<u>**Hewlett Project: Methodology**</u>

Between May 2005 and November 2006, the Riley Institute project team spent more than 3,000 hours meeting with nearly 800 South Carolinians in small groups to gather their opinions on public education. The team met with businessmen and women, teachers of all levels, superintendents, parents, school board members, principals and students from every county and school district in the state - large and small, rural and urban, wealthy and poor.

During each research meeting, four questions were asked: three open-ended discussion questions and one in-depth survey. The first and second questions asked participants to discuss the strengths and weaknesses of South Carolina's public schools. The third question asked participants to share ideas about how they would redesign public schools to address areas in need of improvement. The final question consisted of a 160-question survey, which asked respondents to weigh a list of opportunities, programs and support structures needed in the public schools to help all students succeed.

Using random sampling techniques, the project team invited superintendents, principals, teachers from all grade levels, parents, school board members, business people from both large corporations and small businesses, and students who were still in school or recent graduates to participate in the study. In order to gather lists of potential participants, the project team worked with local Chambers of Commerce, the office of the State School Improvement Council, school district offices, local school boards, and schools themselves. Individuals were invited to attend meetings with others from the same stakeholder group.

<u>**I. Sample Selection Method**</u>

**Stakeholder Group: Superintendents**
A letter was sent to all 86 superintendents, inviting them to attend one of eight stakeholder meetings. The letter introduced the project and requested participation. A follow-up email was sent by Riley Institute staff and follow-up phone calls were conducted by CEPL staff.

**Stakeholder Group: Principals**
All schools and districts were first assigned to one of 15 meeting locations depending on geography and ease of getting to a location. After this step, schools within each meeting location were separated into quartiles based on the percentage of subsidized lunches at the school. For each meeting location, a proportion of schools from within each quartile were then calculated to determine the number of schools from within each quartile that should be

selected for the sample at that location. This proportion from each quartile was equal to the proportion of schools in each quartile relative to the entire sample (e.g. 20 out of 100 schools in the 75-100% quartile = 5 of 25 principals randomly selected from that quartile). For most meetings we invited 25 people in order to secure 8 people. After the proportion had been calculated, a random sample was taken from each quartile, yielding the schools from each quartile that should be included in the 25 schools invited.

The principals of the 25 schools selected from each of the 15 meeting locations were sent letters of invitation. CEPL staff followed up with emails and phone calls, and additional principals were invited to attend if meetings were not full. High, middle, and elementary school principals were combined.

**Stakeholder Group: ECE/Elementary, Middle, and High School Teachers**
All schools were first assigned one of 15 meeting locations, depending on geography. After this step, schools within each meeting location were separated into quartiles based on the percentage of subsidized lunches at the school. For each meeting location, a proportion of schools from each quartile was then calculated to determine the number of schools from within each quartile that should be selected for the sample. This proportion was equal to the proportion of schools in each quartile relative to the entire sample (e.g. 20 out of 100 schools in the 75-100% quartile = 5 of 25 schools randomly selected from that quartile). After this calculation, a random sample was taken from each quartile, yielding the schools from each quartile that should be included in the 25 schools invited. Subsequently, email addresses were gathered and the teachers selected were sent letters of invitation. CEPL staff followed up with emails and phone calls, and additional teachers were invited to attend if meetings were not full.

**Stakeholder Group: Local School Board Members**
All school districts were first assigned to one of eight meeting locations, depending on their geography and ease of getting to a meeting location. A proportion of board members was then randomly selected from within each district, equal to the proportion of board members in that district relative to the entire sample. (e.g. District X has 20 out of 100 total board members in the sample = 5 board members randomly selected from District X.) A total of 25 board members were selected for invitation to each of the meetings. An invitation letter was then sent to all board members selected in the sample. CEPL staff followed up with emails and phone calls, and additional Board members from the list were asked to participate if meetings were not full.

