Appendix B

Survey Results

The average school program days that the average detainee is present:
(8 days - 1, 10 days - 1, 15 days - 2, and 21 days - 5) mean = 17 days

Has the school program discovered that the average student from each present grade level is reading below that grade level? (YES-9) (NO-0)

For each grade level indicate the average reading level of a detainee:
Mean Grade Levels: Grade 6 = 3.15, Grade 7 = 3.98, Grade 8 = 4.40, Grade 9 = 5.24, Grade 10 = 6.66, Grade 11 = 7.48, and Grade 12 = 8.08.

Indicate the reading assessment areas tested with a circle. (Frequency)
Interpretive Comprehension - (6), Literal Comprehension - (5), Word Meaning - (7), Word Analysis - (5), Reference Skills - (2), and a free response was included --> Word Recognition - (1).

(ccc (TM) Release 14.0, 1992)

Indicate the method(s) used to assess student reading by listing the TITLE and PUBLISHER next to the applicable assessment instrument.

<table>
<thead>
<tr>
<th>ASSESSMENT INSTRUMENT</th>
<th>TITLE</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Reading</td>
<td>Schonell's Graded Word Reading Test</td>
<td>Schonell</td>
</tr>
<tr>
<td></td>
<td>- Reading for Pleasure</td>
<td>- Scholastic Scope, Inc.</td>
</tr>
<tr>
<td></td>
<td>- English Comprehension</td>
<td>- Continental Press</td>
</tr>
<tr>
<td></td>
<td>- The J - R's Test</td>
<td>- Riverside</td>
</tr>
<tr>
<td>Audio Taping</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Video Taping</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Pencil/Paper Test</td>
<td>Reading for Understanding</td>
<td>SRA</td>
</tr>
<tr>
<td></td>
<td>- T. A. B. E.</td>
<td>- McGraw-Hill</td>
</tr>
<tr>
<td>Other, not computer</td>
<td>W. A. A. T.</td>
<td>Jastak Associates</td>
</tr>
</tbody>
</table>

Indicate the computer application(s) used to assess student reading by listing the TITLE, PUBLISHER, and the number of WORK STATIONS.

<table>
<thead>
<tr>
<th>COMPUTER HARDWARE</th>
<th>ASSESSMENT SOFTWARE TITLE</th>
<th>PUBLISHER</th>
<th>WORK STATIONS</th>
</tr>
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<tbody>
<tr>
<td>Online academic service</td>
<td>- none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District-wide network</td>
<td>- none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School-site network</td>
<td>- none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onsite file server network</td>
<td>- Basic Skills Inventory - Jostens Learning Corp. - 8</td>
<td>- Jostens Learning Corp. - 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Initial Placement Motion - Computer Curriculum Corp. - 19</td>
<td>- Computer Curriculum Corp. - 19</td>
<td></td>
</tr>
<tr>
<td>Stand-alone personal computer</td>
<td>- Skills Bank II - Skills Bank</td>
<td>- Skills Bank - 9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Reading For Comprehension - Continental Press - 16</td>
<td>- Continental Press - 16</td>
<td></td>
</tr>
</tbody>
</table>
The number of classrooms with computers: 21 (67 percent)
The number of classrooms without a computer: 14 (33 percent)

How many hours of computer hardware training do teachers receive in a school year? Mean = 4.3 hours.

How many hours of reading assessment software training do teachers receive in a school year? Mean = 3.1 hours.

How many hours of reading improvement software training do teachers receive in a school year? Mean = 3.1 hours.

Does classroom reading intervention activities include: Circle one/both (Frequency)
General group lessons - (6) Individualized remediation - (9)

Indicate which type of reading skills management system is used to keep records of students' deficiencies and remediated skills by listing the TITLE and PUBLISHER next to the applicable method(s).

<table>
<thead>
<tr>
<th>MANAGEMENT SYSTEM</th>
<th>TITLE</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual, pencil/paper</td>
<td>no title</td>
<td>teacher made</td>
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<tr>
<td>Computer</td>
<td>Skills Bank II</td>
<td>Skill Bank</td>
</tr>
<tr>
<td></td>
<td>no title</td>
<td>Jostens Learning Corp.</td>
</tr>
<tr>
<td></td>
<td>Reading for Comprehension</td>
<td>Continental Press</td>
</tr>
<tr>
<td></td>
<td>no title</td>
<td>Computer Curriculum Corp.</td>
</tr>
</tbody>
</table>

Indicate the materials used to improve reading skills by listing the TITLE and PUBLISHER next to the applicable material.

<table>
<thead>
<tr>
<th>CLASSROOM MATERIALS</th>
<th>TITLE</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed text/workbooks</td>
<td>Critical Thinking Skills</td>
<td>Steck Vaugh</td>
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<tr>
<td></td>
<td>Superstars in Action</td>
<td>Steck Vaugh</td>
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<td></td>
<td>Reading for Pleasure Series</td>
<td>Scholastic Books, Inc.</td>
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<td></td>
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<td></td>
<td>- CCC texts</td>
<td>Computer Curriculum Corp.</td>
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<tr>
<td>- Where Have We Been All These Years?</td>
<td>Amidon Publications</td>
<td></td>
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<tr>
<td>Audio tapes</td>
<td>none</td>
<td></td>
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<tr>
<td>Video tapes</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Laser video disc</td>
<td>none</td>
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<td>CD-ROM computer disc</td>
<td>Basic Skills Inventory</td>
<td>Jostens Learning Corp.</td>
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<tr>
<td>Other, not software</td>
<td>English Skills II/IV Parallel Alternatives</td>
<td>State of Florida</td>
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</table>
Indicate the computer application(s) used to improve student reading by listing the TITLE, PUBLISHER, and the number of WORK STATIONS.

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<tr>
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<td>District-wide network</td>
<td>-</td>
<td>-</td>
<td>none</td>
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<tr>
<td>School-wide network</td>
<td>- Basic Skills Inventory - Jostens Learning Corp.</td>
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<td>8</td>
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<td>Onsite file server network</td>
<td>- Reader's Workshop - Computer Curriculum Corp.</td>
<td>-</td>
<td>19</td>
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<td>Stand-alone personal computer</td>
<td>- Skills Bank II - Skill Bank</td>
<td>-</td>
<td>9</td>
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<td></td>
<td>- Project Dinosaurs - National Geographic</td>
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<tr>
<td></td>
<td>- Reading Comprehension - American Education Computer</td>
<td>-</td>
<td>12</td>
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</table>

How many minutes a day does a student utilize reading software?
(Six responses) Mean student minutes per day = 41.6 minutes.

Indicate the skills addressed in the school program with a circle.

(Frequency)
Wording Meaning - (7) Word Analysis - (8) Reference Skills - (4)
Interpretive Comprehension - (6) Literal Comprehension - (8)

(CCC (TM) Release 14.0, 1992)

With the most positive method to improve reading skills, give in percent, to your best estimate, the gain results after one month in the school program.
(Six (6) responses)

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<tr>
<th></th>
<th>MEAN</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
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<tbody>
<tr>
<td>Up to one year</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>10</td>
<td>5</td>
<td>0</td>
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<tr>
<td>9 months-1 year</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6 months-9 months</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3 months-6 months</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>2 months-3 months</td>
<td>4</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>1 month-2 months</td>
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<td>0</td>
<td>50</td>
<td>20</td>
<td>5</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Less than 1 month</td>
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<td>100</td>
<td>38</td>
<td>20</td>
<td>20</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>
Appendix C

Students' Grade Level Ages

<table>
<thead>
<tr>
<th>Grade</th>
<th>Age Ranges</th>
<th>Mean Ages</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>12 yrs. 6 mos. to 13 yrs. 9 mos.</td>
<td>13 yrs. 1 mo.</td>
</tr>
<tr>
<td>7</td>
<td>12 yrs. 8 mos. to 13 yrs. 11 mos.</td>
<td>13 yrs. 5 mos.</td>
</tr>
<tr>
<td>8</td>
<td>13 yrs. 3 mos. to 15 yrs. 11 mos.</td>
<td>14 yrs. 11 mos.</td>
</tr>
<tr>
<td>9</td>
<td>14 yrs. 3 mos. to 17 yrs. 6 mos.</td>
<td>15 yrs. 8 mos.</td>
</tr>
<tr>
<td>10</td>
<td>15 yrs. 7 mos. to 17 yrs. 3 mos.</td>
<td>16 yrs. 4 mos.</td>
</tr>
<tr>
<td>11</td>
<td>16 yrs. 8 mos. to 17 yrs. 9 mos.</td>
<td>17 yrs. 5 mos.</td>
</tr>
<tr>
<td>12</td>
<td>17 yrs. 11 mos. to 17 yrs. 11 mos.</td>
<td>17 yrs. 11 mos.</td>
</tr>
</tbody>
</table>

n = 81  age range = 12 yrs. 6 mos. to 17 yrs. 11 mos.
### Appendix D

**Students' Age Distribution**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 yrs. 6 mos. - 1</td>
<td>14 yrs. 4 mos. - 2</td>
</tr>
<tr>
<td>12 yrs. 7 mos. - 0</td>
<td>14 yrs. 5 mos. - 1</td>
</tr>
<tr>
<td>12 yrs. 8 mos. - 2</td>
<td>14 yrs. 6 mos. - 1</td>
</tr>
<tr>
<td>12 yrs. 9 mos. - 2</td>
<td>14 yrs. 7 mos. - 0</td>
</tr>
<tr>
<td>12 yrs. 10 mos. - 1</td>
<td>14 yrs. 8 mos. - 0</td>
</tr>
<tr>
<td>12 yrs. 11 mos. - 2</td>
<td>14 yrs. 9 mos. - 4</td>
</tr>
<tr>
<td>13 yrs. 0 mos. - 0</td>
<td>14 yrs. 10 mos. - 0</td>
</tr>
<tr>
<td>13 yrs. 1 mo. - 2</td>
<td>14 yrs. 11 mos. - 3</td>
</tr>
<tr>
<td>13 yrs. 2 mos. - 1</td>
<td>15 yrs. 0 mos. - 3</td>
</tr>
<tr>
<td>13 yrs. 3 mos. - 1</td>
<td>15 yrs. 1 mo. - 1</td>
</tr>
<tr>
<td>13 yrs. 4 mos. - 1</td>
<td>15 yrs. 2 mos. - 2</td>
</tr>
<tr>
<td>13 yrs. 5 mos. - 1</td>
<td>15 yrs. 3 mos. - 1</td>
</tr>
<tr>
<td>13 yrs. 6 mos. - 1</td>
<td>15 yrs. 4 mos. - 7</td>
</tr>
<tr>
<td>13 yrs. 7 mos. - 1</td>
<td>15 yrs. 5 mos. - 5</td>
</tr>
<tr>
<td>13 yrs. 8 mos. - 5</td>
<td>15 yrs. 6 mos. - 7</td>
</tr>
<tr>
<td>13 yrs. 9 mos. - 1</td>
<td>15 yrs. 7 mos. - 5</td>
</tr>
<tr>
<td>13 yrs. 10 mos. - 2</td>
<td>15 yrs. 8 mos. - 3</td>
</tr>
<tr>
<td>13 yrs. 11 mos. - 1</td>
<td>15 yrs. 9 mos. - 6</td>
</tr>
<tr>
<td>14 yrs. 0 mos. - 1</td>
<td>15 yrs. 10 mos. - 1</td>
</tr>
<tr>
<td>14 yrs. 1 mo. - 3</td>
<td>15 yrs. 11 mos. - 5</td>
</tr>
<tr>
<td>14 yrs. 2 mos. - 1</td>
<td>16 yrs. 0 mos. - 3</td>
</tr>
<tr>
<td>14 yrs. 3 mos. - 1</td>
<td>16 yrs. 1 mo. - 4</td>
</tr>
</tbody>
</table>

---

\[ n = 112 \quad x = 15 \text{ years 2 months} \]
Appendix E

Student Population's Grade Distribution

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Students</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>7</td>
<td>6.25 %</td>
</tr>
<tr>
<td>7</td>
<td>15</td>
<td>13.39 %</td>
</tr>
<tr>
<td>8</td>
<td>28</td>
<td>25.00 %</td>
</tr>
<tr>
<td>9</td>
<td>47</td>
<td>41.96 %</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>8.93 %</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>3.57 %</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>0.89 %</td>
</tr>
</tbody>
</table>

\[ n = 112 \quad x = 8.38 \text{ grade level} \]
## Appendix F

### Reading Skills Grade Level Assessment

<table>
<thead>
<tr>
<th>Passage Comprehension</th>
<th>Interpretive Comprehension</th>
<th>Literal Comprehension</th>
<th>Word Meaning</th>
<th>Word Reference Analysis Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 5.22</td>
<td>5.22</td>
<td>5.16</td>
<td>5.20</td>
<td>5.13</td>
</tr>
<tr>
<td>2 5.26</td>
<td>5.14</td>
<td>5.20</td>
<td>5.17</td>
<td>5.13</td>
</tr>
<tr>
<td>3 3.80</td>
<td>3.86</td>
<td>3.87</td>
<td>3.86</td>
<td>3.86</td>
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<tr>
<td>4 4.51</td>
<td>4.52</td>
<td>4.53</td>
<td>4.51</td>
<td>4.52</td>
</tr>
<tr>
<td>5 4.77</td>
<td>4.76</td>
<td>4.75</td>
<td>4.80</td>
<td>4.74</td>
</tr>
<tr>
<td>6 4.64</td>
<td>4.70</td>
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<td>8 4.28</td>
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<td>4.27</td>
<td>4.34</td>
<td>4.30</td>
</tr>
<tr>
<td>9 5.55</td>
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<td>5.55</td>
<td>5.62</td>
<td>5.54</td>
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<tr>
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<td>4.22</td>
<td>4.27</td>
<td>4.26</td>
<td>4.23</td>
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<tr>
<td>11 4.52</td>
<td>4.52</td>
<td>4.53</td>
<td>4.54</td>
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<td>12 4.30</td>
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<td>4.64</td>
<td>4.62</td>
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<td>4.69</td>
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<td>17 5.07</td>
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<td>5.17</td>
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<td>18 2.98</td>
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<td>3.11</td>
<td>3.00</td>
<td>3.03</td>
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<td>4.00</td>
<td>4.06</td>
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<td>5.74</td>
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<td>4.98</td>
<td>5.00</td>
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<td>4.18</td>
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<tr>
<td>26 4.04</td>
<td>4.10</td>
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<td>4.05</td>
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<tr>
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<td>3.09</td>
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(CCC (TM) Release 14.0, 1992)
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<td>4.89</td>
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<td>5.03</td>
<td>5.03</td>
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<td>4.09</td>
<td>4.06</td>
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<td>47</td>
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<td>4.76</td>
<td>4.81</td>
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<td>5.42</td>
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<td>5.33</td>
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<td>50</td>
<td>3.68</td>
<td>3.72</td>
<td>3.77</td>
<td>3.68</td>
<td>3.81</td>
</tr>
</tbody>
</table>

| Skill | Mean | 4.62 | 4.64 | 4.64 | 4.65 | 4.53 | 4.67 |

\[
n = 50 \quad x = 4.63 \text{ grade level}
\]
### Reading Skills Weakness Report

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Code</th>
<th>Reading Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.6%</td>
<td>WA 01</td>
<td>Decode words in context</td>
</tr>
<tr>
<td>1</td>
<td>1.6%</td>
<td>WA 02</td>
<td>Recognize consonant patterns</td>
</tr>
<tr>
<td>2</td>
<td>3.2%</td>
<td>WA 03</td>
<td>Recognize vowel patterns</td>
</tr>
<tr>
<td>1</td>
<td>1.6%</td>
<td>WA 04</td>
<td>Identify compound words or their components</td>
</tr>
<tr>
<td>5</td>
<td>7.9%</td>
<td>WA 05</td>
<td>Identify contractions or their components</td>
</tr>
<tr>
<td>2</td>
<td>3.2%</td>
<td>WA 06</td>
<td>Identify root words of words with prefixes or suffixes</td>
</tr>
<tr>
<td>3</td>
<td>4.6%</td>
<td>WA 07</td>
<td>Use of define words with prefixes</td>
</tr>
<tr>
<td>2</td>
<td>3.2%</td>
<td>WA 08</td>
<td>Use of define words with suffixes</td>
</tr>
<tr>
<td>2</td>
<td>3.2%</td>
<td>WA 09</td>
<td>Identify correct forms of verbs in context</td>
</tr>
<tr>
<td>2</td>
<td>3.2%</td>
<td>WA 10</td>
<td>Identify correct forms of adjectives in context</td>
</tr>
<tr>
<td>19</td>
<td>30.2%</td>
<td>WM 11</td>
<td>Identify word meanings</td>
</tr>
<tr>
<td>16</td>
<td>25.4%</td>
<td>WM 12</td>
<td>Use vocabulary in context</td>
</tr>
<tr>
<td>6</td>
<td>9.5%</td>
<td>WM 13</td>
<td>Identify synonyms using context clues</td>
</tr>
<tr>
<td>0</td>
<td>0.0%</td>
<td>WM 14</td>
<td>Identify antonyms using context clues</td>
</tr>
<tr>
<td>5</td>
<td>7.9%</td>
<td>LC 15</td>
<td>Identify explicitly stated information in short text</td>
</tr>
<tr>
<td>0</td>
<td>0.0%</td>
<td>LC 16</td>
<td>Identify pronoun referents</td>
</tr>
<tr>
<td>0</td>
<td>0.0%</td>
<td>LC 17</td>
<td>Identify sequence or time of events</td>
</tr>
<tr>
<td>12</td>
<td>19.0%</td>
<td>LC 18</td>
<td>Combine or restate sentences</td>
</tr>
<tr>
<td>4</td>
<td>6.3%</td>
<td>LC 19</td>
<td>Classify words by category</td>
</tr>
<tr>
<td>7</td>
<td>11.18%</td>
<td>IC 20</td>
<td>Make inferences from details in a short text</td>
</tr>
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</table>

