



Neighborhood Charter School
ENVIRONMENTAL SCAN REPORT

March 13, 2009

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STRATEGIC PLANNING BACKGROUND AND PURPOSE

The mission of the Neighborhood Charter School (NCS) is to provide a learning environment for all students that demands high educational standards and high levels of parent/guardian involvement and responsibility.

In fulfilling its mission, the Neighborhood Charter School's board of directors engaged Matthews Consulting Group, LLC to manage and facilitate a strategic planning initiative, which formally began in December 2008 and is scheduled for conclusion in May 2009. The strategic planning initiative includes several phases: (1) project planning and startup; (2) execution of an environmental scan; (3) execution of a strategic planning retreat to prioritize goals and begin strategy formulation; (4) development of strategic initiatives and project milestones; and (5) ongoing project management.

A major milestone in the strategic planning process is the execution of an environmental scan; doing so engages a broad spectrum of community constituents to better understand areas needing improvement. This information will help develop system priorities for NCS. The following Environmental Scan Report summarizes the findings from the information-gathering activities which occurred from December 2008 through March 2009. This Environmental Scan Report will provide the overall context for the Strategic Planning Retreat scheduled for March 27-28, 2009. Direction, oversight and development of the environmental scan was a collaborative effort among members of the Strategic Planning Steering Committee, the Board of Trustees and Matthews Consulting Group.

Objective

The overall objective of the environmental scan is to provide the leadership of the Neighborhood Charter School with an understanding of:

- (1) the school's strengths, weaknesses, opportunities and threats (SWOT Analysis)
- (2) relevant and current economic, social, environmental and educational research, trends and best practices
- (3) key constituents' views about a future vision for the Neighborhood Charter School

DEMOGRAPHIC PROFILE OF ENVIRONMENTAL SCAN PARTICIPANTS

To achieve the research objectives, Matthews Consulting Group, LLC gathered feedback from both internal and external constituents of NCS, employing a variety of quantitative and qualitative information-gathering techniques, including one-on-one interviews, focus group sessions, and an electronic survey.

For the purposes of this study, internal constituents are defined as members of the board of directors, faculty, staff, parents, and students of the Neighborhood Charter School. External constituents are defined primarily as representatives from constituent groups such as the Atlanta Public School administration, community representatives and political officials, educational professionals from other schools, funders, and former parents. A summary of the information-gathering activities are described below.

Environmental Scan Participants by Role

Environmental Scan Participants ¹					
Internal Participants	Frequency	Percent	External Participants	Frequency	Percent
Board	13	6.6%	Former Parents	6	24.0%
Faculty/Staff	29	14.6%	APS Administration	2	8.0%
Students	10	5.1%	Funders	2	8.0%
Parents	146	73.7%	Educational Professionals	3	12.0%
			Community Representatives	12	48.0%
Total	198	100.0%	Total	25	100.0%

¹ Refer to Appendix III. Environmental Scan Participant Demographics on page 80 for demographic breakdown of environmental scan participants.

Environmental Scan Participants by Environmental Scan Activity

Participants	Focus Group		Interviews	Survey		Combined
	Frequency	Percent	Frequency	Frequency	Percent	Total
Internal						
Board	13	21.0%				13
Faculty/Staff	11	17.7%	1	17	11.3%	29
Students	10	16.0%				10
Parents	12	19.4%		134	88.7%	146
External						
Former Parents	4	6.5%	2			6
APS Administration	0	0.0%	2			2
Funders	0	0.0%	2			2
Educational Professionals		0.0%	3			3
Community Representatives	12	19.4%				12
Total	62	100.0%	10	151	100.0%	223

NCS CURRENT PROFILE

History

The Neighborhood Charter School is a K-5 public elementary school founded in the Grant Park neighborhood of Atlanta, Georgia by a group of concerned parents, community members, and educators; they sought a public school that would serve the neighborhood and reflect its diversity. After three years of development, the charter was presented in 2000 to the Atlanta Public School System and the doors opened for the 2002-2003 academic year. In 2006, the charter was renewed for a ten-year term. NCS is located in the historic Slaton Elementary School building. Built in 1906, this building is one of the oldest in the Atlanta Public Schools' system. Though thwarted by a catastrophic fire in 2003, NCS recuperated with the help of dedicated community members who helped to ensure that the facility was rebuilt in approximately two years.

