. Percent of Slaughter Elementary and State Fourth Graders Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-2002

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>1998-99 School</th>
<th>1999-00 School</th>
<th>2000-01 School</th>
<th>2001-02 School</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language</td>
<td>22.0</td>
<td>20.7</td>
<td>19.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>29.3</td>
<td>34.8</td>
<td>28.3</td>
<td>24.7</td>
</tr>
<tr>
<td>Science</td>
<td>N/A</td>
<td>N/A</td>
<td>17.4</td>
<td>14.5</td>
</tr>
<tr>
<td>Social Studies</td>
<td>N/A</td>
<td>N/A</td>
<td>23.9</td>
<td>20.6</td>
</tr>
</tbody>
</table>

SOURCE for Table 6 and Figures 5 and 6: Louisiana Department of Education website, www.state.la.us/lde

In 1999-2000, 32.6% of 4th graders scored unsatisfactory on the LEAP 21 tests in English Language Arts. In 2001-2002, that number had decreased to 2.9%, a difference of 29.7 points. Similar results were achieved across subject areas with a 35.6-point drop in the percentage of students failing the mathematics test (from 41.3% to 5.7%, compared to 28.3% and 24.7% for the state as a whole). In science, the percentage of students scoring unsatisfactory went from 17.4% to 2.9% (18.2% to 14.5% in the state), and in social studies from 23.9% to 11.4% (23.8% to 20.6% for the state). (See Figure 5 and Figure 6)
Although test scores for East Feliciana’s 4th graders remain behind those of 4th graders in the state as a whole in most instances, they are clearly making great gains, most often at rates far exceeding those of the state. Place-based learning has undoubtedly made a difference.

**Place-Based Learning: Beyond the Test Scores**

In East Feliciana, place-based learning has had an impact beyond standardized test scores and beyond the walls of the school itself. Parish schools are developing lasting school-community partnerships. The district is connecting its residents, including students, with natural resources located in East Feliciana and the surrounding communities by collaborating with educators, parents, community members, clergy, businesses and nonprofits. Community partnerships have already been formed with the following:

- Cooperative Extension Service
- Local sheriff’s office
- Local community historians
- Delta Service Corps
- State Office of Forestry
- Natural Resource Conservation Service
- United States Geological Survey
- Colleges and universities
- Regional Watershed Alliance
- Local preservation and historical associations

According to Dr. Roddy, “Those involved have developed new knowledge and skills, and learned much about the challenges of place-based learning.” The acquisition of new knowledge and skills by community members will undoubtedly benefit the community as a whole. At the least, it provides for a more informed citizenry and greater community capacity to support and maintain quality education in the district’s public schools.

Dr. Roddy also maintains “place-based learning is serving as a hook to get students excited about learning.” He continues, “kids are interested in going outside of the school buildings and learning within the context of their environment.” Mr. Hunter, a 7th grade science teacher at Jackson Middle School, made the following comments to Rural Trust steward Julie Bartsch during one of her site visits:

Kids are remembering facts from last year about the critters they netted. When other students and adults come to my class, my students can talk articulately about what they are doing…they remember what they touch!

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**Sources of Information:**
The Rural School and Community Trust
Dr. Knight Roddy, Project Coordinator – East Feliciana School District
Dr. Daisy Slan, Superintendent – East Feliciana School District
Louisiana Department of Education Website