Distinguish between fact and opinion
Recognize logical conclusions
Recognize cause-and-effect relationships
Analyze characters based on their speech or actions
Recognize effective descriptive language
Recognize figurative language
Determine author's viewpoint, purpose, or tone
Recognize analogies

Determine alphabetical order
Identify appropriate reference words for given tasks
Use guide words to locate information

Identify explicitly stated information
Identify sequence of events or steps
Complete a passage using context clues (cloze-type)
Identify main ideas
Make inferences
Identify word meaning in context
Recognize cause-and-effect relationships
Draw conclusions or predict outcomes
Analyze characters based on their speech or actions
Recognize figurative or poetic language
Identify type of passage or writing style
Determine author's viewpoint, purpose, or tone
Use information to make applications or analogies
Make evaluations or judgments
Interpret charts, indexes, or illustrations

n = 63
Appendix H

The Primary Target Population's Reading Skills Assessments with Pre and Posttest Comparisons

<table>
<thead>
<tr>
<th>Student Number</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Gain</th>
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<tbody>
<tr>
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<td>.08</td>
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<td>1030</td>
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<td>3.51</td>
<td>.00</td>
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<td>.10</td>
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<td>1172</td>
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<td>.10</td>
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<td>.10</td>
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<td>.10</td>
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<td>1227</td>
<td>5.63</td>
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<td>.10</td>
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First 3-week study, n = 11

mean 4.572 4.655 .084

Second 3-week study, n = 10

<table>
<thead>
<tr>
<th>Student Number</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Gain</th>
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<td>.10</td>
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<td>.10</td>
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<td>1267</td>
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mean 4.733 4.821 .088

(CCC (TM) Release 14.0, 1992)
Third 3-week study  \( n = 11 \)

<p>| | | |</p>
<table>
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**mean**  
4.785  
4.883  
0.098

Fourth 3-week study  \( n = 11 \)

<p>| | | |</p>
<table>
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<tbody>
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<tr>
<td>1404</td>
<td>5.21</td>
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</table>

**mean**  
4.340  
4.433  
0.093

**N** = 43  
**Mean**  
4.604  
4.695  
0.091

gain less than .10 = 10 students  
gain equal to or greater than .10 = 33 students

\[ \frac{33}{43} = 76.7 \text{ percent of the primary target population were successful} \]

\[ 3.90 \text{ group gain} / 43 = 0.091 \text{ mean population gain} \]
# Appendix I

The Primary Target Population's Reading Attitudinal Survey with Pre and Poststudy Survey Comparisons

<table>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Undecided</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

---

**Directions:** Read the statement and choose your response by circling one number.

1) I enjoy reading.  & 1 2 3 4 5  
2) I am a good reader.  & 1 2 3 4 5  
3) I like to read everyday.  & 1 2 3 4 5  
4) I like to read because it will help me throughout my life.  & 1 2 3 4 5  
5) I learn a new word everyday by reading.  & 1 2 3 4 5  
6) I enjoy reading books and handouts from school.  & 1 2 3 4 5  
7) I enjoy listening to other students read aloud in class.  & 1 2 3 4 5  
8) Other students enjoy listening to me read aloud in class.  & 1 2 3 4 5  
9) I enjoy reading aloud in class.  & 1 2 3 4 5  
10) I enjoy learning reading skills on the computer.  & 1 2 3 4 5  

---

109
Comparison Summary of the Pre and Poststudy Reading Attitudinal Surveys

<table>
<thead>
<tr>
<th></th>
<th>Prestudy</th>
<th>Poststudy</th>
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</thead>
<tbody>
<tr>
<td>Population</td>
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<td>44</td>
</tr>
<tr>
<td>Prestudy mean</td>
<td>19.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(the highest possible score was 30.00)</td>
<td></td>
</tr>
<tr>
<td>The number of the group which had scores greater than the prestudy mean</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>The percentage greater than the prestudy mean</td>
<td>70.5%</td>
<td></td>
</tr>
<tr>
<td>Add 15 percent to the prestudy mean</td>
<td>21.98</td>
<td></td>
</tr>
<tr>
<td>The number of the group which had equal to or greater than scores compared to the 15 percent added to the prestudy mean</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>The percentage equal to or greater than the added 15 percent to the prestudy mean</td>
<td>56.8%</td>
<td></td>
</tr>
</tbody>
</table>
Appendix J

The Secondary Target Population’s
Onsite Computer Applications
Poststudy Test

Answer true or false.

1) A keyboard is an output device.
2) A hard drive is a storage device.
3) A printer is an output device.
4) Monochromatic monitor means a color monitor.
5) A 3.5 inch disk can function in a 5.25 inch disk drive because it is small enough to fit in the slot.
6) A data disk is a storage device.
7) A dot matrix printer has the same print quality as a daisy wheel printer.
8) The 18 Apple IIe (TM) computers at the school site are considered to be stand-alone because they are not networked.
9) The CCC (TM) integrated learning system is on a file server at another school site.
10) The Imagine Writer II (TM) printer is a serial printer because it receives one bit at a time.
Choose a, b, c, or d.

11) The Apple IIe (TM) computer uses the following language(s): a) DOS 3.3 b) ProDOS 8 c) Both a and b d) Macintosh

12) Hardcopy appears on a: a) piece of printer paper b) monitor screen c) floppy disk d) both a and b

13) Output is data that appears on: a) a screen b) a disk c) paper d) all of these

14) The disk that has the capacity to hold the most bytes of memory is: a) a 5.25 inch double density disk b) a 3.5 inch double density disk c) a 20 MB hard drive d) a one gigabyte hard drive

15) RAM is an acronym for: a) read access memory b) random access memory c) ready available memory d) reserve available memory

16) ROM is an acronym for: a) ready off memory b) read only memory c) random off line menu d) rite on menu

17) CPU is an acronym for: a) computer pile unit b) compiler printer uniform c) central processing unit d) coprocessor unit

18) Expansion slots are located on the: a) printer b) monitor c) disk drive d) mother board

19) Functions built into the computer hardware are placed in the: a) mouse b) RAM c) ROM d) hard drive

20) Formatting a disk: a) erases its contents b) organizes the disk c) can only be performed once d) both a and b
Fill-in-the-blank using one of the following words:

bit boot byte card
disk external storage gigabyte hardcopy
input kilobyte megabyte modem
monitor mouse output prompt
RAM write protected software ROM

21) The smallest unit of computer information is called a __________________.

22) __________________ is a computer program and a sequence of instructions that directs a computer to complete a specific task.

23) __________________ means to start the computer and comes from the word bootstrap.

24) A __________________ is a circuit board you can install in a slot inside the computer to expand the computer capabilities.

25) A __________________ is a round piece of mylar and information is stored magnetically on its surface.

26) One __________________ is equal to 1,024 bytes.

27) __________________ stands for modulator/demodulator and changes digital computer and analog telephone signals.

28) The __________________ is a mechanical device used in place of the keyboard to move the cursor around.

29) __________________ is the computer's permanent memory and instructions permanently stored.

30) __________________ means the 5.25 inch disk has its notch covered and the 3.5 inch disk has its window open.
Appendix K

The Secondary Target Population's Poststudy Onsite CAI Assessment Test

Directions: Answer the questions by circling True or False, one multiple choice, and filling-in-the-blank.

1) The CCC (TM) integrated learning system uses the _______ program to assess students' reading skills performances.

2) The CCC (TM) reading skills assessment report lists students' performances at a grade level for each of the six categories. (True or False)

3) There are (44, 46, 48, or 50) reading skills the CCC (TM) assesses when determining grade levels of the six categories.

4) On the assessment report the PC abbreviation stands for ____________.

5) On the assessment report the IC abbreviation stands for ____________.

6) On the assessment report the LC abbreviation stands for ____________.

7) On the assessment report the WM abbreviation stands for ____________.

8) On the assessment report the WA abbreviation stands for ____________.

9) On the assessment report the RS abbreviation stands for ____________.

10) The group report of the CCC (TM) lists up to three reading skills when the student shows a performance weakness. (True or False)
Appendix L

The Secondary Target Population's Onsite CAI Reading Intervention Poststudy Test

1) The CCC (TM) main menu options include Worksheets for generating and focusing on student's weaknesses. (True or False)

2) The CCC's (TM) Initial Placement Motion helps assess students' reading skills grade levels for developing an intervention plan. (True or False)

3) Knowing the students reading skills grade level and areas of weakness are needed to integrate the CAI BLS Tutorsystem (TM). (True or False)

4) The BLS Tutorsystem (TM) has readings skills that correlate with the CCC (TM) assessment. (True or False)

5) The BLS Tutorsystem (TM) has a management system that records the students' performances. (True or False)

6) The teacher using the BLS Tutorsystem (TM) can review the students performance with a report displayed on the screen or printed on paper. (True or False)

7) The teacher can erase the students' performance records to make room for new students files. (True or False)

8) The BLS Tutorsystem (TM) provides worksheets that follow the CAI reading skills lessons. (True or False)

9) The BLS Tutorsystem (TM) is only effective when the students are assessed at the correct reading skills grade level. (True or False)

10) The student must go through a tutorial reading skills lesson and then master the skill with a score of 90 percent or more on the skill test. (True or False)
Appendix M

The Secondary Target Population's Five Critical Thinking Activity Strategies List

Notes from brainstorming activity

Strategy # 1

Fact-Finding

a. Students demonstrate weak reference skills.
b. A reading skills CCC (TM) CMI assessment report confirms students' weaknesses.

Problem-Finding

a. Students cannot "identify appropriate reference words for given tasks."

Idea-Finding

a. Arrange for a librarian as a guest speaker.
b. Review software titles.
c. Review video tape titles.
d. Locate information for student hands on activities.

Solution-Finding

a. Teaching maladaptive learners reference skills.
b. Software title recommend is Eerie Library, MECC (TM), 1993.

Acceptance-Finding

a. Review strategy with curriculum coordinator.
b. Preview software.
c. Students are classified in alternative education curriculum.
d. Test software with a variety of students.

(Horn, 1992:14-15)
Strategy # 2
-----------------------------------------------

Fact-Finding

a. Students demonstrate lower problem solving skills.
b. A math skills CCC (TM) CMI assessment report confirms students' weaknesses.

Problem-Finding

a. Students do not know how to approach problem solving questions.

Idea-Finding

a. Arrange for an economist as a guest speaker.
b. Review software titles.
c. Review video tape titles.
d. Locate information for student manipulatives.

Solution-Finding

a. Teaching low skill learners problem solving.

Acceptance-Finding

a. Review strategy with curriculum coordinator.
b. Preview software.
c. Students are classified in alternative education curriculum.
d. Test software with a variety of students.
e. Print CCC (TM) low strand worksheets.
f. Students practice with manipulatives.
Strategy # 3
--------------------------------
Fact-Finding

a. Students demonstrate weak fraction skills.
b. A math skills CCC (TM) CMI assessment report confirms students' weaknesses.

Problem-Finding

a. Students do not know how to manipulate fractions for calculations.

Idea-Finding

a. Arrange for a carpenter as a guest speaker.
b. Review software titles.
c. Review video tape titles.
d. Locate information for student manipulatives.

Solution-Finding

a. Teaching low skill learners problem solving.

Acceptance-Finding

a. Review strategy with curriculum coordinator.
b. Preview software.
c. Students are classified in alternative education curriculum.
d. Test software with a variety of students.
e. Print CCC (TM) low strand worksheets.
f. Students practice with manipulatives.
Strategy # 4

Fact-Finding

a. Students demonstrate below grade level multiplication skills.
b. A math skills CCC (TM) CMI assessment report confirms students' weaknesses.

Problem-Finding

a. Students do not possess rote memorization skills for multiplication calculations.

Idea-Finding

a. Arrange for a third grade teacher as a guest speaker.
b. Review software titles.
c. Review video tape titles.
d. Locate information for student manipulatives.
e. Review calculator skills.
f. Review audio musical tapes with multiplication.
g. Locate flash cards.

Solution-Finding

a. Teaching low rote memory skill learners multiplication skills.
b. Software title recommended is Multiplication Puzzles, MECC (TM), 1985.

Acceptance-Finding

a. Review strategy with curriculum coordinator.
b. Preview software.
c. Students are classified in alternative education curriculum.
d. Test software with a variety of students.
e. Print CCC (TM) low strand worksheets.
f. Students practice with base ten manipulatives.
g. Develop drill and practice exercises.
Strategy # 5

Fact-Finding

a. Students demonstrate less than average measuring skills.
b. A math skills CMI assessment report confirms students' weaknesses.

Problem-Finding

a. Students do not know how to convert units of measurement.

Idea-Finding

a. Arrange for a home economics teacher as a guest speaker.
b. Review software titles.
c. Review video tape titles.
d. Locate information for student manipulatives.
e. Develop learning centers.

Solution-Finding

a. Teaching low skill spatial concept learners measuring units conversion.
b. Software title recommended is Measureworks, MECC (TM), 1991.

Acceptance-Finding

a. Review strategy with curriculum coordinator.
b. Preview software.
c. Students are classified in alternative education curriculum.
d. Test software with a variety of students.
e. Print CCC (TM) low strand worksheets.
f. Students practice with manipulatives.
Appendix N

The Study's Primary Target Population's Grade Level Ages

<table>
<thead>
<tr>
<th>Grade</th>
<th>Age Ranges</th>
<th>Mean Ages</th>
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<tbody>
<tr>
<td>7</td>
<td>13 yrs.  9 mos. to 14 yrs.  1 mos.</td>
<td>13 yrs. 11 mos.</td>
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<tr>
<td>8</td>
<td>13 yrs.  8 mos. to 14 yrs.  8 mos.</td>
<td>14 yrs. 2 mos.</td>
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<tr>
<td>9</td>
<td>14 yrs.  8 mos. to 17 yrs.  7 mos.</td>
<td>16 yrs. 1 mo.</td>
</tr>
<tr>
<td>10</td>
<td>15 yrs.  10 mos. to 17 yrs.  10 mos.</td>
<td>16 yrs. 10 mos.</td>
</tr>
<tr>
<td>11</td>
<td>13 yrs.  5 mos. to 17 yrs.  0 mos.</td>
<td>15 yrs. 3 mos.</td>
</tr>
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</table>

n = 55    age range = 13 yrs. 5 mos. to 17 yrs. 10 mos.
Appendix O

The Study's Primary Target Population's Age Distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Participants</th>
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<td>12 yrs. 7 mos.</td>
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<tr>
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<tr>
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<td>13 yrs. 8 mos.</td>
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<td>14 yrs. 0 mos.</td>
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<td>14 yrs. 2 mos.</td>
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<tr>
<td>14 yrs. 3 mos.</td>
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n = 52

\[ x = 15 \text{ years 8 months} \]
Appendix P

The Study’s Primary Target Population’s Grade Distribution

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<th>Grade</th>
<th>Number of Students</th>
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\[ n = 55 \quad x = 9.13 \text{ grade level} \]
Appendix Q

The Study's Primary Target Population's Reading Skills Assessment

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<tr>
<th>Passage Comprehension</th>
<th>Interpretive Comprehension</th>
<th>Literal Comprehension</th>
<th>Word Meaning</th>
<th>Word Reference Analysis Skills</th>
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(CCC (TM) Release 14.0, 1992)
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---

**Skill**

**Mean** 4.60 4.56 4.58 4.59 4.53 4.60

\( n = 49 \)

\( x = 4.58 \) grade level
Appendix R

The Study's Primary Target Population's Reading Skills Weaknesses

<table>
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<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Code</th>
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<tr>
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<td>0.0%</td>
<td>WA 02</td>
<td>Recognize consonant patterns</td>
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<td>0</td>
<td>0.0%</td>
<td>WA 03</td>
<td>Recognize vowel patterns</td>
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<tr>
<td>1</td>
<td>3.1%</td>
<td>WA 04</td>
<td>Identify compound words or their components</td>
</tr>
<tr>
<td>1</td>
<td>3.1%</td>
<td>WA 05</td>
<td>Identify contractions or their components</td>
</tr>
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<td>2</td>
<td>6.3%</td>
<td>WA 06</td>
<td>Identify root words of words with prefixes or suffixes</td>
</tr>
<tr>
<td>1</td>
<td>3.1%</td>
<td>WA 07</td>
<td>Use of define words with prefixes</td>
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<tr>
<td>2</td>
<td>6.3%</td>
<td>WA 08</td>
<td>Use of define words with suffixes</td>
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<tr>
<td>1</td>
<td>3.1%</td>
<td>WA 09</td>
<td>Identify correct forms of verbs in context</td>
</tr>
<tr>
<td>0</td>
<td>0.0%</td>
<td>WA 10</td>
<td>Identify correct forms of adjectives in context</td>
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</table>

| **WORD MEANING** | | | |
| 9 | 28.1% | WM 11 | Identify word meanings |
| 13 | 40.6% | WM 12 | Use vocabulary in context |
| 1 | 3.1% | WM 13 | Identify synonyms using context clues |
| 3 | 9.4% | WM 14 | Identify antonyms using context clues |

| **LITERAL COMPREHENSION** | | | |
| 3 | 9.4% | LC 15 | Identify explicitly stated information in short text |
| 0 | 0.0% | LC 16 | Identify pronoun referents |
| 0 | 0.0% | LC 17 | Identify sequence or time of events |
| 3 | 9.4% | LC 18 | Combine or restate sentences |
| 1 | 3.1% | LC 19 | Classify words by category |

| **INTERPRETIVE COMPREHENSION** | | | |
| 3 | 9.4% | IC 20 | Make inferences from details in a short text |

| 1 | 3.1% | IC 21 | Distinguish between fact and opinion |
| 3 | 9.4% | IC 22 | Recognize logical conclusions |
| 1 | 3.1% | IC 23 | Recognize cause-and-effect relationships |
| 1 | 3.1% | IC 24 | Analyze characters based on their speech or actions |
| 0 | 0.0% | IC 25 | Recognize effective descriptive language |
| 0 | 0.0% | IC 26 | Recognize figurative language |
| 0 | 0.0% | IC 27 | Determine author's viewpoint, purpose, or tone |
| 0 | 0.0% | IC 28 | Recognize analogies |

