

**Descriptive Statistics on Student Achievement  
Data Collected for the ARTS FIRST  
Windward Research Project**

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**Addendum to the Report, “Evaluation of the  
Second Year of the ARTS FIRST  
Windward Research Project”**

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## Purpose

This report is an addendum to the report, “Evaluation of the Second Year of the ARTS FIRST Windward Research Project” (Brandon, Lawton, and Krohn-Ching, 2005). The purpose of the report is to present descriptive statistics for the 2004–05 Hawai‘i State Assessment (HSA), the standardized test used to measure students reading and mathematics achievement. The HSA consists of two sections: The criterion referenced Hawai‘i Content and Performance Standards (HCPS) and the norm referenced Stanford Achievement Test 9<sup>th</sup> Edition (SAT9). The achievement test data are being presented in an addendum to the full report (Brandon, Lawton, & Krohn-Ching, 2005) because they were unavailable when that report was produced in September 2005. The results reported here will be used in the final evaluation report after Year 3 of the project to answer part of Evaluation Question 1, “To what extent do students show improvements in reading and mathematics achievement, attitudes toward school, interest in artistic activities, and behavior?” and Evaluation Question 2, “To what extent do these changes differ among project and comparison schools?” The results presented here should not be used to answer the questions because they do not show the levels at which the two groups achieved before the start of the project and because students have yet to be instructed over the three-year life of the project.

Year 2 of the project, examined in the full report, was the first year in which the program was implemented for an entire school year. It was implemented in Grades 3 and 4. Descriptive statistics for the 2004–05 HSA, which was administered to all Grade 3 and 5 project and control group students, are presented in Tables 1 and 2.

Although Grade 5 project group students were not exposed to the project in Year 2, we are presenting their data for continued baseline information, which will be used in the third year of the project when we conduct trend analyses. Trend data will be limited to the years since the HSA was first implemented in 2001–02 and will be presented through the final project year (2005–06).

For psychometric and scoring information for the HSA, refer to the addendum to the Year 1 full evaluation report (Brandon & Lawton, 2004) and to Appendix B, Section 1 of the Year 2 full evaluation report (Brandon, Lawton, & Krohn-Ching, 2005).

## References

Brandon, P. R., Lawton, B., & Krohn-Ching, W. (2005). *Evaluation of the second year of the ARTS FIRST Windward Research Project*. Honolulu: University of Hawai‘i at Mānoa, Curriculum Research & Development Group, Program Research and Evaluation Office.

Brandon, P. R., & Lawton, B. (2004). *Student achievement results for the ARTS FIRST Windward Research Project: Addendum to the Report “Evaluation of the first year of the ARTS FIRST Windward Research Project.”* Honolulu: University of Hawai‘i at Mānoa, Curriculum Research & Development Group, Program Research and Evaluation Office.

Table 1

Descriptive Statistics for Project and Control Schools' Grade 3 2004–05 Hawai'i State Assessment (HSA) Scores

| Group/<br>School | N          | Hawai'i Content and Performance Standards section of HSA |             |              |              |              |              | Stanford Achievement Test 9 <sup>th</sup> Edition section of HSA |             |              |             |
|------------------|------------|--|-------------|--------------|--------------|--------------|--------------|--|-------------|--------------|-------------|
|                  |            | Writing  |             | Reading      |              | Mathematics  |              | Reading  |             | Mathematics  |             |
|                  |            | Mean   | St. dev.    | Mean         | St. dev.     | Mean         | St. dev.     | Mean   | St. dev.    | Mean         | St. dev.    |
| <b>Project</b>   | <b>196</b> | <b>13.70</b>   | <b>3.25</b> | <b>36.42</b> | <b>11.45</b> | <b>45.66</b> | <b>14.01</b> | <b>18.72</b>   | <b>5.79</b> | <b>20.81</b> | <b>5.62</b> |
| Keolu            | 34         | 11.44  | 3.19        | 30.35        | 11.34        | 33.09        | 13.51        | 16.09  | 6.89        | 16.32        | 5.77        |
| Parker           | 68         | 14.50  | 3.23        | 38.13        | 10.03        | 49.31        | 10.28        | 19.97  | 4.49        | 21.99        | 4.57        |
| Lā'ie            | 94         | 13.94  | 2.93        | 37.37        | 11.83        | 47.58        | 14.11        | 18.77  | 5.94        | 21.58        | 5.51        |
| <b>Control</b>   | <b>154</b> | <b>14.58</b>   | <b>3.63</b> | <b>40.44</b> | <b>11.21</b> | <b>47.42</b> | <b>12.92</b> | <b>20.94</b>   | <b>5.76</b> | <b>22.14</b> | <b>5.23</b> |
| Ka'a'awa         | 16         | 11.47  | 3.66        | 43.13        | 7.92         | 55.13        | 8.76         | 22.43  | 4.36        | 24.94        | 3.40        |
| He'eia           | 71         | 14.67  | 4.03        | 37.17        | 12.31        | 46.99        | 13.83        | 19.65  | 6.42        | 22.39        | 5.51        |
| Kahuku           | 67         | 15.22  | 2.72        | 43.27        | 9.76         | 46.04        | 12.26        | 21.96  | 5.05        | 21.19        | 5.06        |

Table 2

Descriptive Statistics for Project and Control Schools' Grade 5 2004–05 Hawai'i State Assessment (HSA) Scores

| Group/<br>School | N          | Hawai'i Content and Performance Standards section of HSA |             |              |              |              |              | Stanford Achievement Test 9 <sup>th</sup> Edition section of HSA |             |              |             |
|------------------|------------|--|-------------|--------------|--------------|--------------|--------------|--|-------------|--------------|-------------|
|                  |            | Writing  |             | Reading      |              | Mathematics  |              | Reading  |             | Mathematics  |             |
|                  |            | Mean   | St. dev.    | Mean         | St. dev.     | Mean         | St. dev.     | Mean   | St. dev.    | Mean         | St. dev.    |
| <b>Project</b>   | <b>165</b> | <b>14.16</b>   | <b>3.30</b> | <b>39.22</b> | <b>10.79</b> | <b>40.10</b> | <b>13.19</b> | <b>17.55</b>   | <b>6.22</b> | <b>20.52</b> | <b>5.47</b> |
| Keolu            | 24         | 9.75   | 2.79        | 38.17        | 12.39        | 36.46        | 11.28        | 18.58  | 7.25        | 19.46        | 4.34        |
| Parker           | 61         | 14.28  | 2.73        | 39.44        | 10.24        | 38.79        | 13.40        | 16.49  | 5.60        | 20.05        | 5.85        |
| Lā'ie            | 80         | 15.39  | 2.70        | 39.38        | 10.82        | 42.19        | 13.34        | 18.05  | 6.32        | 21.20        | 5.44        |
| <b>Control</b>   | <b>185</b> | <b>15.43</b>   | <b>3.21</b> | <b>40.57</b> | <b>11.85</b> | <b>40.32</b> | <b>13.21</b> | <b>18.26</b>   | <b>5.90</b> | <b>21.35</b> | <b>5.52</b> |
| Ka'a'awa         | 19         | 15.29  | 2.65        | 38.68        | 12.49        | 44.77        | 11.29        | 18.47  | 6.77        | 21.86        | 5.20        |
| He'eia           | 81         | 14.53  | 3.12        | 39.51        | 12.61        | 39.12        | 13.77        | 17.48  | 6.00        | 21.68        | 5.70        |
| Kahuku           | 85         | 16.32  | 3.20        | 42.01        | 10.90        | 40.47        | 12.98        | 18.96  | 5.57        | 20.93        | 5.46        |