**Stakeholder Group: Business Leaders**
In order to garner potential lists of participants for the business leader sessions, the project team compiled a list of all chambers of commerce across the state and

utilized chamber websites to create comprehensive lists of employers and business men and women across South Carolina. Additionally, CEPL staff utilized lists of large companies by region to further add to the list. Chambers lists and companies were then assigned to one of 16 meeting locations around the state. In some instances and locations, the project team contacted the heads of Chambers of Commerce in order to gather lists of potential participants. Chambers contacted include Orangeburg, Myrtle Beach, Conway, Beaufort, Greenville, Barnwell, Greenwood, Newberry, and Walterboro. Chamber heads provided CEPL staff with a list of names and contact information from which invitations were issued.  After compiling lists of potential participants in each location CEPL staff invited people randomly, ensuring that both large and small companies from all areas of the state were surveyed, as well as men and women. After potential participants were identified, they were sent an invitation email. CEPL staff followed up with emails and phone calls, and additional business leaders from the list were asked to participate if meetings were not full.

**Stakeholder Group: Students**
CEPL staff collaborated with the School Improvement Council (SIC) central office in Columbia to have students recommended for participation in the project. Working with the SIC, CEPL staff created a database of students and assigned each to one of five meeting locations in the state based on geography. Students were then divided into quartiles based on the subsidized lunch percentage at their schools and randomly selected from each quartile.  The number of students selected from each quartile was based on the overall proportions of subsidized lunches across the state. To ensure that 7-8 students were present at each meeting, 25 students were randomly selected to receive an invitation to each meeting.  CEPL staff followed up with emails and phone calls, and additional students from the list were asked to participate if meetings were not full.

**Stakeholder Group: Parents**
CEPL staff collaborated with the School Improvement Council (SIC) central office in Columbia to solicit parent involvement in stakeholder meetings. Working with the SIC, CEPL staff created a database of parents and assigned each to one of 16 meeting locations in the state based on geography.  Parents were then divided into quartiles based on the subsidized lunch percentage at their schools and randomly selected from each quartile.  The number of parents selected from each quartile was based on the overall proportions of subsidized lunches across the state. To ensure that 7-8 parents were present at each meeting, 25 parents were randomly selected to receive an invitation to each meeting. CEPL staff followed up with emails and phone calls, and additional parents from the list were asked to participate if meetings were not full.

## II. Data Analysis Method

Data were collected without the use of a tape recording device. Individuals trained to serve as meeting recorders manually recorded data during each meeting.

After collecting the qualitative and quantitative data through multiple research meetings with various stakeholder groups, the CEPL research team first began the process of "reduction" and "interpretation," where the "researcher takes a voluminous amount of information and reduces it certain patterns, categories, or themes and then interprets the data using some schema" (Creswell, 1994, 154). Coding, "the act of categorizing raw data into groups or giving the data numerical values" was used by the research team to interpret the first three research questions, which were an open-ended discussion format (Kidder, Judd, and Smith, 1986, 511). Please see below for more information about the specific process used for each question and also see below for the section entitled "Data Entry Instructions" to learn more about the data entry process and how steps were taken by the research team to ensure reliability.

### Question 1: Strengths of South Carolina's Public Education System

During the first research question, respondents were asked to share their thoughts on the strengths of South Carolina's public education system. Respondents were not given a list from which to choose and data were collected through an open-ended discussion format. An in-depth coding process was utilized to analyze the data that emerged. Approximately 90 codes were determined throughout the analysis process and, after the data were coded, the identified codes were entered into SPSS. (Codes used are listed at the end of this document.) Percentages were then calculated for each code, thus helping to determine what respondents believe to be the general strengths of the public education system in South Carolina. In addition to these calculations, direct quotations taken from the discussions were entered into a separate excel document so they could be used for the data summaries. (Note that comments were only reported as direct quotes if they were recorded verbatim or written into respondent notes.)

### Question 2: Weaknesses of South Carolina's Public Education System

During the second research question, respondents were asked to share their thoughts on the weaknesses of South Carolina's public education system. Respondents were not given a list from which to choose and data were collected through an open-ended discussion format. An in-depth coding process was utilized to analyze the data that emerged. Approximately 90 codes were determined throughout the analysis process and, after the data were coded, the identified codes were entered into SPSS. (Codes used are listed at the end of this

document.) Percentages were then calculated for each code, thus helping to determine what respondents believe to be the general weaknesses of the public education system in South Carolina. In addition to these calculations, direct quotations taken from the discussions were entered into a separate excel document so they could be used for the data summaries. (Note that comments were only reported as direct quotes if they were recorded verbatim or written into respondent notes.)