**REFERENCE SKILLS**

| 1 | 3.1% | RS 29 | Determine alphabetical order |
| 1 | 3.1% | RS 30 | Identify appropriate reference words for given tasks |
| 4 | 12.5% | RS 31 | Use guide words to locate information |

**PASSAGE COMPREHENSION**

| 5 | 15.6% | PC 32 | Identify explicitly stated information |
| 0 | 0.0% | PC 33 | Identify sequence of events or steps |
| 0 | 0.0% | PC 34 | Complete a passage using context clues (cloze-type) |
| 1 | 3.1% | PC 35 | Identify main ideas |
| 0 | 0.0% | PC 36 | Make inferences |
| 4 | 12.5% | PC 37 | Identify word meaning in context |
| 0 | 0.0% | PC 38 | Recognize cause-and-effect relationships |
| 1 | 3.1% | PC 39 | Draw conclusions or predict outcomes |
| 0 | 0.0% | PC 40 | Analyze characters based on their speech or actions |
| 0 | 0.0% | PC 41 | Recognize figurative or poetic language |
| 0 | 0.0% | PC 42 | Identify type of passage or writing style |
| 0 | 0.0% | PC 43 | Determine author's viewpoint, purpose, or tone |
| 0 | 0.0% | PC 44 | Use information to make applications or analogies |
| 0 | 0.0% | PC 45 | Make evaluations or judgments |
| 1 | 3.1% | PC 46 | Interpret charts, indexes, or illustrations |

n = 32
Appendix S

Staff Training Prestudy
Session Handout

Objectives:
Discuss and review staff manual contents and practicum procedures
Discuss and review computer-aided instruction
Discuss and review supporting activities for computer-aided instruction
Review computer management instruction files
Review activity logs
Assign extra credit assignment

Materials:
Staff program manual
page 18 Pretest procedure -
page 19 Posttest procedure -
page 21 Pre and posttest log -
page 22-23 Individualized education plan and form -
page 24-25 The student performance report and form -
The weekly student contract and form -

CCC (TM) worksheets and log -

Unison reading, log, and HBJ (TM) book list -

Letter Read Write and log -

Video tape spelling, sample word list, worksheet, and log -

Video tape dictation, worksheet, and log -

Reading survey and form -

BLS STAT (TM) software, content titles, skill correlations, and log -
Appendix T

Letter of Appreciation for HRS Participation

Date: January 20, 1994

To: Xxxx Xxxxxxxx, Superintendent
    Xxxxx Xxxxxxxx, Assistant-Superintendent
    Xxxxxxx Regional Juvenile Detention Center

From: Xxxxxxxxxxxx County Public Schools
      School Program

This letter is to inform you of our appreciation to the members of the HRS care givers staff. The commitment of your staff and their willingness to help the school program with classroom video presentations is greatly valued.

We would like to recognize the following staff for their contribution. They are:

Xxxx Xxxxxxxx  Xxxxx Xxxxxxxx
Xxxx Xxxxxxxx  Xxxxx Xxxxxxxx
Xxxx Xxxxxxxx  Xxxxx Xxxxxxxx
Xxxx Xxxxxxxx  Xxxxx Xxxxxxxx

We know that others would help us if asked so we salute your whole staff and say a job well done!

Thank you,

Alan Vigilante
Appendix U  

Spelling Lists for Video Sessions  

Spelling List # 1  

1. absent  
2. accident  
3. agree  
4. alike  
5. balance  
6. balcony  
7. banish  
8. banner  
9. cactus  
10. calculate  
11. calorie  
12. canopy  
13. debate  
14. decline  
15. decorate  
16. decrease  
17. ease  
18. economical  
19. effect  
20. electricity  

(Awbrey et al, 1989:52-59)
Spelling List # 2

1. factory
2. famous
3. favorite
4. female
5. gallop
6. genuine
7. ghost
8. glacier
9. hatch
10. heave
11. hinge
12. hospitality
13. identification
14. ignore
15. increase
16. inferior
17. landlord
18. landmark
19. layer
20. least

(Awbrey et al., 1989:52-59)
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<td>magnet</td>
</tr>
<tr>
<td>3.</td>
<td>male</td>
</tr>
<tr>
<td>4.</td>
<td>manage</td>
</tr>
<tr>
<td>5.</td>
<td>object</td>
</tr>
<tr>
<td>6.</td>
<td>observe</td>
</tr>
<tr>
<td>7.</td>
<td>occasion</td>
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<tr>
<td>8.</td>
<td>occur</td>
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<td>9.</td>
<td>panic</td>
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<td>parachute</td>
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(Awbrey et al, 1989:52-59)
Spelling List # 4

1. nail
2. narrow
3. nation
4. native
5. pace
6. particle
7. particular
8. perfect
9. raid
10. recess
11. recreation
12. refinery
13. salvage
14. scalp
15. scene
16. sentence
17. technique
18. texture
19. thoughtful
20. thrilling

(Awbrey et al, 1989:52-59)
Spelling List #5

1. valley  
2. valuable  
3. vegetable  
4. village  
5. wealth  
6. widow  
7. wisdom  
8. witness  
9. achievement  
10. annual  
11. apprentice  
12. automatic  
13. barely  
14. base  
15. blister  
16. brace  
17. cable  
18. calculator  
19. cancer  
20. cement

(Awbrey et al, 1989:52-59)
Spelling List # 6

1. danger  
2. dentist  
3. different  
4. difficult  
5. eager  
6. earth  
7. effort  
8. elbow  
9. fantastic  
10. fatigue  
11. fiction  
12. fungus  
13. gap  
14. gauge  
15. generous  
16. grand  
17. harbor  
18. harmless  
19. headquarters  
20. honor  

(Awbrey et al, 1989:52-59)
Spelling List # 7

1. idea
2. important
3. inch
4. insect
5. jealous
6. jewel
7. jingle
8. judgment
9. laboratory
10. latitude
11. launch
12. lava
13. major
14. manual
15. manufacturer
16. mascot
17. oatmeal
18. obligation
19. opinion
20. organize

(Awbrey et al, 1989:52-59)
Appendix V

Dictation Lists for Video Sessions

Dictation List # 1

1. And the hungry grasshopper had to sit in the snow.
   Level # 4 - page 75

2. I'll clean up the room tomorrow.
   Level # 5 - page 109

3. The man and the dolphin were soon home again.
   Level # 6 - page 145

4. Slowly, the balloon floated up into the sky.
   Level # 7 - page 137

5. People like to make jokes with words that have two meanings.
   Level # 8 - page 192

6. Some of the crew were young men looking for adventure.
   Level # 9 - page 163

7. Because of its clouds, scientists could not learn much about Venus until recently.
   Level # 10 - page 471

8. Of those three journeys that together spanned the continent, only one had a happy ending.
   Level # 11 - page 291

9. And the people who lived at the foot of the mountains grew happier and richer and more beautiful from generation to generation.
   Level 12 - page 383

10. He removed an oakwood leaf from the dining-room table.
    Level 13 - page 213

1. She had lost skis and poles but was otherwise intact.
   Level # 14 - page 303

2. In the afternoon, people go up and down the city streets.
   Level # 4 - page 121

3. Little by little she made a clay pot.
   Level # 5 - page 139

4. Then the soldiers saw what she had.
   Level # 6 - page 176

5. Just as I came to the door, it started to rain.
   Level # 7 - page 115

6. She really made use of her pool on hot days.
   Level # 8 - page 128

7. A map gives you information about an area by showing many different details.
   Level # 9 - page 159

8. I based my writing on things that had really happened.
   Level # 10 - page 327

   Level # 11 - page 331

10. At last, the captain of the guard called a halt.
    Level # 12 - page 402
Dictation List # 3

1. From these two names, he figured out eleven signs that stood for eleven sounds in the Greek alphabet.
   Level # 13 - page 58

2. Perhaps the key to understanding the Constitutional Convention is to look at the delegates themselves.
   Level # 14 - page 307

3. A sad little dog ran down the gray city streets.
   Level # 4 - page 109

4. Put something under all the pictures.
   Level # 5 - page 82

5. Some people think that pencils have lead in them.
   Level # 6 - page 79

6. It was long way from a cloth bag to a ride in a balloon.
   Level # 7 - page 134

7. They raced after each other in the water swimming, rolling, playing in all kinds of ways.
   Level # 8 - page 110

8. Magicians make up tricks for people's enjoyment.
   Level # 9 - page 87

9. If it gets cold outside, their body temperature drops.
   Level # 10 - page 417

10. Lots of cities began as railroad stations.
    Level # 11 - page 363

Dictation List # 4

1. Rabbits eat only lettuce, carrots, and all other kinds of vegetables.  
   Level # 12 - page 326

2. The pilot had to lie flat on the lower wing.  
   Level # 13 - page 235

3. If water enters the joints, the water may freeze and expend, splitting the rock into smaller fragments.  
   Level # 14 - page 175

4. Some people work at night to look at the stars.  
   Level # 4 - page 30

5. At the mill, big saws cut up the logs.  
   Level # 5 - page 73

6. She had on a pretty red hat with a long feather.  
   Level # 6 - page 121

7. He told his friends that it was a piece of gold.  
   Level # 7 - page 81

8. Different rock layers in the canyon have different fossils.  
   Level # 8 - page 202

9. Suddenly the bamboo grew warm, and its trunk seemed to stretch.  
   Level # 9 - page 38

10. The people on shore watched each day as the framework rose higher in the sky.  
    Level # 10 - page 225

Dictation List # 5

1. I would lie in the hammock and listen to all the sounds of summer.
   Level # 11 - page 17

2. Twenty-eight years is a long time to search for a missing person.
   Level # 12 - page 346

3. At school, like always, I answered if I was called on, but not otherwise.
   Level # 13 - page 393

4. Firefighters, doctors, nurses, police officers, and waterworks employees gathered at the tunnel's entrance.
   Level # 14 - page 169

5. Some people work at night to help sick people.
   Level # 4 - page 29

6. Today people make paper from wood.
   Level # 5 - page 75

7. All day she had stayed away from the fun of the water.
   Level # 6 - page 136

8. You need different things to make your own kite.
   Level # 7 - page 95

9. After a time there were so many dirty dishes that the sink was full.
   Level # 8 - page 165

10. Three meters down, they hit something hard - it was a floor of thick wooden boards.
    Level # 9 - page 73

Dictation List # 6

1. A traffic signal is also a sign without words.
   Level # 10 - page 277

2. Pictures include photographs, drawings, paintings, and cartoons.
   Level # 11 - page 322

3. Many volcanoes are hidden beneath the ocean.
   Level # 12 - page 351

4. A bat is a small mammal that looks something like a flying mouse.
   Level # 13 - page 190

5. Their rescuers gave them tea and moose-meat sandwiches.
   Level # 14 - page 241

6. The lightning bug went up from the jar.
   Level # 4 - page 10

7. His singing was so good that it made all the animals in the woods dance.
   Level # 5 - page 87

8. Bulldozers work fast.
   Level # 6 - page 77

9. He thought of what he loved most about Alaska.
   Level # 7 - page 100

10. You may find many other surprises in the wonderful world of nature.
    Level # 8 - page 139

## The 60-Day Activities Schedule

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** Inservice Training **

** Honor Roll and Student of the Week awards **
### Appendix X

Pre and Posttest Student Activity Log

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## Individual Educational Plan Form

**Student Name**

**Student Number**

**Date**

### Improving Reading Skills

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### 2. Cognitive Reading Program

- Increase reading skills
- Use word analysis
- Develop vocabulary
- Sequence events
- State main ideas
- Demonstrate critical comprehension
- Demonstrate inferential comprehension
- Verbalize and read a letter
- Increase fluency
- Write correctly from dictation

### 3. Application Reading Program

- Increase study skills
- Use various book parts
- Locate information
- Utilize library resources
- Interpret graphical displays

### 4. Affective Weekly Student Contract

- Increase positive behavior
- Demonstrate appropriate behavior
- Accept responsibility
- Set realistic goals
- Increase self-esteem

---

**Appendix Y**

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Appendix 2

**Student Performance Report Form**

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| CCC (TM) Pretest Skill Weaknesses | | | |
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| CCC (TM) Posttest Skill Weaknesses | | | |
|------------------------------------| | | |

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Appendix AA

Weekly Student Contract Form

I, ________________________, sign this student contract and pledge to improve my reading skills to the best of my ability. My promise is to put forth an effort in every learning opportunity. I am aware that if I reach my goals I will be placed on the honor roll and be nominated for Student of the Week. Also, I will be awarded a certificate that can be presented to the judge as evidence to my self-commitment to improving my life through education.

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I agree to these goals, ________________________ .

Date: ________________________
Teacher: ________________________
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Appendix AC

The Unison Reading Materials List

HBJ (TM) Bookmark Reading Program, Eagle Edition


Together We Go, Level # 5
World of Surprises, Level # 6
People and Places, Level # 7
Widening Circles, Level # 8
Ring Around the World, Level # 9


Blazing Trails, Level # 11
Golden Voyages, Level # 12


Widening Pathways, Level # 14
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### Letter Read Write Log

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Appendix AF

**Video Spelling Student Worksheet**

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**Directions:** First, listen to the word spoken by the presenter in the video tape. Second, write down the word and listen to the presenter as the word is repeated in a sentence. Third, listen and check what you wrote.

1. ________________________________________ 11.
2. ________________________________________ 12.
3. ________________________________________ 13.
4. ________________________________________ 14.
5. ________________________________________ 15.
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## Appendix AG

### Video Spelling Log

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Appendix AH

Sample Video Spelling Test Word List

Grade 3
1. ocean

2. offer

3. office

4. operation

Grade 4
5. object

6. occasion

7. occur

8. offspring

Grade 5
9. obedience

10. observatory

Grade 6
11. observe

12. obvious

13. obese

14. obscurity

Grade 7
15. obsolete

16. ominous

17. oatmeal

18. obligation

19. obsession

20. obstacle

(Awbrey et al, 1989:52-59)
Appendix AI

Video Dictation Student Worksheet

Student Name ______________________

Study 1 2 3 4 Score ________

Group Number _______ Student Number _______ Date ________

Directions: First, listen to the video tape. Second, write down exactly what the presenter says. Third, listen again and make any revisions or corrections to your paper.

1. ___________________________________

2. ___________________________________

3. ___________________________________

4. ___________________________________

5. ___________________________________

6. ___________________________________

7. ___________________________________

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9. ___________________________________

10. ___________________________________
## Video Dictation Log

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Appendix AL

CCC (TM) and BLS STAT (TM) Software Correlations

BLS 100R (TM) Reading Series / Reading Level 2.6 - 5.2

Following Directions 100RA
BLS STAT (TM) Objective Numbers: 13 & 62
CCC (TM) Skill Numbers: 15, 16, 17, 20, 30, 34, & 46

Reference Skills 100RB
BLS STAT (TM) Objective Numbers: 59, 60, 61, & 62
CCC (TM) Skill Numbers: 29, 30, 31, & 46

Interpretations I 100RC
BLS STAT (TM) Objective Numbers: 13, 14, 15, 16, 18
CCC (TM) Skill Numbers: 15, 16, 17, 18, 20, 24, 25, 27, 32, 34, 35, 40, 41, 43, & 45

Interpretations II 100RD
BLS STAT (TM) Objective Numbers: 15, 16, 17, 18, & 19
CCC (TM) Skill Numbers: 18, 21, 22, 23, 24, 25, 26, 27, 28, 38, 39, 40, 41, 42, 43, 44, & 45

Vocabulary Skills 100RE
BLS STAT (TM) Objective Numbers: 8, 9, 10, 12, 22, & 60
CCC (TM) Skill Numbers: 1, 6, 10, 11, 12, 13, 14, 19, 29, 30, 31, & 37

Phonic Analysis 100RF
BLS STAT (TM) Objective Numbers: 1, 2, 3, 4, 5, 20, & 21
CCC (TM) Skill Numbers: 2 & 3

(CCC (TM) Release 14.0, 1992)
(BLS STAT (TM) 100R, 1992)
BLS 200R (TM) Reading Series / Reading Level 4.6 - 7.2

Following Directions 200RA
BLS STAT (TM) Objective Numbers: 13 & 62
CCC (TM) Skill Numbers: 15, 16, 17, 20, 30, 34, & 46

Reference Skills 200RB
BLS STAT (TM) Objective Numbers: 59 & 61
CCC (TM) Skill Numbers: 30 & 46

Interpretations I 200RC
BLS STAT (TM) Objective Numbers: 12, 13, 14, 15, 16, 18, 37, & 38
CCC (TM) Skill Numbers: 1, 9, 10, 15, 16, 17, 18, 20, 24, 25, 27, 32, 34, 35, 40, 41, 43, & 45

Interpretations II 200RD
BLS STAT (TM) Objective Numbers: 15, 16, 17, 18, & 19
CCC (TM) Skill Numbers: 18, 21, 22, 23, 24, 25, 26, 27, 28, 38, 39, 40, 41, 42, 43, 44, & 45

