North Carolina Student Learning Conditions Survey (SLCS)

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Governor Perdue’s North Carolina Student Learning Conditions (SLCS): Survey Validation Study – Phase II Report

Available from:

http://www.fi.ncsu.edu/slcs
The SLCS Planning Team defined the purpose of the survey: **To determine the extent to which NC schools provide a safe, caring, engaging, 21st century learning environment for students**

This purpose is consistent with the new professional standards for teachers and administrators.
SLCS Planning Team

- Angela Quick, Rebecca Garland (NCDPI)
- Bill McNeal (NCASA)
- Carolyn McKinney (NC Professional Teaching Standards Commission)
- Ed Dunlap (NCSBA)
- Eric Hirsh (New Teacher Center)
- Angela Farthing, Sheri Strickland (NCAE)
- Bryan Setzer (NCVPS)
- Myra Best, Dawn Shepard Pope (NC Office of the Governor)
- Debra Horton (NC PTA)
SLCS Pilot Survey Development Process

<table>
<thead>
<tr>
<th>Pilot</th>
<th>Schools</th>
<th>Districts</th>
<th>Respondents</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>8</td>
<td>4</td>
<td>4,776</td>
<td>MS, HS</td>
</tr>
<tr>
<td>Phase II</td>
<td>89</td>
<td>11</td>
<td>14,977</td>
<td>7th, 9th, 11th</td>
</tr>
<tr>
<td>TOTAL</td>
<td>97</td>
<td>15</td>
<td>19,753</td>
<td></td>
</tr>
</tbody>
</table>

- Construct Literature Review
- Item Development
- Focus Groups
- Validity and Reliability Analyses
- Item Frequencies
- Correlations with TWC
- School and District-Level Reports
Participants – Phase II Pilot

14,977 completed surveys (63% response rate)

<table>
<thead>
<tr>
<th>Characteristics items and choices</th>
<th>Sample Frequency</th>
<th>Sample Percent</th>
<th>Percent NC 7th, 9th, 11th graders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response Method</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td>4,327</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Scantron</td>
<td>10,650</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td><strong>Grade level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7th grade</td>
<td>6,168</td>
<td>41%</td>
<td>33%</td>
</tr>
<tr>
<td>9th grade</td>
<td>4,648</td>
<td>31%</td>
<td>38%</td>
</tr>
<tr>
<td>11th grade</td>
<td>3,384</td>
<td>23%</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>301</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>476</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>407</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>603</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>2,402</td>
<td>16%</td>
<td>32%</td>
</tr>
<tr>
<td>Hawaiian/Other Pacific Islander</td>
<td>153</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1,165</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>728</td>
<td>5%</td>
<td>*</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>8,660</td>
<td>58%</td>
<td>55%</td>
</tr>
<tr>
<td>Other</td>
<td>499</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>361</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>
Results

• There are 31 items in the final version of the SLCS (see Appendix B) that contribute to five factors.

<table>
<thead>
<tr>
<th>Original SLCS Pilot Constructs</th>
<th>Phase II Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>21st Century Learning</td>
<td>21st Century Skills ($\alpha = .75$)</td>
</tr>
<tr>
<td>Academic Engagement</td>
<td>Academic Engagement ($\alpha = .83$)</td>
</tr>
<tr>
<td>Social Engagement</td>
<td>Social Engagement ($\alpha = .78$)</td>
</tr>
<tr>
<td>Caring Environment</td>
<td>Caring and Safe Environment ($\alpha = .91$)</td>
</tr>
<tr>
<td>Safe Environment</td>
<td></td>
</tr>
<tr>
<td>Use of Technology for Learning</td>
<td>Use of Technology for Learning ($\alpha = .81$)</td>
</tr>
</tbody>
</table>

• These analyses confirm the structural soundness of the items and constructs included in the SLCS.
Results

Theme-Level Analysis

• A number of significant predictors were identified, although only a few of those predictors had effect sizes of consequence (see Appendix C).
• Academic Engagement, Social Engagement, 21st Century Skills, and Caring and Safe School Environment.
  • Students who reported better grades tended to be more positive about items in these constructs.
  • Transient students tended to report lower impressions of items in these constructs.
• Use of Technology for Learning
  • Students in 9th and 11th grades tended to indicate more frequent use of technology for learning.
Results

Item-Level Analysis (Appendix D)

• Analysis of students’ responses to individual items revealed little variation among male and female students, students whose home language is English and students whose home language is not English, and students at schools in cities, towns, suburban areas, and rural areas.

• The majority of differences in responses occurred when items were disaggregated by race/ethnicity.
Results

Item-Level Analysis

• A greater percentage of students from schools that met AYP agreed with the statement “Students of all races are treated equally at my school” (80.4%) than students from schools that did not meet AYP (69.1%).

• A greater percentage of students from schools that met AYP indicated that “I use the Internet at school” daily or weekly (73.3%) than students from schools that did not meet AYP (56.9%).

• Among the three largest racial/ethnic groups, fewer African American students agreed that “Adults in my school treat me with respect” (75.2%) than White (82.4%) or Hispanic students (85.1%).

• Hawaiian/Other Pacific Islander students (n=153 or 1% of the study sample) reported the lowest level of agreement of any ethnic group to 23 items comprising the Academic Engagement, Social Engagement, 21st Century Skills, and Caring and Safe School Environment constructs.
Results

TWC-SLCS Analysis: Positive correlations found for results at the school-level

- The strongest relationships were between student and teacher perceptions of various aspects of personal safety at their schools.
- Strong relationships exist between student perceptions of individual attention and teacher perceptions of structures that allow them to provide students with that attention, such as reasonable class sizes and sufficient instructional time.
- Also strong was the consistently positive relationship between perceptions of technology availability for teachers and for students.
- Moderately sized relationships exist between student perceptions of the complexity of their schoolwork and teacher perceptions of certain aspects of the construction of their teaching experiences.
Results

TWC-SLCS Analysis: Other expected positive correlations at the school level were not found

• Consistent lack of association between school-level responses about the degree to which teachers think they are held to high professional standards and the degree to which their students believe that they are being challenged academically.

• No association between student perceptions of teachers’ efforts to answer questions and teacher perceptions of conditions favorable to this type of individual attention.

• However, there is an overall absence of systemic negative patterns.
Results

Focuses on how the SLCS results will be used and what intended and unintended consequences might exist

• The FI evaluation team created SLCS reports containing item- and factor-level statistics for each school and district that participated in Phase II (see Appendix E)
• These reports will assist school and district leaders with interpreting and making inferences based on their data.
Recommendations

Survey Implementation

• Either the online or scantron version of the SLCS can be used, regardless of grade or school type.
• Data can and should be aggregated to the school, district, and state levels
• SLCS should be rolled out in the early spring
• SLCS should be implemented during the same academic year as the TWC
Recommendations

Additional Analysis

- Additional multilevel models should be run with the more ethnically and geographically representative data set.
- Results from the SLCS and TWC should be compared regularly to further compare teacher and student perceptions and expectations.
- Consider linking SLCS responses with student UIDs so that future multilevel models can include objective student achievement measures and demographic data.
Recommendations

Technical Assistance

- Work with pilot schools and districts to develop a guide to using SLCS results to inform school improvement.
- Integrate support for using SLCS and TWC results and build upon what has been learned from TWC.
- Have version 1.0 SLCS support materials available before conducting a statewide survey.
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