**Question 3: Redesigning South Carolina's Public Schools**
During the third open-ended question, respondents were asked to share their thoughts about how they would redesign South Carolina's public schools in order to adequately prepare a larger number of students to graduate, succeed in college or career training, and compete in the global market place. An in-depth coding process was utilized to organize and analyze the data that emerged. (Codes used are listed at the end of this document.) Approximately 30 codes were determined throughout the analysis process and, after the data were coded, the identified codes were analyzed according to their frequency. In addition, in order to capture some detail and richness of the comments made during discussion, quotations were recorded when appropriate. (Note that comments were only reported as direct quotes if they were recorded verbatim or written into respondent notes.)

**Question 4/Survey:**
All respondents were asked to respond to a 150+ item survey, in order to glean data about the components and programs they believed to be necessary to adequately prepare all of South Carolina's students for college or career training.

The categories about which respondents were surveyed were Early Childhood/Elementary School, Middle School, High School, Teacher Training and Development, Leadership, and Resources. Respondents were initially asked to rate items within each category on a scale of 1-6 (1=Essential, 2=Unimportant, 3=Useful, 4=Not Very Important, 5=Unimportant, 6=Not Sure). Then, they were asked to circle the five items within each category that they felt were "most essential."

The survey was developed by a large mixture of individuals involved in and affected by education: teachers, administrators, business people, professors of education, and other experts in the field of education. Care was taken to make the survey as comprehensive as possible; however, in case any item deemed relevant by respondents was excluded, the survey included an "other" item underneath each category where items could be added by the respondent if necessary.

During the analysis process, survey data were entered into SPSS and a frequency analysis was run on each item, using "Essential" and "Important" in cumulative percentages. Please see the document entitled "Data Entry Instructions" to learn more about the data entry and analysis process and how steps were taken by the research team to ensure reliability.

After survey data were entered into SPSS and frequencies on survey items were run, the following documents were then created based on the descriptive statistics that emerged:

- A frequency document for each stakeholder group
- A document for each stakeholder group, analyzing the "most essential" items circled by respondents
- A matrix summarizing items that emerged as 75%+ "essential" and "important" in at least one stakeholder group
- A matrix looking at the "most essential" survey items across all stakeholder groups
- Future: Further analysis with the linking of demographic information such as geographic location, subsidized lunch, etc.

## III. Phase Two: Reconstituted Meetings

In late 2006, the Riley Institute invited all to take part in a second phase of research focusing on key themes that emerged from the research during Phase One and asked participants to delve deeper into possible solutions. Participants reassembled in mixed groups featuring one representative from each stakeholder group – an elementary school teacher, a middle school teacher, a high school teacher, a principal, a superintendent, a parent, a school board member, a student, and a business leader. Over 200 people participated during the two days. Participants in the mixed reconstituted sessions were asked to reflect upon, discuss, and prioritize strategies that emerged most often and with most agreement during the first year of research. They were then asked to devise practical action plans for South Carolina related to the top-rated strategies.

## IV. Papers and Summaries

After data were collected and analyzed, the CEPL project team put together a number of papers designed to effectively share the results of the project. Papers were developed for each level of education—Early Childhood/Elementary, Middle Years, and High School Years—and papers addressing the nine key action areas that emerged from the research also were written. These papers are as follows: Developing Strong Leaders for South Carolina's Schools; Promoting Support for Public Education in South Carolina; Identifying and Assisting At-

Risk Students in South Carolina; Creating and Maintaining an Infrastructure to Support Educational Excellence in South Carolina; Preparing South Carolina's Students for Success in a Global Economy; Expanding Learning Opportunities for South Carolina's Students; Rejecting a One-Size-Fits-All Approach for South Carolina's Schools; Fostering Excellent Teaching in South Carolina's Classrooms; Encouraging and Supporting Family Collaboration and Involvement in South Carolina's Public Schools.