Vocabulary Skills 200RE
BLS STAT (TM) Objective Numbers: 8, 9, 10, 12, & 60
CCC (TM) Skill Numbers: 1, 9, 10, 11, 12, 13, 14, 19, 29, 30, 31, & 37

Structural Analysis of Words 200RF
BLS STAT (TM) Objective Numbers: 6, 7, 10, 11, & 22
CCC (TM) Skill Numbers: 4, 5, 6, 7, 8, 11, 12, & 13

(CCC (TM) Release 14.0, 1992)
(BLS STAT (TM) 200R, 1992)
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(Reading 100, BLS, Inc., 1990:16-21)
BLS100RD-1 Reading Interpretations II, Disk 1 (Literal Skills)
OBJ1 Finding the Main Idea
OBJ2 Reading for Details
Summary
Test

BLS100RD-2 Reading Interpretations II, Disk 2 (Higher Skills)
OBJ3 Making an Inference
OBJ4 Sequence of Events
OBJ5 Critical Reading
Summary
Test

BLS100RE-1 Vocabulary Skills, Disk 1 (Word Parts of Structural Analysis Skills)
OBJ1 Compound Words
OBJ2 Roots
OBJ3 Prefixes
OBJ4 Suffixes
Summary
Test

BLS100RE-2 Vocabulary Skills, Disk 2 (Context Clues Skills)
OBJ5 Homonyms
OBJ6 Synonyms & Antonyms
OBJ7 Context Clues
OBJ8 Dictionary Skills
Summary
Test

BLS100RF-1 Phonic Analysis, Disk 1
OBJ1 Identifying Vowels & Consonants
OBJ2 Variant Single Vowels
Summary
Test

BLS100RF-2 Phonic Analysis, Disk 2
OBJ3 Digraphs and Diphthongs
OBJ4 Variant Single Consonants
OBJ5 Consonant Pairs
OBJ6 Syllables
Summary
Test
BLS200RA-1 Following Directions, Disk 1  
**Worksheet**
OBJ1 Counting
OBJ2 Lines & Directions
OBJ3 Filling Out Forms
  Summary
  Test

BLS200RA-2 Following Directions, Disk 2  
**Worksheet**
OBJ4 Following Directions in Sequence
OBJ5 Comparison & Differentiation
OBJ6 Quantitative Analysis
OBJ7 Inference
  Summary
  Test

BLS200RB-1 Reference Skills, Disk 1  
**Manual**
OBJ1 Alphabetical Order
OBJ2 Parts of a Book: Table of Contents
OBJ3 Parts of a Book: Index
OBJ4 Standard Reference Books
OBJ5 Guide Words
OBJ6 Reader's Guide to Periodical Literature
  Summary
  Test

BLS200RB-2 Reference Skills, Disk 2  
**Manual**
OBJ7 The Dewey Decimal System
OBJ8 Library Card Catalog
  Summary
  Test

BLS200RB-3 Reference Skills, Disk 3  
**Manual**
OBJ9 Graphs & Maps
  Summary
  Test

BLS200RC-1 Reading Interpretations I, Disk 1  
**Manual**
OBJ1 Related Sentences
OBJ2 Paragraph Unity
OBJ3 Reading for Details
OBJ4 Main Idea/Titles
  Summary
  Test

(Reading 200, BLS, Inc., 1990:16-21)
BLS200RF-1 Structural Analysis of Words, Disk 1
OBJ1 Compound Words
OBJ2 Contractions/Possessives
OBJ3 Syllables
OBJ4 Inflectional Endings
  Summary
  Test

BLS200RF-2 Structural Analysis of Words, Disk 2
OBJ5 Suffixes
OBJ6 Prefixes
OBJ7 Word Building
OBJ8 Roots & Morphemes
  Summary
  Test
Appendix AN

Staff Training Session # 1 Handout

Objectives: Review all staff training topics
  Identify ILS hardware components
  Identify ILS software features

Materials: Staff program manual, weekly schedule, ILS hardware components and software, and sample computer management instructional reports

I. Overview of staff training topics

II. List the ILS hardware components: 

III. ILS Software:

a) Identify the following

  ILS -
  CCC (TM) -
  Release ______
  Copyright year
  TL -
b) What does the assessment number represent?

c) IPM -
   IPM's time needed -
   IPM's incremental movement -

d) proctor commands -
   password -
   main menu access and options -

e) Which reports are used at this school-site?
Appendix A0

Staff Training Session # 2 Handout

Objectives: Identify Apple (TM) IIe computer hardware components and their functions

Materials: Apple (TM) IIe Owner's Guide and an Apple (TM) IIe computer

Review the pages in the Apple (TM) IIe Owner's Guide

page xv shielded cable -
page 2 Apple (TM) IIe and peripheral devices -
page 5 power cord and power switch -
page 6 open the Apple (TM) IIe -
page 7 main logic board -
page 9 installing an 80 column text card -
pages 11-13 slot assignments -
 slot 1 -
 slot 2 -
 slot 3 -
 slot 4 -
 slot 5 -
 slot 6 -
 slot 7 -

page 16 backside of computer -
page 17 cable heads -
pages 18-19 connecting a display device -
pages 34-35 the keyboard -
page 88 monitors -
pages 89-91 printers -
page 92 serial or parallel interface -
page 93 disk drives and the mouse -
pages 94-96 other peripherals -
pages 130-131 Apple (TM) IIe family system differences
  Apple (TM) II Plus -
  Apple (TM) IIe (older models) -
  Apple (TM) IIe (current models) -
  Apple (TM) IIc -
Appendix AP

Staff Training Session # 3 Handout

Objectives:  
Computer system commands  
Data disk features and utility commands

Materials:  
Apple (TM) IIe Owner's Guide, 5.25 and 3.5 inch disks, an Apple (TM) II system disk, and an Apple (TM) IIe computer

Review the pages in the Apple (TM) IIe Owner's Guide

page 26 starting up the system -

page 36 return -

esc -

delete -

shift -

caps lock -

page 37 wraparound -

page 40 cold boot -

page 41 warm boot -

(Apple Computer, Inc. (TM), 1986:26-58)  
(System Disk, Version 3.2, Apple Computer, Inc. (TM), 1990)
page 45  review special keys -

page 48  floppy disk -

page 49  hard drive -

pages 51 & 54 caring for disks -

pages 52 & 55 write protecting -

pages 50 & 53 disk components -

page 56  review disk utilities -

format disk -

page 57  catalog -

copy disks -

page 58  copy files -

delete files -

rename files -
Appendix AQ

Staff Training Session # 4 Handout

Objectives: Identify internal computer components
Computer application programs

Materials: Apple (TM) IIe Owner's Guide and an Apple IIe (TM) computer

Review the pages in the Apple (TM) IIe Owner's Guide

page 62 main logic board -

page 63 RAM -

page 64 ROM -

page 65 operating system -
application program -

page 68 save information -
filename -

page 69 backup -

page 74 application program -

(Apple Computer, Inc. (TM), 1986:62-82)
word processors -
data base -

spreadsheets -

graphics -
integrated software -
educational software -

CAI -
entertainment -
simulations -

communication software -
modem -
information services -
public domain software -

utilities -

computer languages -
BASIC -
Pascal -
C -
Appendix AR

Staff Training Session # 5 Handout

Objectives: Review reading skills tutorial software features

Materials: Teacher's Handbook: Reading Comprehension Tutorcourse (TM) BLS100R - Course Description and a printout of student performances

Review the pages in the BLS Tutorcourse (TM) 100R Handbook

page 1 reading level -
   hardware requirements -

page 2 instructional objectives -

page 3 logon -

page 4 disk management -

page 5 main menu -

page 6 review feature -
   escape options -

page 9 report generator -
   main menu -
   student selection menu -

(BLS, Inc. (TM), 1989:1-24)
page 10  lesson selection menu -

page 11  print student records -
          maintain student records -

page 12  erase records on lesson disk -
          show student roster -

page 16  100RA-1
          100RA-2

page 17  100RB-1
          100RB-2

page 18  100RC-1
          100RC-2

page 19  100RD-1
          100RD-2

page 20  100RE-1
          100RE-2

page 21  100RF-1
          100RF-2

page 22-24  Master Objective and Grade Range -
Appendix AS

Staff Training Session # 6 Handout

Objectives:
Demonstrate lesson disk procedures
Demonstrate report generator disk features
Demonstrate printing management reports
Review reading skill software features

Materials:
Teacher's Handbook: Reading Comprehension Tutorcourse (TM) BLS200R - Course Description, an Apple IIe (TM) computer, an Apple (TM) ImageWriter II printer, a Report Generator disk, and a lesson disk

I. Demonstrate lesson disk procedures
II. Demonstrate report generator disk features
III. Demonstrate printing management reports
IV. Review the BLS Tutorcourse (TM) 200R Handbook

page 1 reading level -
hardware requirements -
page 2 instructional objectives -
page 3 logon -
page 4 disk management -
page 5 main menu -
page 6 review feature -
escape options -
(BLS, Inc. (TM), 1989:1-24)
report generator -
main menu -
student selection menu -
lesson selection menu -
print student records -
maintain student records -
erase records on lesson disk -
show student roster -
200RA-1
200RA-2
200RB-1
200RB-2
200RB-3
200RC-1
200RC-2
200RD-1
200RD-2
200RD-3
200RE-1
200RE-2
200RF-1
200RF-2
Master Objectives and Grade Range -
Appendix AT

Staff Training Session # 7 Handout

Objectives:

Discuss and review computer-aided instruction

Discuss and review supporting activities for computer-aided instruction

Review computer management instruction files

Review activity logs

Materials:

Staff program manual

page 18 Pretest procedure -

page 19 Posttest procedure -

page 21 Pre and posttest log -

page 22-23 Individualized education plan and form -

page 24-25 The student performance report and form -

page 26-27 The weekly student contract and form -
CCC (TM) worksheets and log -

Unison reading, log, and HBJ (TM) book list -

Letter Read Write log -

Video tape spelling, sample word list, worksheet, and log -

Video tape dictation, worksheet, and log -

Reading survey and form

BLS STAT (TM) software, content titles, skill correlations, and log -
Appendix AU

Staff Training Session # 8 Handout

Guest Speaker: School district media services coordinator

Objectives: Visit district media service center
- Lecture and discussion about computer-aided instructional materials lead by district coordinator
- Review district software manuals, educational programs, and license agreements
- Review software titles for curriculum integration
- Review procedures and duplicate software and print labels
- Review computer application poststudy test

Materials: Forty blank 3.5 and 5.25-inch disks, MECC (TM) district licensed software, manuals, authorized duplication software, disk labels, printer, Apple IIe (TM) computer

I. Guest speaker introduction

II. Computer-aided instructional software

III. Software manuals
IV. District license agreement

V. Software to be integrated in the work related and life survival skills curriculum

VI. Duplicate disks and print labels

VII. Review for the computer applications poststudy test

a. test format -

b. review staff training sessions # 1 - 4 handouts
Appendix AV

Thank You Letter to District Technology Coordinator

Date: January 28, 1994

To: Xxxx Xxxxxxx, District Coordinator Technology Media Services

From: Detention Center School Program

Xxxx Xxxxxxx,

This letter is to inform you of our many thanks for working with the teaching staff to increase integration of computer-aided instruction in the school program's curriculum. The school program staff gained insights with the new software titles and screen previews that will enhance classroom presentations. The staff acquired experience from the hands-on activities of duplicating district license programs and the printing of disk labels.

Thank you,

Alan Vigilante
Appendix AW

Staff Training Session # 9 Handout

Objectives:

Poststudy test on computer applications
Review ILS hardware components
Review ILS software features for assessments

Materials: Staff program manual, weekly schedule, ILS hardware components and software, and sample computer management instructional reports

I. Posttest on computer applications

II. List the ILS hardware components: __________________________

________________________

________________________

III. ILS Software:

a) Identify the following

________________________

ILS -

CCC (TM) -

Release ________

Copyright year
b) What does the assessment number represent?

c) IPM -
   IPM's time needed -
   IPM's incremental movement -

d) proctor commands -
   main menu access and options -

e) Which reports are used at this school-site?
Appendix AX

Staff Training Session # 10 Handout

Objectives:
- Poststudy CAI reading assessment test
- Review reading skills intervention software features for poststudy test

Materials:
- Poststudy test, Teacher's Handbook:
  Reading Comprehension Tutorcourse (TM)
  BLS100R and BLS200R - Course Descriptions

I. Poststudy test on reading skills assessment

II. Review the pages in the BLS Tutorcourse (TM) 100R and 200R Handbooks

page 1
  reading level -
  hardware requirements -

page 2
  instructional objectives -

page 3
  logon -

page 4
  disk management -

page 5
  main menu -

page 6
  review feature -
  escape options -

page 9
  report generator -
  main menu -
  student selection menu -

(BLS, Inc. (TM), 1989:1-24)
Appendix AY

Staff Training Session # 11 Handout

Objectives:

Post-study test on reading skills intervention software

Prepare for critical thinking activity using brainstorming to develop five alternative curriculum strategies with computer applications

Materials:

Poststudy test, onsite software title listing and the Parnes Problem Solving Model

I. Post-study test

II. Brainstorming activity preparation
Fact-Finding

Problem-Finding

Idea-Finding

Solution-Finding

Acceptance-Finding


(Horn, 1992:14-15)
Appendix AZ

Staff Training Session # 20 Handout

Objectives: Participate in a critical thinking activity using brainstorming to develop five alternative curriculum strategies with computer applications

Evaluate the staff training course and presenter

Materials: Onsite software titles listings, CMI mathematics and reading assessment reports, the Parnes Problem Solving Model worksheet, and an evaluation form for staff training

I. Critical thinking activity on computer applications

II. Course and presenter evaluation

(Horn, 1922:14-15)
<table>
<thead>
<tr>
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<tbody>
<tr>
<td># 1</td>
<td># 2</td>
<td># 3</td>
<td># 4</td>
<td># 5</td>
<td></td>
</tr>
</tbody>
</table>

Fact-Finding

Problem-Finding

Idea-Finding

Solution-Finding

Acceptance-Finding


(Horn, 1992:14-15)
**Staff Training and Presenter Evaluation Questionnaire**

Circle a number that corresponds to your perception of the staff training and the presenter.

---

1 = Strongly Disagree  
2 = Disagree  
3 = Not Applicable  
4 = Agree  
5 = Strongly Agree

---

1) An overview of objectives was discussed  
2) Handouts followed the lesson  
3) Content was focused on classroom integration  
4) Objectives were given for each meeting  
5) Hands on activities were appropriate for the lessons  
6) Materials were prepared for instruction  
7) Presenter was knowledgeable on content instructed  
8) Scheduled sessions were convenient for the participant  
9) Presentation methods were effective  
10) The appropriate media was utilized

---

Respond to questions, use another sheet if needed.

11) What did you like best?  
12) What would you change in this inservice if redone?  
13) What do you plan to use in your classroom activities?
A practicum encapsulated a reading skills assessment and intervention program utilizing computer-aided instruction and support activities for four 3-week sessions. The primary target population was the 43 juvenile delinquents at a Florida juvenile detention center who completed posttest measures. A total of 280 students participated in the program. The secondary target population was the teaching staff. The practicum problem was the target population's marked deficiencies in reading skills. The secondary population received training to help them understand, plan, and implement the classroom activities. Computer-aided pre- and posttest measures were employed to measure the primary target population's gains in reading skills. Pre and poststudy reading attitudinal surveys were used to measure the primary target population's inclinations toward reading and the effect of the program. Secondary target population's objectives included scoring 80% or more on poststudy tests covering the areas of onsite hardware and software and computer-aided assessment and intervention. Results of the primary target population indicated that 76.7% improved their reading skills by 10% and 56.8% improved their attitudes toward reading by 15%. The secondary target population met all the objectives. (Seven tables, 53 appendixes including reading assessment and intervention surveys, a software evaluation form, and computer applications tests are included. Contains 26 references. (Author/RS)
INTEGRATING COMPUTER-AIDED INSTRUCTION FOR IMPROVING READING SKILLS WITH JUVENILE DELINQUENTS

by

Alan Vigilante

A Practicum Report

Submitted to the Faculty of the Abraham S. Fischler Center for the Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

BEST COPY AVAILABLE

The abstract of this report may be placed in a National Database System for reference.

March 1994

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Alan Vigilante

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
Abstract

Integrating Computer-Aided Instruction for Improving Reading Skills with Juvenile Delinquents.
Vigilante, Alan, 1994. Practicum Report, Nova University, Abraham S. Fischler Center for the Advancement of Education.
Descriptors: Computer Aided Instruction/ Reading Improvement/ Reading Skill Software/ Letter Read Write/ Unison Reading/ Reading Assessment/ Reading Intervention/ Reading Skills with Video Tape/ Staff Development/ Juvenile Delinquents.

This practicum encapsulated a reading skills assessment and intervention program utilizing computer-aided instruction and support activities for four 3-week sessions. The primary target population was the juvenile delinquents and the secondary target population was the teaching staff. The practicum problem was the primary target population's marked deficiencies in reading skills. The secondary target population received training to help them understand, plan, and implement the classroom activities. Computer-aided pre and posttest were employed to measure the primary target population's gains in reading skills. Pre and poststudy reading attitudinal surveys were used to measure the primary target population's inclinations toward reading and the effect of the program. Secondary target population's objectives included scoring 80 percent or more on poststudy tests covering the areas of onsite hardware and software and computer-aided assessment and intervention. The results of the primary target population marked 76.7 percent improving reading skills by 10 percent and 56.8 percent improve their attitudes toward reading by 15 percent. The secondary target population met all the objectives. Appendices includes a reading assessment and intervention survey, a software evaluation form, and computer applications tests.
Authorship Statement/Document Release

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my work, presented here, will earn similar respect.

[Signature]

student's signature

Document Release

Permission is hereby given to Nova University to distribute copies of this applied research project on request from interested parties. It is my understanding that Nova University will not charge for this dissemination other than to cover the costs of duplicating, handling, and mailing of the materials.

[Signature]

student's signature

March 1, 1994

date
Verification of Practicum Activity

Dear Observer:

Practicum students in Nova's M.S. and Ed.S. programs are asked to provide external verification that the project activities reported in their final practicum documents took place as described. You have been designated an observer to fulfill this confirmation function by the student named below. On this sheet, then, please write a note attesting to your knowledge of the project activity described in the final practicum report to which this will be attached. (Note that you are not asked to evaluate or make judgments about the quality of the project.)

Practicum Title Integrating Computer-Aided Instruction for Improving Reading Skills with Juvenile Delinquents

Student's Name Alan Vigilante

Project Site Seminole Reg. Juvenile Det. Date March 1, 1994

Observer's Name Douglas Hanks

Observer's position Instructor

Observer's comment on impact of the project (handwritten):

The project has been beneficial for both student and teachers. We've made substantial improvement in basic skills, i.e., writing, reading, and listening. Improvement in all areas has been noted.

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CHAPTER I

Purpose

Background

The purpose of this practicum was the improvement of juvenile delinquents' reading skills deficiencies with the combination of computer-aided instruction (CAI) and non-CAI classroom activities and staff training sessions. The writer's practicum took place at a Florida regional juvenile detention center. The juvenile detention center was a year-round residential secured facility operating 24 hours a day, seven days a week. The 39 bed facility possessed the capacity to house up to 50 male and female detainees on any given day. The general welfare of the detainees was the responsibility of the Department of Health and Rehabilitative Services (HRS). The detention center was managed with a staff of 48 HRS workers. Thirty of the 48 HRS staff were caregivers and aided the teachers in the classroom with behavioral management and informal tutorial assistance.
The school program was located inside the walls of the detention center compound. The school program delivered instruction in the main building of the complex and in a school district trailer. The onsite education staff consisted of four classroom teachers, one administrative dean, and one full-time equivalency (FTE) clerk. The school had one classroom with eight Atari (TM) computers networked from a file server located at a district alternative public school site. Each of two other classrooms contained nine Apple IIe (TM) stand-alone computers. The fourth classroom had no computers.

Students were placed in multiage, multigrade, and multischool district groups for class instruction. The detention center school program was designed to have a pupil-teacher ratio of 15:1 which provided a greater individualized learning experience for the student during the month of attendance. The school program followed the school district's traditional student attendance calendar of 180 days and extended instruction for 38 days during the summer.

Students attending the school program were arrested youths with ages ranging from 12 years 6
months to 17 years 11 months old. The youths were arrested on criminal charges ranging from contempt of court to murder. The normal amount of time a youth spent in the detention center was 21 school days. During the period of July 1, 1992, to June 30, 1993, the total school enrollment reached 1,104 students. This enrollment was divided thusly: 6 percent sixth graders, 13 percent seventh graders, 25 percent eighth graders, 42 percent ninth graders, 9 percent tenth graders, 4 percent eleventh graders, and 1 percent twelfth graders. The school program served a student population that consisted of 50 percent Black, 25 percent Hispanic, 20 percent White, and 5 percent Other which included Asian and American Indian.

The writer of this practicum has been teaching for seven years. Two of those years were spent as a Grade 8 Remediation and Compensatory instructor for Communications and Mathematics. Another two years were spent teaching Grade 7 mathematics. The past three years have been spent as a dropout prevention teacher at the target school. The writer is presently teaching students work related and life survival skills.
Problem Statement

If the student could not read, how could the student graduate from high school? If a student could not read, how could a youth have enjoyed the success of academic achievement? Deficiencies in reading skills were turning youths away from academic achievement and directing juveniles to lives of crime and self-destruction. How could a job application be filled out, if it could not be read? A "National Council of Crime and Delinquency study, 'Who Goes to Prison,' ... found that ... over 50 percent had never been employed," Austin and Irwin, as cited by Bates et al (1992:172). "Inmates' ... average reading level ... nationwide ... is below fifth grade," Cookson, as quoted by Bates et al (1992:174).

The problem that low reading skills produced was a major dilemma facing the nation. "The inability to read and write is the primary causal factor behind the high recidivism rate," stated Winters et al (1993:16). The poor reading skills produced lifelong frustration which denoted "higher mortality rates, higher suicide rates, and higher rates of admission to mental hospitals," Gage, as reported by Luna and Price
The nation's state juvenile detention center school programs were on the front line to direct youth back into the classroom.

The nation's state regional juvenile detention centers were multischool district facilities. The school programs maintained complete in-district student information and minimal out-of-district student information. The combination of in-district, out-of-district, multigrade, and multiage student classroom profiles produced ranges and arithmetic means for age, grade, and academic performance. For example, Rincker, Reilly, and Braaten (1990:125) indicated, "The mean age of the subjects was 14.7, while the mean scores for reading comprehension ... were 5.2."

A 1993 statewide survey (Appendix A:82-86) of Florida's regional juvenile detention centers elicited a 47 percent rate of response. The survey of school programs contained questions pertaining to CAI and non-CAI reading assessments and interventions, teacher training with computer applications and CAI software for reading assessments and interventions, and a "software evaluation form (Horn, 1992:73)."
Florida's regional juvenile detention center school programs reported (Appendix B:87-89) mode school days of 21 and mean school days of 17 to provide educational instruction to the students. With 100 percent of the school programs agreeing, the mean grade level student was assessed as having reading skills below grade level. The mean grade level student should have reading skills at the present grade level. In "operational terms," the overall statewide mean reading skills grade level of juvenile delinquents was 5.57 with a reading skills deficiency of 39.4 percent.

In Florida's detention center school programs, the percentage of classrooms that had and did not have computers was 67 percent and 33 percent respectively. With computers in two-thirds of the classrooms, school program teachers received mean hours of 4.3 a year in computer applications training. Teachers also received mean hours of 3.1 in CAI software training providing reading assessments and mean hours of 3.1 for interventions to improve students' reading skills performances.
The population at the target juvenile detention center's school program was a group of incarcerated youths. The sample age range was from 12 years 6 months to 17 years 11 months old (Appendix C:90) at the time of admittance to the center. The overall sample mean age (Appendix D:91) was 15 years 2 months old. The sample mean age placed the student in the grade range of Grade 8 to Grade 9. The sample mean student grade level was 8.38 (Appendix E:92).

The target school's population reading skills performance was below present grade level as indicated on the Computer Curriculum Corporation's (CCC) (TM) Release 14.0 pretest. At the target school, the CCC (TM) pretest assessment disclosed the six category concepts covering 46 reading skill areas. The CCC (TM) pretest ascertained scores and weaknesses in "Passage Comprehension, Interpretive Comprehension, Literal Comprehension, Word Meaning, Word Analysis, and Reference Skills (Awbrey et al, 1989:23)." The CCC (TM) mean pretest random sample score of 4.63 was the overall grade level of these six reading skills categories (Appendix F:93-94). The CCC (TM) pretest recorded the students' mean reading skills grade level.
deficit to be 3.75 years and a 45 percent deficiency below reading skills grade level. The reading skills grade level deficit of 3.75 years demonstrated by juvenile delinquents signified that reading skills at the target school were three to four years below the mean students' grade level.

The CCC (TM) pretest documented the most frequently seen reading skills weaknesses of student performance. The following four most commonly missed reading skills directed teachers to where student improvement was needed. The student sample testified (Appendix G:95-96) that 30.16 percent did not "Identify word meanings," 25.40 percent had trouble with the "Use of vocabulary in context," 19.08 percent were unable to "Combine or restate sentences," and 14.29 percent could not "Identify explicitly stated information."

In the target school program, the percentage of classrooms that had and did not have computers was 75 percent and 25 percent respectively. With computers in three-fourths of the classrooms, school program teachers received mean hours of 2.25 a year in computer applications training. Teachers also
received mean hours of 1.25 in CAI software training providing reading assessments and mean hours of 1.25 for interventions to improve student performance.

When revealing the causes of reading skills deficiencies Bintz (1993:612) stated,

... I have learned that reading decline and reading failure during the adolescent school years are extraordinarily complex problems. There are no simple causes ...

While the below grade level reader was sitting in class many psychologically damaging processes were brought into motion. The student started to receive less encouragement and more discouragement which made the youth believe in a lack of ability. "My teacher feels that I am not good enough," reported Opalack (1988:126). "It is not uncommon for these students to be unmotivated and demoralized and to have low self concepts," commented Trudnak (1990:116). The poor reading skills limited learning, limited writing skills, and limited communication with all others at the school setting. Trudnak (1990:116) mentioned, "... students would like to use written communication for personal reasons, but are unable to read and write." Then, the student found classes to be boring, earned poor grades, and did not like school.
The student gained the attitude of failure and accepted the failure role among the classmates. Next, the below grade level readers from other classes were pooled into one group with others having a low motivation for learning. Moniuszko (1990:32) explained, Remedial reading with teenagers means students who would rather do anything except pick up a book. They act as though they are being punished when assigned reading. This aversion has an adverse impact on other subject areas, as well as depleting their self-esteem. Their reading skills are years delayed. They are frustrated by their inability to read fluently and embarrassed by the resulting academic inadequacies. My pupils are often derided by their peers.

Later, the student was fearful of school, was unwilling to attend, and started appearing on the absentee sheet. "Why do they fail? They fail because they are afraid, bored, and confused," Holt, cited by Bintz (1993:605). "Juvenile offenders demonstrated a lack of self-esteem as evidenced by their choice of sample answers such as ... 'I am a failure at school'," repeated Opalack (1988:126).

The secondary school teachers were bypassing the students' reading deficiencies with classroom discussions and memorization of important facts to
past tests while sending the message "that reading is no longer necessary or important (Wood et al., 1988:6)." Bintz (1993:611) acknowledged,

One student described a survival strategy this way: If I hear it, then I only need to glance at something to ready for the test. ... And, that's why I don't have to read that much in school. ... On my last test I barely skimmed the chapter and was still only a few points from a perfect score. ... They read just enough to get by and that, of course, leads to poor reading habits and low reading test scores.

This indicated that students were receiving the traditional classroom pedagogy which had failed to maintain the students' grade level reading skills.

The comparison of reading skills grade levels of juvenile delinquents were as follows: nationwide was 5.20, statewide was 5.57, and at the target school was 4.63. The discrepancy lay in the fact that students at the juvenile detention center possessed reading skills 3.75 grades below the youths' present grade level. The expectation was that students were reading at the present grade level of 8.38. A program was developed to address the juvenile delinquents' low level of reading skills.

The program included teacher training on computer applications. Training was focused on CAI for
assessing student reading skills weaknesses. Staff training included CAI reading skills intervention that juvenile delinquents need to improve reading skills.

Outcome Objectives

At the target school, the duration of incarceration of the primary target population was in the range from 15 to 21 days. The primary target population was the students. The secondary target population was the school program's teachers. Both target populations were measured for 12 weeks. For the primary target population the 12 weeks were divided into four separate studies with each lasting for three weeks. The primary target population of the study was 36 students. The secondary target population consisted of one administrative dean and three teachers.

Students at the target school had access to CAI software programs and support reading materials. The students were utilizing intervention software programs, computer generated worksheets, and short-term non-CAI activities that improved reading skills which were measured by the CCC (TM) pre and
posttest. The teachers met for inservice training. Staff training focused on computer hardware and software applications, CAI reading skills assessments, and CAI and non-CAI intervention activities. The following proposal objectives were addressed in the practicum:

After using CAI and non-CAI intervention activities over a three-week block, 80 percent of the primary target group will demonstrate a 10 percent (one month) increase in reading skills as measured by the CCC (TM) pre and posttest (Appendix H:97-98).

To measure the success of using CAI intervention activities over a three-week block, 80 percent of the primary target group will improve their outlooks toward reading by 15 percent as measured by pre and poststudy attitudinal surveys, using the five-point Likert Scale (Appendix I:99-100).

As a result of an staff training over a 12-week period, the secondary target population will have performed a score of 80 percent or above on a knowledge test of onsite computer hardware and software applications as measured by a teacher-made poststudy test (Appendix J:101-103).
As a result of an inservice training over a 12-week period, the secondary target population will have scored 80 percent or above on a teacher-made poststudy test to demonstrate knowledge of onsite CAI reading assessments (Appendix K:104).

As a result of an inservice training over a 12-week period, the secondary target population will have scored 80 percent or above mastery on a teacher-made post inservice test to demonstrate understanding of onsite CAI reading interventions (Appendix L:105).

As a result of an inservice training over a 12-week period, the secondary target population will use critical thinking skills to brainstorm and produce a list of five alternative teaching strategies by using CAI reading assessments and interventions (Appendix M:106-110).
CHAPTER II

Research and Solution Strategy

Unison Reading

At the Learning Center in Virginia, Traynelis-Yurek and Yurek (1990:110) indicated, students were assessed with the Wide Range Achievement Test (WRAT) for reading skills grade levels. The 16 to 19-year-old students measured reading skills grade levels in the range from 3.0 to 6.5. The interest level of material taught was from grades 7 to 10. The method used to help improve reading skills was the Heckelman's Neurological Impress Method. The method required one student "to read in unison with the teacher or a paraprofessional (Traynelis-Yurek and Yurek, 1990:110)." Teacher and student started with sentences and worked up to whole paragraphs, repeated "several times to establish a fluent, normal reading pattern (Traynelis-Yurek and Yurek, 1990:111)." The student was told to pronounce the words without thinking about what was being read. Pages were
Repeated until 95 percent of words were pronounced correctly. There was no comprehension check during the unison reading.

Motivation occurred when success was experienced on a daily basis. Immediate feedback was given when the learners' words were the same as the lead reader's accurately pronounced words. The lessons lasted for 15 minutes, 5 days a week for a total of four hours. The teacher's management system recorded the number of pages read by the students. "An attitudinal survey was administered (Traynelis-Yurek and Yurek, 1990:111) at the end of the program.

The Slosson Oral Reading Test (SORT) was the pre and posttest for evaluation of gains. The SORT was helpful in prescribing materials to read. The outcomes using the SORT indicated the "average gain per pupil was approximately one month per hour of instruction (Traynelis-Yurek and Yurek, 1990:111-112)." The pages read at the beginning were 3.0 pages in each session and ended with 4.9 pages in each session.

The advantages were: improved oral reading and reading comprehension, significant gains in word
recognition, individualized teaching for the student, and a carryover of being successful was felt in other subject classes. Students' positive reactions were recorded on the attitudinal survey with 87 percent feeling successful.

The disadvantages were: the period of time needed for full effect was from 7 to 12 hours in sessions; one-to-one teaching was very timely and expensive; and the use of paraprofessionals because there was an insufficient teaching staff.

The Letter

In a Maryland prerelease facility, the school program utilized a teaching approach known as "The Letter," Trudnak revealed (1990:116). The Letter used oral and written communication to teach students previously diagnosed as being "unable to read and write (Trudnak, 1990:116)." The materials used were pencil, paper, envelopes, a word processor if available, and stamps. The Letter approach was used as an alternative since traditional reading skills materials and methods had produced poor results at the facility. The strategy worked on both decoding words
and reading comprehension. The individualized education plan (IEP) was used to set goals and gave students the choice of traditional materials or The Letter.

Students started The Letter with a few lines. The dictation-writer strategy occurred as the student talked and the teacher wrote all that was said. The student read what the teacher wrote which involved auditory with sight sensory. The reading of their lines meant that words were more than an abstract concept but were concrete with written groups of letters that represented sounds. Then, the letter was copied, which involved writing and sight which was a kinesthetic approach to learning. Later, the copied letter was mailed. If there was a word processor available, the student used it to copy the letter for mailing. The students learned "to read by reading and not memorizing rules" stated Smith, as cited by Trudnak (1990:117). "Follow-up activities (Trudnak, 1990:117)" led into traditional reading skills materials and the writing of new letters.

The advantages were that it was cost-effective, easy to implement, and the individualized letter kept
the student involved. The students' motivation was heightened when letters of reply were received. Other advantages noted were: the practice was in privacy, no child-like materials were used, and no reminders "of previous failures (Trudnak, 1990:116)." Less frustration between learner and teacher made the program more relevant to the student who now had established a purpose for learning and quickly developed sight vocabulary.

The disadvantages were that the strategy did "not work with all (Trudnak, 1990:117)" students and the one-on-one teaching approach was too slow moving for a large group of students.

The Video Tape Series

In West Virginia, indicated the Office of Education Research and Improvement (1993:409), video tapes were a major component of distance education for improving reading skills. Distance education helped students in security prisons and in rural areas of the country. The video series was broadcast over satellite, cable, and closed-circuit systems to students. Schools and libraries had video tapes
available for individual and group lessons.

The professionally produced video tape series, featured in The Kentucky Network (TM) catalog (1993:7), which developed the Kentucky Education Television (KET) (TM), was supported with computer software, workbooks, audiotapes, and a toll-free tutor phone line. The video tapes, in a KET (TM) demonstration video tape (Literacy Sampler, 1993), indicated the grade level reading skills were grouped from 0.0 to 4.0, from 5.0 to 8.0, and from 7.5 and above. The basic costs of each of the three groupings were in the price range from $1,200.00 to $2,200.00.

The taped series utilized well-known personalities and teachers to deliver the video instruction. The videos had high interest, utilized low level reading skills, and included material integrated with higher order thinking skills. The video tapes taught sight words by displaying sentences on the screen and highlighting words as they were spoken.

All the skills employed a management system to direct the module skills on which the students were working. All modules used a pretest followed by a practice test with a score of 90 percent needed to
qualify one for the mastery test. The mastery test required an 80 percent score or higher to successfully complete the skill.