**Hewlett Project: Data Entry and Analysis Instructions**

Q1 and Q2 Entry and Analysis:
1) After each research meeting, compare the recorder grid to respondents' written notes, making sure all of the items listed in written notes were included on the recorder grid.
2) Once all data are reflected on recorder grid, begin coding process with pre-determined codes.
3) Two individuals will code data, one following the other. If discrepancies exist on items between the first coder and follow-up coder, another CEPL staff member will be asked to code the items in question in order to break the tie.
4) After coding is complete, codes will be entered into SPSS and a frequency analysis run for each stakeholder group.
5) After coding is complete, relevant quotations should be added to the Q1 and Q2 quotation excel databases. Quotations should only be recorded into this document if they were written in respondent notes or have quotation marks around them in recorder notes.

Q3 Entry and Analysis
1) After each research meeting, compare the recorder grid to respondents' written notes, making sure all of the items listed in written notes were included on the recorder grid.
2) Once all data are reflected on recorder grid, begin coding process with pre-determined codes. Enter codes into Excel database.
3) After coding is complete, CEPL staff members should analyze the codes to determine themes that emerged from each stakeholder group
4) After this point, themes that emerged from stakeholder groups should be looked at and compared across groups, in order that overall themes can be identified
5) After coding is complete, relevant quotations should be added to the Q3 quotation excel databases. Quotations should only be recorded into this document if they were written in respondent notes or have quotation marks around them in recorder notes.

Q4/Survey Entry and Analysis:
1) Data (numerically coded qualitative items from above and numerical survey responses) will be entered into the SPSS database by a CEPL staff member as soon as possible following each meeting. This individual will enter all data for a given meeting.

2) Entries for two surveys from each meeting will be reviewed by another CEPL staff member for data entry accuracy.
3) Items #10, 35, 45, and 75 (these numbers need to be determined) on all surveys will also be reviewed for accuracy by this CEPL staff member.
4) If any mistakes are found in data entry, all surveys from that particular meeting will be reviewed by this CEPL staff member for accuracy.

**Q1 and Q2 Codes**

Education Climate
1. Climate/Tone/Culture/Commitment    (general improvement, willingness to admit failures, need to change, archaic system)
2. Public support for education/Statewide commitment to education (media)
3. Addressing poverty of incoming student population (social services)
4. Diversity of student population  (open to all; public education is free – 4 and 5)
5. Diversity of opportunities for students within public system (open to all students, teaching to the whole child)
6. Other Education Climate (children want to learn, dealing with ills of society, influx of people, teaching not seen as profession, lack of respect for teachers)

Family/Community Outreach
7. Partnerships with community and business community
8. Partnerships with higher education
9. Parental/family involvement/accountability
10. Parental/family literacy (adult education)
11. Opportunities for family involvement (communication with home)
12. PTA/School Improvement Councils
13. Other Family/Community Outreach (parents too involved)

Within the Schools
14. Curriculum content - content – arts ed., math/science core, foreign language, character, values etc.  (not enough time in a day)
15. Quality of Early Childhood Education
16. Vocational/Tech-prep/School-to-Career programs

17. Career clustering early on
18. Graduation requirements and end-of-course testing
19. Routes to graduation
20. Opportunities for remediation (after school, summer)
21. Availability of mentoring programs
22. Literacy
23. Small learning communities, local schools
24. Charter schools
25. Schools with a focus (Magnet, IB, Gifted)
26. Counseling/guidance services
27. Extracurricular activities
28. Special education (28, 29, 30 for differentiated learning)
29. Assistance for at-risk students (not addressing achievement gap)

30. Programs for gifted students
31. Social promotion (lack of mastery grouping)
32. Discipline
33. Dropout rates
34. Class size
35. Other Within the Schools (improvement in scores SAT, PACT; uniform grading, attendance, safe schools, nutrition/health, speech pathology)

Teaching and Teacher Training and Development
36. Teacher recruitment/retention
37. Teacher quality
38. Teacher incentives
39. Teacher training programs
40. Teacher certification requirements
41. Dedicated and committed teachers (willingness to change curriculum)
42. Programs for developing future administrators
43. Teacher accountability
44. Use of research-based best practices in education
45. Professional development for educators
46. Instructional assistance for teachers
47. Emphasis on testing
48. Teaching to the test  (lack of creativity in the classroom)
49. Tools for teachers to better assess individual student progress (MAPS test)
50. Too much teacher responsibility, not enough time in the day (planning time, paperwork)