The advantages were: the self-paced individualized lessons which were repeated when needed; a toll-free help line was available; and the video tapes had a clock counter display to help access any lesson by fast forward or rewind.

The disadvantage was that the video tape series needed other support materials.

CAI Assessment

In the Teacher's Handbook for Reader's Workshop, a CCC (TM) publication Awbrey et al (1989:9) explained the Initial Placement Motion (IPM) for assessing students' reading skills grade level. The IPM was an "adaptive process that successively revise the students' grade level in each strand (Awbrey et al, 1989:9)." The initial level of evaluation was set at the individual CAI centers based on previous students' performances. The IPM was constantly measuring the students' performances by the correctness or incorrectness of answers during the pretest.
When students progressed through the pretest, the IPM placed the students either a .25 grade level higher or lower every 10 minutes. The pretest lasted for 100 minutes. If students gained two grade levels during the pretest, an additional 100 minutes of the IPM was needed to assess the students.

The advantages were that the students were measured at their current level and were challenged but not overburdened with the difficulty of the placement test.

The writer noticed no disadvantages.

The Los Angeles Juvenile Court and Community Schools Program (Hartman, 1989:138), found the need for testing and measuring students for their educational programs. The target group was arrested juveniles who had been placed in a juvenile detention center. The computer assessment lab had 12 International Business Machines Corporation (IBM) (TM) compatibles linked to a master unit. The assessment software was named the Computer Adaptive Testing (CAT).

The CAT development theory rested on "the psychometric foundation known as Item Response Theory
(IRT) (Hartman, 1989:139)" which was individually tailored to examinees' knowledge levels. The reason for assessment was to determine the students' educational background. This knowledge was used as a prerequisite in mastering new material. The CAT was an alternative to using a commercial "norm-referenced achievement test (Hartman, 1989:138)." The test items ranged from grade 2.5 to 12.9. The examinees' age determined the starting point of the CAT.

One advantage was: students' profiles provided an accurate and efficient means of placing students into an instructional program. Another advantage was that students' reactions were positive; it was noted that the CAT was fair and gave a clear "picture of what they know in a shorter time period (Hartman, 1989:141)." Other students felt that a computer test was fun as opposed to "traditional paper and pencil test (Hartman, 1989:141)." Teachers liked the test because the information generated helped them facilitate their roles.

The writer noticed no disadvantages.
Students Learning With CAI

At three short-term, high population turnover prison settings, in Ohio, (Rose and Williams, 1989:116), CAI was used for instruction. The prerelease centers were six-week programs for convicted felons. The curriculum was functional skills. The CAI focused on skills when students were below 80 percent in mastery. After 10 hours on task, a posttest was given. The software used was the Comprehensive Competencies Programs by the Remediation and Training Institute of Virginia. After 10 hours the CAI produced a 10.9 percent increase in skills from pre to posttest. It was a common occurrence to record inmates with a 20 percent gain after 10 hours of CAI.

The advantages were: the centers were able to handle large populations with high turnovers, students gained in functional skills, and their assessed level was their starting point for learning. The student performance reports helped document the compliance of objectives to receive funding from the Jobs Training Partnership Act (JTPA). "Computers permitted the staff to spend more time teaching and less time doing
The disadvantages were: some students did not finish 10 hours on task in six weeks; students received furloughs or were "placed in disciplinary control where they could not attend class (Rose and Williams, 1989:117)," and some students lacked the necessary keyboarding skills to operate a computer.

**Students Improving Reading Skills With CAI**

The Programmed Activities for Correctional Education (PACE) Institute in Chicago's Cook County Jail (Winters et al, 1993:10) was utilizing CAI to improve students' reading skills. Short-term students were enrolled in the PACE program with grade ranges 4.0 or higher. The students' IEP listed the basic reading skills, the learners' objectives, suggested activities, and specified text titles with page numbers. The PACE program had 25 hours a week of instruction and one hour of actual CAI use. After 30 days of instruction the students took a posttest.

The software used was the BLS Seven Through Adult Tutor systems (STAT) (TM) by BLS, Incorporated (TM). The BLS STAT (TM) software was written for stand-alone
128K Apple II (TM) and 256K stand-alone and networked IBM (TM) and compatibles. The software was divided into four grade groups as follows: from 2.6 to 5.2, from 4.6 to 7.2, from 6.6 to 9.2, and from 8.6 to 12.9. The eight reading skills categories were as follows: Word Analysis, Vocabulary, Comprehension, Inferential Comprehension, Critical Comprehension, Spelling, Paragraph Development, and Study Skills. The cost of the reading skills packages ranged from the stand-alone price of $2,500.00 to the network price of $6,200.00.

The PACE Institute had given students a weekly or biweekly contract based on their IEP in order to complete and master skills. The students who showed continued success were placed on an honor roll and became candidates for the Student of the Month.

The BLS STAT (TM) software was based on a score of 90 percent competency on the tutoring practice test and a score of 90 percent mastery on the skills test. The BLS, Incorporated (TM) advertised 90 percent of all students were successful if placed at the correct grade level for improving reading skills. The outcome of the BLS STAT (TM) software was a positive
alternative to the traditional pedagogy at the center. After the BLS STAT (TM) software was used for one month 78 percent of the students maintained or gained reading skills grade levels as opposed to traditional pedagogy in which only 50 percent of the population maintained or gained in reading skills grade levels.

The advantages were that the BLS STAT (TM) software prompted offenders learning reading skills to help them self-plan, self-evaluate, and self-monitor. The BLS STAT (TM) was "non-judgmental (Winters et al, 1993:12)" and gave "continuous feedback and reinforcement (Winters et al, 1993:12)." The software had a record keeping system that recorded all of the students' performances. There were indications that the students showed improvement in spelling. The CAI software gave teachers more time to help individuals, thus making the software cost-effective.

The disadvantages were that some students were computer illiterate and the software was costly.

Staff Training Included Computer Applications

At a kindergarten through grade 12 private school located at a university campus, (Brennan, 1991:1),
staff development was utilized to effectively integrate CAI at the school-site. The target group was the faculty who taught grades 1-5. The author noticed that the teachers failed to give their input into the students use of an on-campus integrated learning system (ILS) and a lack of use of computers in the classroom. Students used the ILS in two 30-minute periods each week. It was documented that the teachers were not prescribing any areas of students' deficiencies to the lab technicians.

The author facilitated six formal workshops of inservice training. The teachers gave their input by suggesting what types of activities should have occurred. The trainer involved teachers in CAI practices, simulations, applications, concepts, and skills. Discussions also evolved around the topics of acquisitions, evaluations, and assignments of hardware and software.

As a result of staff development many benefits were noted. There was greater integration of CAI in the classroom. Students exposure to CAI increased. In addition, teachers became active participants in school-wide CAI decisions.
The advantages of the staff development were a positive and effective increase of CAI. Teachers communicated students' prescriptions to the ILS lab technicians, and as a result, learners improved their skills.

The disadvantage was the inability to change the narrow focus of faculty members who had unfairly prejudged CAI.

The Staff Development Manual

The International Society for Technology in Education, located in Eugene, Oregon, (Franklin and Strudler, 1989:64), gave a complete outline for staff development. The manual divided 27 in-service objectives into six categories as follows: teacher objectives, student objectives, delivery system, organizational context, governance, and selection and evaluation.

Teacher objectives were stated in behavioral goals. Teachers needed to know the expected level of competency required for them. Mastery of the students' objectives, was the aim of the in-service training.
The delivery system involved meetings used to build a consensus to participate and air teachers' concerns. A schedule of sessions was developed in order to produce the least amount of conflict with the teachers' other obligations. The staff expressed positive feelings towards the trainer. The training site was adequate to hold all the activities planned for a session. Teachers received a manual on objectives. It was noted that teachers needed to receive feedback on their progress and an ongoing monitoring after the training.

The organizational context contended that the principal participated and supported the inservice activities. The inservice aimed at school improvement and not professional improvement. Inservice training contained small group activities that gave staff an opportunity to work with one another.

The governance was concerned with establishing a mandatory attendance policy for all staff members. Teachers had input in the planning of the inservice incentives, such as, inservice points earned for re-certification.
The selection and evaluation processes focused on the purpose and effectiveness of the inservice. The focus of the inservice aimed at the students' academic weaknesses. The content was relevant to classroom situations. The evaluation measured students' performance after implementation of the new teacher techniques for effectiveness in a non-threatening manner.

The advantages were the overall positive philosophy, structure, and guidance of the staff development activity.

The writer found no disadvantages.

The Summary

The research literature focused on the teaching strategies used to improve students' reading skills. The intent of the literature was to present a school program structure for short-term students. Through the use of CAI and non-CAI activities, the blend of both concepts helped the student become a more successful learner.

The research literature included staff development insights for the trainer as well as the staff. The
purpose was to improve students' academic weaknesses. The inservice training oriented the staff to the goals and techniques that were implemented.

The Solution Strategy

The rationale followed in the selection of a solution strategy to improve students' reading skills grade levels and provided inservice training encompassed many steps that had strongly established applications and results.

The starting point for reading skills improvement was to establish (Hartman, 1989) (Winters et al, 1993) a grade equivalency level for all students. Using a computerized assessment (Hartman, 1989) (Awbrey et al, 1989) for juvenile delinquents was an alternative to the traditional pencil and paper test. Students simply believed that it was more fun (Hartman, 1989) to take a test on the computer. The CCC's (TM) IPM (Awbrey et al, 1989) activity accurately measured the students' current reading skills level.

The IEP (Winters et al, 1993) was used to direct teachers and students in the mastering of learning objectives. The students' current knowledge
(Hartman, 1989) was the prerequisite for learning new material. Based upon students' performances, a weekly contract encouraged students to progress and improve (Winters et al, 1993). Successful students were placed on an honor roll (Winters et al, 1993) to encourage self-esteem.

To improve reading skills, CAI (Winters et al, 1993) was utilized. The BLS STAT (TM) (Winters et al, 1993) software provided individualized tutoring lessons in conjunction with mastery reading skills tests. The BLS STAT (TM) had built-in to every tutor disk a computer management instructional (CMI) (Winters et al, 1993) (Rose and Williams, 1989) system to generate reports which helped monitor the progress of the learners.

The teachers and students utilized non-computer time with other successful strategies to promote and teach reading skills improvement. Teachers used the ILS (Brennan, 1991) to generate worksheets that focus on the students' reading skills weaknesses. Teachers scheduled 10-minute blocks of time for unison reading (Traynelis-Yurek and Yurek, 1990) in order to help students improve their sight vocabulary
and reading comprehension. Students dictated letters (Trudnak, 1990) to teachers who wrote all that was said and then the student read the letter to the teacher to improve sight vocabulary and spelling. Teachers used video tapes (Office of Education Research and Improvement, 1993) (Kentucky Network, 1993) to create spelling and dictation activities. The teachers asked students at the beginning and end of the study to complete a reading attitudinal survey (Traynelis-Yurek and Yurek, 1990) to measure any positive change that took place.

A staff development was organized to help students improve their reading skills (Franklin and Strudler, 1989). Teachers met to discuss (Brennan, 1991) improving students' reading. A meeting explored new activities (Brennan, 1991) and hands-on exercises. The trainer scheduled sessions, listed objectives, provided a manual, and made ready the training site (Franklin and Strudler, 1989) area.

Inservice points were applied for as an incentive (Franklin and Strudler, 1989) for participation. The information presented was relevant to classroom (Franklin and Strudler, 1989) activities. A review of
students' academic weaknesses and students' progress was discussed (Franklin and Strudler, 1989). A critical thinking activity based on the teachers and CAI roles (Brennan, 1991) resulted in a listing of five alternative curriculum teaching strategies. An evaluation questionnaire (Brennan, 1991) at the end of staff training provided assistance to determine the success and plan future inservice activities.
CHAPTER III

Method

Statistical Comparisons of the Primary Groups in Chapter I and the Study's Group

The high turnover rate at the detention center has made it impossible to represent in "operational terms" the study's target group as described in Chapter I. Chapter I's statistical information pertains to a group that has been released from the secured facility. An entirely new group has replaced the primary group as described in Chapter I. During the 12-week study 280 students participated. Forty-three students had qualified as the primary target population. The other 237 students did not participate in taking the posttest which disqualified them. A comparison of the primary groups in Chapter I and the study's group involved the following statistical descriptions shown from Tables 1 to 7.

Table 1 shows the study's group (Appendix N:111) was a year older on the low end of the sample age
range and one month younger on the high end compared to Chapter I's primary group.

Table 1

A Comparison of Sample Age Ranges from Chapter I and the Study's Target Group

<table>
<thead>
<tr>
<th>Primary Target Group</th>
<th>Sample Age Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I's Group</td>
<td>12 yrs. 6 mos. to 17 yrs. 11 mos.</td>
</tr>
<tr>
<td>Study's Group</td>
<td>13 yrs. 5 mos. to 17 yrs. 10 mos.</td>
</tr>
</tbody>
</table>

Table 2 shows the study's group sample mean age (Appendix 0:112) was six months older than those in Chapter I.

Table 2

A Comparison of Sample Mean Ages from Chapter I and the Study's Target Group

<table>
<thead>
<tr>
<th>Primary Target Group</th>
<th>Sample Mean Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I's Group</td>
<td>15 years 2 months</td>
</tr>
<tr>
<td>Study's Group</td>
<td>15 years 8 months</td>
</tr>
</tbody>
</table>
Table 3 shows the study's group sample grade ranges (Appendix P:113) indicate a grade higher on the low end and a grade lower on the high end compared to Chapter I's group.

Table 3

A Comparison of Sample Grade Ranges from Chapter I and the Study's Target Group

<table>
<thead>
<tr>
<th>Primary Target Group</th>
<th>Sample Grade Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I's Group</td>
<td>grades 6 - 12</td>
</tr>
<tr>
<td>Study's Group</td>
<td>grades 7 - 11</td>
</tr>
</tbody>
</table>

Table 4 shows the study's group sample mean grade level (Appendix P:113) was a 0.75 grade level higher compared to Chapter I's group.
Table 4

A Comparison of Sample Mean Grade Level Students from Chapter I and the Study's Target Group

<table>
<thead>
<tr>
<th>Primary Target Group</th>
<th>Sample Mean Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I's Group</td>
<td>8.38</td>
</tr>
<tr>
<td>Study's Group</td>
<td>9.13</td>
</tr>
</tbody>
</table>

Table 5 shows the study's group sample CCC (TM) pretest score (Appendix Q:114-115) was a 0.05 grade level lower compared to Chapter I's group.

Table 5

A Comparison of Sample CCC (TM) Pretest Scores from Chapter I and the Study's Target Group

<table>
<thead>
<tr>
<th>Primary Target Group</th>
<th>Sample CCC (TM) Pretest Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I's Group</td>
<td>4.63</td>
</tr>
<tr>
<td>Study's Group</td>
<td>4.58</td>
</tr>
</tbody>
</table>

Table 6 shows the study's group sample reading skills deficiencies (Appendix Q:114-115) was a 0.80
year and five percent less than Chapter I's group.

Table 6
A Comparison of Reading Skills Deficiencies from Chapter I and the Study's Target Group

<table>
<thead>
<tr>
<th>Primary Target Group</th>
<th>Reading Skills Deficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I's Group</td>
<td>- 3.75 years and - 45 percent</td>
</tr>
<tr>
<td>Study's Group</td>
<td>- 4.55 years and - 50 percent</td>
</tr>
</tbody>
</table>

Table 7 shows the study's population (Appendix R:116-117) and Chapter I's group had identical most seen reading skills weaknesses which were "Identify word meanings" and "Use vocabulary in context".

Table 7
A Comparison of CCC (TM) Reading Skills Weaknesses from Chapter I's and the Study's Target Group

<table>
<thead>
<tr>
<th>Reading Skills</th>
<th>Chapter I's Group</th>
<th>Study's Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Identify word meanings&quot;</td>
<td>30.2%</td>
<td>28.1%</td>
</tr>
<tr>
<td>&quot;Use vocabulary in context&quot;</td>
<td>25.4%</td>
<td>40.6%</td>
</tr>
</tbody>
</table>
The seven tables combined indicate that the older study's group possessed greater reading skills deficiencies than the younger Chapter I's group.

**Preliminary Procedures**

Certain preliminary procedures occurred during the week prior to the 12-week study. Initially, a one-hour formal prestudy session (Appendix S:118-119) was presented by the writer to the school program dean and three teachers. The session's participants received and reviewed a manual of the 12-week practicum for implementation of the program to improve students' reading skills. The manual focused on the components and sequences of CAI and non-CAI activities and described each task to be performed by the teachers and students. The task descriptions listed the personnel to be involved, the materials to be used, the sequence of activities to be followed, and the students' performance data collection instruments to be utilized.

Secondly, a portion of the classroom activities involved teacher-made videos. Thirteen 10-minute video taping sessions took place. Teacher #1 used
a video camera to record the sessions and teacher # 3 directed the video sessions. In order to provide interest to the students and promote excitement among the supporting staff of the facility, the video tape spelling and dictation sessions employed the HRS staff as guest presenters. A letter (Appendix T:120) of appreciation for HRS staff participation was sent to the facility's superintendent. Since these video tapes are reusable they were utilized for all four studies. One tape was partially demagnetized and the session was retaped.

Thirdly, CCC (TM) worksheets and spelling (Appendix U:121-127) and dictation (Appendix V:128-133) lists were printed for use in teacher # 4's classroom activities when utilizing the unison reading and the Letter Read Write sessions.

Fourthly, a banner was placed in each classroom to promote the classroom activities and encourage teachers and students to work toward a common goal. The banner had a graphic representation of a computer at each end. In the middle of the graphics were the words "Reading is Prime Time".
Additionally, an attendance list was printed by the administrative dean and distributed to teachers and HRS staff. The attendance list doubled as a schedule of where and when students and teachers were located. Teacher #1 used the attendance list to assign CCC (TM) ILS identification numbers to students' names. The ILS pre-registration helped facilitate the pretest activity. Also, every morning prior to the start of school there was an informal meeting with the writer and each teacher in order to review the day's scheduled classroom activities.

Overview of the Weekly Classroom Activities

During each week of the practicum students were engaged in certain core activities. The core activities were both CAI and non-CAI related. The self-paced CAI activities were the tutorial lessons in which students learned, practiced, reviewed, and mastered reading skills. The non-CAI activities were individualized instruction utilizing the unison reading and Letter Read Write sessions. The group activities were the video spelling and dictation sessions which was designed to increase their
vocabulary. The traditional pencil and paper individualized CCC (TM) activity worksheets were available for instruction and feedback.

The key events (Appendix W:134-135) of weeks 1, 4, 7, and 10 initiated each three-week study. Students were pretested to reveal deficiencies and responded to an attitudinal survey to measure their inclinations toward reading. Weekly student contracts helped set goals to instill self concepts.

The key events of weeks 2, 5, 8, and 11 built students' self-esteem through the use of the Honor Roll and The Student of the Week awards.

The focus of weeks 3, 6, 9, and 12 was the posttest used to measure gains. The post-study reading attitudinal survey measured positive increases toward reading. Self-confidence was enhanced by the posting of the Honor Roll and the awarding of the title of Student of the Week.

The Pretest Procedure

This activity involved 100 minutes of testing. The primary target population utilized the CAI process for three days in 35-minute sessions in order to
insure completion. One make-up day was scheduled for students who missed class due to court appearance, medical treatment, legal counseling, or behavioral confinement. The students were given their CCC (TM) ILS identification number and entered it to start the pretest. The students responded to questions using a keyboard or mouse. The test started at a reading skill grade level of 4.0. The computer tested 46 skills which were divided into six major categories. As the students responded to the CCC (TM) computer program Release 14.0, the IPM recorded the students' correct responses. After every 10-minute interval the Release 14.0 program adjusted each of the six categories in an higher or lower measure by a .25 grade level. Students continued for a second and third session until 100 minutes were completed. Teacher #1 recorded the students' pretest attendance and participation using a log (Appendix X:136).

**The Posttest Procedure**

The students typed in their CCC (TM) ILS identification number to begin the posttest. The students responded by using the keyboard or mouse for
three 35-minute sessions. Thematic passages were utilized as a source for posttest questions. The test which measured the students' progress lasted 100 minutes. Teacher #1 logged the students' posttest attendance and participation (Appendix X:136). Gains in reading skills grade levels were determined through comparison of the pre and posttest (Appendix H:97-98). The CCC (TM) CMI files generated an individual record of each students' performances, weaknesses, and gains.

Make-Up Pre and Posttest Procedure

The make-up pre and posttest acted as a safety net to enable the students to complete the required 100 minutes of testing. Unforeseen disruptions of the pre and posttest could have been some of the following: student riots, file server shutdown at the host public school site, phone line damage that connects to the public school file server, an electrical power outage, or a bomb threat.

During the first two studies' pre and posttesting, the CCC (TM) host site was experiencing power surges from the facility's air conditioning and heating unit. The power surges caused the file server to shut down
the system. The shutdown caused students to lose testing time. Extra time was scheduled daily and students worked 10 to 15 minutes each day to complete the 100 minutes of pre and posttesting. Technicians were called to the site to correct the problem. A power surge absorption device was attached to the file server to relieve future shutdowns.

The Pre and Poststudy Reading Attitudinal Surveys

Pre and poststudy reading attitudinal survey statements (Appendix I: 99-100) revealed students' perceptions about reading. Prestudy surveys were done only with new students. Poststudy surveys were elicited from students who had at least two weeks attendance in the reading skills program. The students did not put their names on the paper. Teacher #3 read the 10 sentences aloud and the students responded by circling a number from 1 to 5. The number 1 stood for "strongly disagree", the number 2 represented "disagree", the number 3 indicated "undecided", the number 4 suggested "agree", and the number 5 stood for "strongly agree". The teacher collected papers. The focus of the reading
attitudinal survey was to determine if the CAI and non-CAI improving reading skills program had a positive effect on students. Particular attention was paid to statements # 1-5 and 10. These measured students' attitudes toward reading.

The IEP

The IEP (Appendix Y:137) was used as a prescriptive plan for meeting the students' needs. Teachers met during every mid-day to determine a plan of action for each new student who completed the pretest by checking off items listed on the IEP. Some items on the IEP included the short-term goals, the skill objectives, the teachers' expectation level of improvement, the methods of evaluation, and the determination of goal achievement. Other items included the process to be used, the cognitive goals, the applications demonstrated for improvement, and affective goals to increase self-esteem.

The Student Performance Report

The student performance report was a collection of all the work recorded (Appendix Z:138) in the activity
logs and the CCC (TM) and BLS STAT (TM) CMI reports. The activity logs contained the results of the Letter Read Write and the unison reading. Other items included the scores from video spelling and dictation sessions and the CCC (TM) worksheets. The CCC (TM) CMI files reported the pre and posttest results and skills weaknesses. The BLS STAT (TM) CMI reports indicated progress on reading skills working through the tutorial practice test and the mastery skills test. The students' data collected were the support for all the statistical summaries that made up the results. An individual folder for each of the students contained all the supporting documents of the students' work. The performance report was also used to show strengths and weaknesses when meeting with students to set weekly contract goals.

The Weekly Student Contract

The weekly student contract (Appendix AA:139) was a device used to help teachers and students set goals to be accomplished. The achievement of these goals helped instill self-esteem and self-confidence. The meeting of weekly contract goals placed the student's
name on the honor roll and nominated the student as "Student of the Week." Placement on the honor roll entitled the student to receive a certificate. The certificate was placed in their personal property packet and presented to the juvenile judge. The certificate was evidence of the students' commitment to improving their education and outlook on life.

The honor roll was a three foot by two foot poster displayed in the writer's classroom. The students who mastered all the goals of the contract had their names appear on the poster. The teachers decided to whom the Student of the Week award would be presented. The recipient received a certificate, a banner, and a candy treat. A copy of all the banners were displayed on the writer's classroom wall.

**CCC (TM) Worksheets**

The CCC (TM) CMI files generated students' low strand worksheets. Teacher # 4 used the worksheets in the classroom when other students were individually scheduled to work with the teacher one-on-one. The worksheets were graded by the student with an answer key for immediate feedback. A log (Appendix AB:140)
was kept of students' work and their scores.

The Unison Reading Procedure

The unison reading activity was a 10-minute session between teacher # 4 and a student. The reading literature contained the Harcourt Brace Jovanovich (HBJ) (TM) Bookmark Reading Program, Eagle Edition series (Appendix AC:141). The HBJ (TM) books spanned reading grade levels from 3.0 to 8.0. Students' placement was determined by the CCC (TM) pretest and the video spelling and dictation performances. The student followed the teacher in unison reading to acquire a natural reading pace. The student was asked after each page to be the lead reader. Teacher # 4 logged (Appendix AD:142) the student's success in recognizing the decoded sight vocabulary. When 95 percent of the words were pronounced correctly the teacher logged the results. This process continued until the student had read three pages. The teacher pointed out words with which the student should become familiar and noted at most four words on the log.
The Letter Read Write Procedure

This 10-minute session began with the student dictating a letter to teacher # 4. After the student had dictated and the teacher had written the letter, the teacher read the words to the student pointing to each word. Then the student read the words to the teacher who noted any words that were mispronounced or were not decoded by the student. The teacher logged (Appendix AE:143) the number of lines written and noted at most four words missed by the student for future review. Students copied their letters in their own handwriting and then gave them to HRS staff to be mailed.

The Video Tape Spelling Sessions

The video tape was a teacher-made presentation challenging students to apply their knowledge of spelling words. The test list was extracted from the CCC (TM) Teacher's Handbook Reader's Workshop (Awbrey et al, 1989:52-59). The words were found in grades 3 to 7 spelling lists. A working list of 20 words was compiled from each of the five grade levels. Students received the list the prior day. They wrote
each word twice to become familiar with the words. The presenter pronounced 20 words, used the words in a sentence, and repeated the words (Appendix AF:144). After all the words were read, teachers # 1 or # 2 gave the correct list to the students to self-score. The teacher recorded the scores on the log and answered any questions at that time. Words were given in sequential order so that a teacher saw where the students began having difficulty. The teacher recorded a grade level next to the score on the log (Appendix AG:145) where the difficulty began. The words from 1 to 4 were at the Grade 3 level, words from 5 to 8 were at the Grade 4 level, words from 9 to 12 were at the Grade 5 level, words 13 to 16 were at the Grade 6 level, and words from 17 to 20 were at the Grade 7 level (Appendix AH:146).

The Video Tape Dictation Sessions

Sentences were extracted from the HBJ (TM) Bookmark Reading Program, Eagle Edition series (Appendix AC:141). Students received the list a day prior to the video session. Students read and copied each sentence once. Students watched and listened to
a teacher-made video tape. The presenter stated each one three times before continuing to the next until all 10 sentences were read. Teachers # 1 or # 3 stopped and started the tape to give students enough time to make (Appendix AI:147) the necessary corrections and revisions. Students received a copy of the sentences that were dictated and asked to make corrections and score their papers. The teacher logged (Appendix AJ:148) scores with grade levels and reviewed any words that students had difficulty in spelling or understanding.

Utilizing CAI BLS STAT (TM) Software

After the completed pretest, students interacted with tutorial software. The students were scheduled for two 30-minute sessions each day (Appendix AK:149). Some students logged on with their initials, a nickname, a middle name, no name, a profanity, or with someone else's name. Teachers # 2 and # 3 monitored and made certain students logged on with their full name and the date and helped students in operating the software. Students practiced and reviewed skills deficiencies (Appendix AL:150-151) with the BLS STAT
(TM) disks and were told a passing score was a 90 or above.

The teachers directed students to do the lesson before the test. Some students had gone into the test, written the answers, and then waited for the test to start. These occurrences were detected when CMI reports were reviewed. The reports showed no lesson work and a low test score followed by a high test score. Teachers monitored the CAI sessions attentively; and when the students began the test before the lesson, students were again directed into the lesson.

The lesson was timed for 20 minutes, and the test lasted approximately 10 minutes for each skill disk. Some students went through the lessons in less than 20 minutes. They were directed into the lesson's summary which is an option in the main menu. The tutorial disks (Appendix AM:152-156) were supported with printed text that followed the lessons. To demonstrate improvement, students completed the lessons' mastery tests. To monitor progress, the teachers used CMI files to generate performance reports.
Seven lesson disks were sent back to BLS, Inc. (TM) because they had failed to work properly. The problem disks were damaged by students who in haste to complete the lessons continually pressed the return key. This gave the 5.25 inch disk insufficient time to spin in the disk drive and record responses into individual student files. The disks were unable to enter into the program files causing error messages to be displayed on the screen.

Interim Evaluation and Mid-Course Adjustments

The end of weeks 3, 6, and 9 resulted in statistical interim evaluations (Appendix H:97-98). Midcourse adjustments for the practicum were made for pre and posttest scheduling. Students who had missed two or more sessions made it necessary to extend testing. The summary reports provided CAI and non-CAI feedback on the effectiveness of planned interventions. The weakest student participation activity was the Letter Read Write sessions as reflected in the logs. Most students simply did not want to write letters. The ones who did participate, appreciated the opportunity to work with teacher # 4.
This activity was promoted when teacher # 3 and the student went through the goals of the weekly contract.

Staff Training

A prestudy staff training session (Appendix S:118-119) was held. The formal session was with the administrative dean and teachers. The meeting detailed all CAI and non-CAI classroom activities. The staff manual included sample copies of activity logs and record keeping forms that were utilized in the study. Teachers experienced a little uneasiness with the implementation of new classroom activities. During the study, regular weekly meetings were held to insure staff conformity with the schedule (Appendix W:134-135) and the integrity of the project. The secondary target population reviewed, revised, and discussed the study's procedures. The main topic was implementation of computer applications.

The first regular weekly staff training (Appendix AN:157-158) session's objectives included an overview of all topics, activities, and requirements to successfully complete the inservice. Other objectives were to identify ILS hardware components and software
assessment features. The training site was the classroom with the Atari (TM) networked computers. Materials used were the staff manual, the ILS hardware components and software program, and sample CMI reports showing students' performances, weaknesses, and gains. Teachers became more aware of the CMI reports' contents.

The second meeting (Appendix A0:159-160) took place in a classroom with Apple IIe (TM) computers. The objectives were to identify the Apple IIe (TM) computer's internal and external hardware components and their functions. Materials included an Apple IIe (TM) Owner's Guide and an Apple IIe (TM) computer and its peripherals. Teachers were overcome with the vast technical names and functions.

The third meeting (Appendix AP:161-162) occurred in a classroom with Apple IIe (TM) computers. The objectives were to describe and discuss computer system commands, data disk features, and utility commands. Materials included an Apple IIe (TM) Owner's Guide, 5.25 and 3.5 inch disks, an Apple IIe (TM) utility disk, and an Apple IIe (TM) computer. Teachers were familiar with caring for disks but were
confused with all the utility disk's features and functions.

The site of the fourth staff training (Appendix AQ:163-164) was in a classroom with Apple IIe (TM) computers. The objectives were to identify internal computer components and understand computer application programs. Materials used were the Apple IIe (TM) computer and the Apple IIe (TM) Owner's Guide. There were two computers acquired from the district warehouse for classroom use. The writer disassembled both computers, then asked the participants to rebuild each computer. The rebuilding process involved the inserting of peripheral cards into the correct slots, plugging in the corresponding cables, and starting up the computer. Teachers needed guidance to proceed through this hands-on activity. Each computer was placed in the classroom for teacher and student use. One was placed in the room that had no computer and the other was placed in the Atari (TM) classroom.

The fifth session (Appendix AR:165-166) occurred in an Apple IIe (TM) classroom. The objectives were to identify the reading skills intervention software
features. Materials were the BLS STAT (TM) handbook with tutorial disks and a report generator disk for the 100 series. Teachers reviewed sections of the handbook, examined tutorial disk content titles, and discovered the many menu options of the report generator disk. Again, teachers were exposed to new material which caused minor anxiety as they went through their learning curves.

The sixth meeting (Appendix AS:167-168) was a continuation of the last session as the teachers discussed the similarities and differences of the BLS STAT (TM) 100 and 200 series. Teachers had hands-on activity with operating the various features of the tutorial and report generator disks. Prior to the meeting, the two new computers that were put into classroom use had students working on lesson disks. The two teachers brought the lesson disks to the meeting to produce CMI file reports. The first disk displayed an error message and was sent to BLS, Inc. (TM) for replacement. The second disk produced hard copies of students' performances. At the end of the session, teachers expressed excitement about integrating new software into the classroom.
Session seven (Appendix AT: 169-170) was presented in the dean's office. The objectives were to discuss and compare the planned CAI and non-CAI activities of the study. There were no changes that had occurred since the beginning and none were needed as agreed to by the teachers. There was extra class time in teacher #1's schedule to handle extended pre and posttesting. Teachers #2 and #3 were more vigilant to students following directions when interacting with the BLS STAT (TM) software. Teachers #3 and #4 attempted to promote more student participation in the Letter Read Write activity.

The eighth staff training (Appendix AU: 171-172) was held at the school district media services center. The technology coordinator (Appendix AV: 173) lead the group through district licensed software titles, public domain programs and shareware. The district coordinator set up a workstation to preview all of the programs. Two other workstations were provided to duplicate licensed software and print corresponding disk labels. A short review of the computer applications presented in prior sessions prepared participants to achieve a passing score on the
poststudy test.

Session nine (Appendix AW:174-175) started with the poststudy test (Appendix J:101-103) on computer applications. The test questions were reviewed by the group. A short discussion on the concepts of random access memory (RAM) and read only memory (ROM) produce a clearer understanding. A review of material related to CAI reading skills assessments was presented to prepare participants to demonstrate a passing score on the next poststudy test.

The tenth staff meeting (Appendix AX:176-177) started with a poststudy test (Appendix K:104) on CAI reading skills assessments. A short discussion on the acronym IC which stood for interpretive comprehension and not inferential comprehension had confused one of the members. The session ended with a review of CAI reading skills interventions.

The eleventh session (Appendix AY:178-179) started with a poststudy test (Appendix L:105) on CAI reading skills intervention. A short discussion was held on the topic of report generator menu choices for displaying student records on the screen as an alternative to printing a hard copy report. The
session ended with a reminder of next week's session
with a brainstorming activity and a questionnaire on
the staff training.

The twelfth staff meeting (Appendix AZ:180-182)
started with a brainstorming session to create five
alternative curriculum strategies (Appendix M:106-110)
utilizing CMI assessments and CAI interventions and support activities. Materials used were a listing of
onsite software titles, a Parnes Problem Solving Model
(Horn, 1992:15) worksheet, and copies of CCC (TM) CMI
mathematics and reading skills assessment reports.

The session ended with a staff training evaluation
questionnaire (Appendix AZ:182). The five-point
Likert Scale was utilized to solicit perceptions from
the participants. To determine the staff training's
overall effectiveness, a questionnaire was used to
cover the topics of objectives, materials, content,
hands on activities, presenter's expertise, training
schedule, presentation methods, and media. Short
answer questions asked participants to choose the best
component area, changes that can be made for future
staff training, and what components could be placed
into classroom activities.
CHAPTER IV

Results

At the target school, the duration of incarceration of the primary target population was in the 15 to 21 day range. The primary target population was the students. The secondary target population was the school program's staff. Both target populations were measured for 12 weeks. For the primary target population the 12 weeks were divided into four separate studies of three weeks duration. The primary target population was comprised of 43 students. The secondary target population consisted of one administrative dean and three teachers.