Leadership and Funding
51. Statewide curriculum standards (high/low curriculum expectations for students)
52. Funding methodology and equity (tax base)
53. Level of funding
54. Unfunded mandates
55. Use of funds at school/district level (local use of funds, local control)
56. School choice
57. Vouchers and tax credits
58. School administration (quality, dedication)
59. District leadership
60. School boards (quality, school board training)
61. Politics' role in education
62. State Department of Education
63. State Legislature/General Assembly
64. Governor
65. Federal support (Title 1 money)

66. Firing low quality teachers
67. State's response to No Child Left Behind, School ratings, proficiency
68. PACT, Data from PACT
69. Accountability (high expectations for all)
70. Report cards (AYP)
71. Other Leadership and Funding (state not using funds effectively, hiring process, lack of superintendent training, need better personnel management, attention to growth, need to change)

Resources, Technology, and Infrastructure
72. Year round school
73. Class scheduling/instructional calendar
74. Length of school day
75. Compensation for teachers
76. Compensation for administrators
77. Availability of textbooks
78. Availability of labs, equipment
79. Facilities, infrastructure
80. Transportation system
81. Technology availability
82. Integration of technology into the curriculum
83. Technology training for teachers
84. Other Resources, Technology, and Infrastructure        (Lottery, scholarships, LIFE, grants, libraries)

Other
85. Other not listed above (economy, pockets of excellence, litigation)
86. Statewide unified vision
87. Alternative programs, schools, paths for students who do not succeed in the regular classroom
88. Changing programs and/or methods prematurely
89. Teacher Other (teacher advocacy, mentoring, evaluations, ADEPT, low morale)
90. Ability grouping within grades
91. Assistance for ESOL population
92. Mismanagement of funds, misuse (general)

**Q3 Codes**

1. Administrative Leadership (firing ineffective teachers, teacher accountability)
2. Technology, Classroom Resources (labs)
3. Class Size
4. Community and Higher Ed. Partnerships/Involvement (job shadowing, apprenticeships, internships, career centers, field trips)
5. Culture, Tone, Commitment (addressing poverty generally, public support, education is important, etc)
6. Curriculum & Standards (service learning, arts, socialization/social skills, instruction time, academic rigor)
7. Early Childhood
8. Facilities & Infrastructure (transportation)
9. Funding
10. Governance (local autonomy, school board, politics, NCLB)
11. Parent Involvement/Accountability/Education
12. School Calendar (block scheduling, year round, extended school day)
13. Social Support for Students (guidance, mental health, social services, advisors, mentors)
14. Special Education (special services, speech, screening for disabilities)
15. Support for Underperforming Students (retention programs, remediation, at-risk programs, early identification)
16. Teacher Support and Resources (planning time, aides, specialists, less paperwork, giving teachers a voice)
17. Teacher Compensation, Recruitment, and Training
18. Testing (AYP, report cards)
19. School Size (small learning communities, 9th grade academies, teaming, grade level structure)
20. Vocational/Career Prep, Tech Prep, Clusters (school to work, career classes, career counseling)
21. Transitioning b/w Levels (vertical alignment, looping, articulation, collaboration)
22. Discipline Issues (attendance, drop-outs) & Alternative Schools (for disciplinary purposes only)
23. Individualized Instruction/Classroom Organization (tracking, assessing student strengths, interests, weaknesses, social promotion, mastery grouping, gendered classes, multi-age grouping, one size doesn't fit all, seat-time, leveling)
24. Student Accountability/Expectations/Motivation/Student Miscellaneous (incentives, desire to learn)
25. Literacy
26. After School Programs/Extracurricular/Summer Programs

27. Teaching/Instructional Methods (group work, engaged learning, hands-on, research based, creative thinking, project-driven experiences
28. Miscellaneous (school uniforms, nutrition, non-specific alternative schools/programs)