The primary target group had access to CAI software programs and support reading materials. The group utilized intervention software programs, computer generated worksheets, and short-term non-CAI activities that improved reading skills which were measured by the CCC (TM) pre and posttest.

The teachers met for inservice training. Staff training focused on computer hardware and software
applications, CAI reading skills assessments, and CAI and non-CAI intervention activities. The group went for a visit to the district's media services and met with the technology coordinator, previewed software, and duplicated licensed programs.

A pre and posttest CCC (TM) Release 14.0 software program was used to measure the success of the practicum. The pre and posttest lasted for 100 minutes. The test measured the primary target population's reading skills. The test structure contained the following formats: multiple choice, yes or no, true or false, and fill-in-the-blank. The correctness of the answers determined the IPM movement of a .25 grade level every 10 minutes. The software program graded the test immediately. The posttest resumed at the achieved pretest level. A comparison of the six major categories' means documented the gain in reading skills (Appendix H:97-98).

After utilization of CAI and non-CAI intervention activities over four 3-week blocks, it was anticipated that 80 percent of the primary target group's achieved improvement would increase by 10 percent (one month) or more in reading skills.
The high turnover rate left the majority of the primary target group unable to complete 100 minutes of the posttest. CMI reports were used to compare gains (Appendix BA:183-184) with posttest time. The mean gain of .01 for every ten minutes was used to determine a projected gain of .10 for 100 minutes. For example, if an individual showed a gain of .05 in 50 minutes of testing, then it was projected that at that rate of gain a .10 would be achieved in 100 minutes of posttesting.

The posttest results documented that 76.7 percent of the group achieved the 10 percent (one month) or more increase. Most of the primary target group, 88.4 percent, demonstrated gains in reading skills. The overall group had individuals whose test results showed no gain and others who had as much as a 17 percent (more than one and one-half months) gain. A favorable aggregate mean of the study's group performance was 9.1 percent (nearly one month). This was considered a significant outcome and reflected an effective utilization of the solution strategies.

The pre and poststudy reading attitudinal surveys (Appendix I:99) were used to measure the primary
target population's positive perceptions toward the activity of reading. The survey had 10 statements. The measure of the reading attitudinal survey used the primary target population's responses on the five-point Likert Scale. The scale was numbered from 1 to 5. The number 1 represented "strongly disagree," number 2 stood for "disagree," number 3 suggested "undecided," number 4 indicated "agree," and number 5 represented "strongly agree." The prestudy mean of the responses was used to calculate a 15 percent increase and was compared to the individuals' poststudy's surveys. It was anticipated after implementation that 80 percent of the primary target group would improve their outlook toward reading. The affective gain results (Appendix I:100) indicated that 56.8 percent of the group measured a 15 percent increase. Overall, 70.5 percent of the population indicated a positive gain on the survey.

The poststudy hardware and software content test (Appendix J:101-103) was used to measure the secondary target population's knowledge and understanding of onsite CAI resources. The function of the test was to reinforce their working knowledge of computers.
The poststudy software and hardware test contained material reviewed in the inservice training. The test consisted of 30 questions and was structured as 10 true or false, 10 fill-in-the-blank questions, 10 multiple choice. The test gave the secondary target population a common computer applications background. The successful achievement of the anticipated goal was represented by 100 percent of the secondary group scoring 80 percent or more on the poststudy test.

The secondary target population's CAI assessment poststudy test (Appendix K:104) covered information pertaining to onsite CCC (TM) generated reports. The function was to help determine the staff's knowledge and understanding of CAI assessments. The onsite CMI reports contained six category concepts representing 46 reading skills. The test consisted of 10 questions and were of the fill-in-the-blank, multiple choice, and true or false variety. All participants achieved scores of 80 percent or more to satisfy the objective.

The poststudy secondary target population's CAI intervention test (Appendix L:105) covered the use of onsite CAI assessment reports and tutorial reading skills software. The format of the CAI programs in
the tutorial lessons was the learning objectives, the lessons' summaries, and the mastery skills tests. The function of the CAI intervention test reinforced knowledge of the onsite reading skills tutorial software being utilized in the classroom. The test consisted of 10 true or false questions. All participants achieved scores of 80 percent or more on the poststudy test to satisfy the objective.

The critical thinking activity (Appendix M:106-110) assisted the secondary target population in evaluating the onsite computer applications. The critical thinking activity was a small group collaboration. The activity's function directed the secondary target population in a brainstorming session to help them choose resources to improve students' performances. The critical thinking activity produced a list of five alternative teaching strategies in the curriculum of life survival and work related skills. The critical thinking activity utilized CMI assessments to plan CAI interventions. It enabled the secondary target group to synthesize new potential utilizations and applications of onsite resources. The timing of this session encapsulated all of the
knowledge and curriculum events that were presented and utilized in the 12-week practicum.

In conclusion, the first objective, which was 80 percent of the group to increase by 10 percent their reading skills, was too high. The posttest documented that 75 percent of those who had tested for over 60 minutes had a 10 percent or more gain in reading skills. If the study was repeated, then a new goal of 75 percent of the population gaining 10 percent would be expected.

The second goal, which was 80 percent of the group to increase by 15 percent their outlook toward reading, was too high for a short-term juvenile delinquent program. It was noted from the attendance records that 15 percent of the population had been arrested twice during the 60-day study. This indicated that low reading skills, low self-esteem, and recidivism had a close relationship. If the study was repeated, then a goal of 70 percent of the population to increase by 5 percent their outlook toward reading would be anticipated.
CHAPTER V

Recommendations

The CCC (TM) ILS system was an excellent tool to certify the integrity of the project. The CCC (TM) ILS was tamper proof because students and teachers had no way of interjecting false information or performance into the study's CMI reports. Thus, pre and posttest scores were accurate and immediate. The drawbacks to the ILS were the power surges that disrupted pre and posttesting and the generation of worksheets and CMI reports. Teachers and students felt frustrated when experiencing a shutdown while working on the ILS.

Using the results of the pretest, the ILS generated useful low strand worksheets for each individual. The worksheets were supplied with answer keys so that students could self-score their work. The self-scoring provided immediate feedback for students. A teacher was there to clarify students' questions on missed skills.
The BLS STAT (TM) tutorial software was an outstanding delivery presentation of reading skills curriculum. The fourth and sixth grade reading level skills mixed with seven through adult interest material caused a minor amount of the complaints in the classroom. In other words, the material was easy to defend because of the high interest level. The rewards were observing students interacting with the lessons and hearing shouts of excitement like, "Hey, I got that one right!"

One drawback was that students needed constant monitoring to operate the software. Another was that students would not log on correctly and would not start with the lesson. The logon required a date and full name and CMI reports revealed students did not follow directions. Additionally students went into the test thinking they would not encounter any difficulty, but they did. In frustration they tried routinely to go to the test, go through the questions, write the answers on paper, and then go through the test again with the rest of the class and proudly announce a high score for the test.
With the BLS STAT (TM), the generating of CMI reports was a tedious process of individually transferring tutorial disk files to the report generator disk and then printing the reports. Each disk, after transferring, had to be erased to create new student files on the tutorial disk. The report generator disk holds the student files for each tutorial disk. The software does not permit the erasure of files on the report generator, however the transfer of the tutorial disk files replaced the oldest student files. The file replacement was not effective because CMI printouts repeated information causing a waste of teacher's time and paper. The printing of CMI reports began as a daily task and ended as a weekly one which alleviated wasted time and paper.

Eight of 26 tutorial disks purchased were damaged from student use. BLS, Inc. (TM) replaced the disks when they were returned by mail. The damage was originally thought to be caused by static electricity; but upon talking to a company representative, it was explained that students who continuously pressed the return key did not give the 5.25 inch disk sufficient
time to spin in the drive and record scores in the individual student's files.

The video spelling and dictation had mixed reviews with teachers and students. Since the video presenters were HRS caregivers and not teachers, the pace of the spelling and dictation was often too fast, making it necessary for teachers to stop and start the tape frequently. Students complained that they could not understand the pronunciation of some of the words. Students liked seeing the HRS staff on television and appreciated the opportunity to self-score their papers. Teachers could supervise students' behavior by keeping their eyes on the students instead of reading the spelling words and sentences from a paper.

Unison reading with the teacher served as a self-check for students. The teacher could immediately help students with sight vocabulary and explain contextual meanings of words and phrases as the three pages were being read. The disadvantages were the slow pace of one-on-one instruction and the reluctance of some students to read because of their low self-esteem and peer pressure.
The Letter Read Write exercise was the least popular with students because of non-isolation within the class. Some students felt embarrassed or felt peer pressure not to participate. Students who took advantage of the experience appreciated the help of the teacher. Students were able to improve their reading and letter writing skills and sent letters to their family, friends, and to the juvenile judge.

The weekly student contracts gave students a goal and the opportunity to express commitment to try their best to improve their reading skills. Students were surprised to see the four classes' performances recorded on the student performance report as honor roll goals were discussed with a teacher. Students were anxious to have their names placed on the honor roll and to be named Student of the Week. The second student named Student of the Week wanted to take home the banner that was on the writer's classroom wall. It was gladly given and two banners were printed weekly; one banner was displayed on the wall and the other taken home by the Student of the Week.

The reading survey did indicate an affective increase in the appreciation of reading as students
completed the program. Some students responded to the survey angrily, because they were upset about being placed at the detention center. Students who worked well within the reading skills program expressed high praise and showed gains in self-confidence.

The reading program showed positive results because of an equal balance of reading and writing with and without computer applications. Students were able to improve reading skills while avoiding negative feedback or unwanted labels placed upon them which often occurs in the traditional classroom. Based on the positive outcomes of the improvement of reading skills, a strategy was developed to maintain the program continuity.

The staff gained new understanding of onsite computer applications. Two classrooms were able to integrate Apple IIe (TM) computers for teacher and student use. Duplicating district licensed software was a bonus to staff by expanding new titles available for classroom instruction. Teachers were given hands-on activities to assemble computers internally with slot cards and externally with cables and peripheral devices. Members of the staff became more aware of
the ILS CMI reports and available worksheets. Teachers became familiar with and used the CAI BLS STAT (TM) tutorial disks to help students improve their reading skills. The staff enjoyed the brainstorming activity by synthesizing classroom strategies with the combination CAI software and support activities. An evaluation of the presenter and the staff training by the participants indicated a greater awareness of computer applications as an integral part of the juvenile delinquent curriculum.
Reference List


Appendix A

The Introduction Letter, The School Program Survey on Students' Reading Assessments and Interventions with a Focus on Computer Applications, and Nova University's Software Evaluation Form

Date: August 4, 1993

To: The School Program Onsite Dean or Head Teacher
   Any Regional Juvenile Detention Center
   Street Address
   City, Florida 3xxxx

From: Alan Vigilante

Detention Center School Program,

I am currently completing my graduate studies at Nova University, Fort Lauderdale, Florida. My field of study is Computer Applications in Education. I am a Dropout Prevention Teacher at the XXXXXXXXXX County facility. My practicum proposal is focused on the reading levels of juvenile detainees and the software applications used to improve reading. This survey is being sent to all twenty regional juvenile detention centers in Florida. The information obtained will give a statewide view of the reading levels of juvenile delinquents and onsite computer technology and software applications used in classroom activities. Please take the time to respond to this survey as your cooperation is greatly appreciated. Feel free to contact me if you have any questions. Any additional comments can be written on the back of the survey or you may telecommunicate through the Florida Information Resource Network (FIRN) to account VIGILAA.

Thanks for your help,

Alan Vigilante
The School Program Survey on Students' Reading
Assessments and Interventions with a
Focus on Computer Applications

The average school program days that the average detainee is present:
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Has the school program discovered that the average student from each
present grade level is reading below that grade level? YES NO

For each grade level indicate the average reading level of a detainee:
Grade 6 ________ Grade 7 ________ Grade 8 ________ Grade 9 ________
Grade 10 ________ Grade 11 ________ Grade 12 ________

Indicate the reading assessment areas tested with a circle.
Interpretive Comprehension Literal Comprehension
Word Meaning Word Analysis Reference Skills

(CCC (TM) Release 14.0, 1992)

Indicate the method(s) used to assess student reading by listing theTITLE and PUBLISHER next to the applicable method.

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Indicate the computer application(s) used to assess student reading by
listing the TITLE, PUBLISHER, and the number of WORK STATIONS.

<table>
<thead>
<tr>
<th>COMPUTER HARDWARE</th>
<th>ASSESSMENT SOFTWARE TITLE</th>
<th>PUBLISHER</th>
<th>WORK STATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online academic service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District-wide network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School-site network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onsite file server network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stand-alone personal computer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The number of classrooms with computers: 

The number of classrooms without a computer: 

How many hours of computer hardware training do teachers receive in a school year? 

How many hours of reading assessment software training do teachers receive in a school year? 

How many hours of reading improvement software training do teachers receive in a school year? 

Does classroom reading intervention activities include: Circle one/both 

- General group lessons 
- Individualized remediation 

Indicate which type of reading skills management system is used to keep records of students' deficiencies and remediated skills by listing the TITLE and PUBLISHER next to the applicable method(s).

<table>
<thead>
<tr>
<th>MANAGEMENT SYSTEM</th>
<th>TITLE</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual, pencil/paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicate the materials used to improve reading skills by listing the TITLE and PUBLISHER next to the applicable material.

<table>
<thead>
<tr>
<th>CLASSROOM MATERIALS</th>
<th>TITLE</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed text/workbooks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio tapes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video tapes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser video disc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD-ROM computer disc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, not software</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Indicate the computer application(s) used to improve student reading by listing the TITLE, PUBLISHER, and the number of WORK STATIONS.

<table>
<thead>
<tr>
<th>COMPUTER HARDWARE</th>
<th>IMPROVING SOFTWARE TITLE</th>
<th>PUBLISHER</th>
<th>WORK STATIONS</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>District-wide network</td>
<td></td>
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</tr>
<tr>
<td>Stand-alone personal computer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How many minutes a day does a student utilize reading software?

Monday _____ Tuesday _____ Wednesday _____ Thursday _____ Friday _____

Indicate the skills addressed in the school program with a circle.

<table>
<thead>
<tr>
<th>Wording Meaning</th>
<th>Word Analysis</th>
<th>Reference Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wording Meaning</td>
<td>Interpretive Comprehension</td>
<td>Literal Comprehension</td>
</tr>
</tbody>
</table>

(DDC (TM) Release 14.0, 1992)

With the most positive method to improve reading skills, give in percent, to your best estimate, the gain results after one month in the school program.

Up to one year _____%  9 months - 1 year _____%  6 months - 9 months _____%  3 months - 6 months _____%  2 months - 3 months _____%  1 month - 2 months _____%  Less than 1 month _____%

Complete the Nova University Software Evaluation Form on the software program that your school program uses for improving reading skills.

Please place in the envelope provided:

1) The School Program Survey on Students' Reading Assessment and Interventions with a Focus on Computer Applications
2) The Nova University Software Evaluation Form for improving reading
3) Please place in the mail by August 12, 1993 or as soon as you can.
Practicum Software Evaluation Form
Nova University

AUTHOR: ____________________________

TITLE: ____________________________

CHECK ALL THAT APPLY

TYPE: __ Academic Game  __ Drill and Practice
       __ Administrative  __ Simulation
       __ Test/Diagnostic  __ Tutorial
       __ Problem Solving  __ Other

LEVEL: ___ Preschool  ___ K-3  ___ 4-6  ___ 6-8  ___ 9-12  ___ Adult

PURPOSE: ___ Remediation  ___ Developmental  ___ Enrichment

HARDWARE: Computer: __________ K Ram required: ______ Color: Y  N

- Number of Drives: ______ Printer: Y  N  Other: ______

CONTENT
1. Program has educational value  Y  N  NA
2. Grammar accurate and free of syntax errors  Y  N  NA
3. Stereotype-free (race, ethnic, sex, etc.) Y  N  NA
4. Content adaptable to varied instructional strategies Y  N  NA

INSTRUCTIONAL QUALITY
5. Purpose of the program well defined  Y  N  NA
6. Defined purpose achieved  Y  N  NA
7. Presentation of content clear and logical  Y  N  NA
8. Level of difficulty appropriate for target audience Y  N  NA
9. Sequence organized for selected developmental steps Y  N  NA
10. Graphics, color, sound appropriate for instruction Y  N  NA
11. Student controls rate and sequence of presentation Y  N  NA
12. Program self-paced and controls the sequence Y  N  NA
13. Entry level prerequisites specified Y  N  NA
14. Program user-friendly, easy-to-read, understand Y  N  NA

TECHNICAL QUALITY
15. Instructional text formatted/sized for easy reading Y  N  NA
16. Students easily operate program independently Y  N  NA
17. Relevant computer capabilities used Y  N  NA
18. Program reliable and student-proof Y  N  NA
19. Adequate error trapping Y  N  NA
20. Easy escape from program provided Y  N  NA
21. Record keeping/printouts of student progress Y  N  NA

DOCUMENTATION
22. Manuals available and user-friendly Y  N  NA
23. Clear operating instructions and trouble shooting Y  N  NA
24. Constant reference to documentation unnecessary Y  N  NA
25. Table of Contents, Index, Glossary of Terms provided Y  N  NA

7/92 (Horn, 1992:103)
Appendix BA

Posttest Duration and Gains

<table>
<thead>
<tr>
<th>Student Number</th>
<th>Posttest Time</th>
<th>Gain</th>
<th>Projected Gain</th>
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