Mission Statement

The mission of the Neighborhood Charter School is to provide a learning environment for all students that demands high educational standards and high levels of parent/guardian involvement and responsibility.

The Charter

The NCS effort is centered around four ideas: (1) *Involvement of Parents, Guardians and Family*- NCS recognizes the value of parents/guardians and extended family and works to actively involve them in their child's learning experience; (2) *Community/Diversity* - NCS envisions a dynamic, community-oriented, inclusive school and seeks to honor, celebrate, and embrace diversity for the benefit of all students; (3) *Constructivism* - NCS is organized around a Constructivist philosophy that recognizes that students learn primarily by direct engagement with ideas and materials, rather than through passive transfer of information; (4) *Educational Partnerships* - By working closely with educational partners (NCS has a committed partnership with Zoo Atlanta), NCS offers a focused, consistent, progressive curriculum.

Constructivist Curriculum

Constructivism is a philosophy of learning that focuses on experience-based learning in place of traditional didactic teaching methods such as lecturing and memorization. This model promotes using curricula customized to the students' prior knowledge and calls for a variety of activities that engage students to actively participate. Instructors tailor their teaching strategies to student responses and encourage students to analyze, interpret, and predict information. Standardized grades are not employed; instead, assessment is a part of the learning process and students learn to judge their own progress.

Enrollment and Graduation

In its seventh year of operation, NCS currently enrolls 353 students in kindergarten through fifth grade. On average, there are 15 students in each of the four kindergarten classes and 20 students in each first through fifth grade class, which all have three classes each. Ninety-six percent of the 2007-2008 student body re-enrolled for the 2008-2009 school year. There are 107 fifth grade graduates to date. There is no tuition and no entrance criteria, other than geographic restrictions; students must live within the NCS attendance zone. The primary attendance zone for NCS encompasses the neighborhoods of Grant Park, Ormewood Park, and North Ormewood Park.

Faculty and Staff Profile

NCS employs 19 full-time lead teachers, 20 full-time associate teachers, four full-time related arts teachers, and two full-time special education teachers, for a total full-time faculty headcount of 45. Of the 45 faculty members, 24 are certified. There are eight staff associates in varying professions including administration, finance, media, technology, counseling, and healthcare. With a total faculty and staff of 53, sixty-six percent are Caucasian/white, 30 percent are African American/black, and 4 percent are Hispanic. Females represent 91 percent of the faculty and staff and males represent 9 percent.

Student Profile

Of the 353 students enrolled at NCS, approximately 56 percent are Caucasian/white, 30 percent are African American/black, 11 percent are multiracial, 1 percent are Hispanic, and less than 1 percent (0.2%) are Asian. Twenty percent of the student population is in the free and reduced lunch program. Females represent slightly over 50 percent of the student population; males represent 49 percent.

Performance

Student scores for the 2007-2008 academic year are as follows: students scoring at or above required levels averaged 96 percent in Reading; 92 percent in Language Arts; 71 percent in Mathematics; 73 percent in Science; and 93 percent in Social Studies.

Governing Board Profile

The Governing Board includes sixteen voting members and two ex-officio members from the NCS community. The breakdown is as follows: nine parent/guardian representatives with the presiding PTCA president among them; the immediate past-chair; four faculty/staff associates; two community representatives – one from the Grant Park Neighborhood Association (GPNA) and one from South Atlantans for Neighborhood Development (SAND); and the School Principal and Chief Financial Officer as ex-officio, non-voting members. All members serve staggered two-year terms, with the exception of the principal and the representatives from GPNA and

SAND. Parent/guardian and faculty/staff representatives can serve a maximum of two consecutive terms.

Volunteer Profile

NCS is substantially supported by a strong base of parent and community volunteers. In the 2007-2008 academic year, parents volunteered for a total of 8,050 volunteer hours. Volunteers serve in a variety of capacities at the school, some of which include: members of the Governing Board; school committees such as Diversity Awareness and Initiatives; Building and Grounds; Related Arts; and Parent and Teacher Conference Association committees such as Child Care; Book Fair; Yard Sale; New Family Partners; Sustainability, and many others.

Financial Resources

NCS reported total public support and revenue for 2008 of \$3,999,141. For the 2007-2008 academic year, 89 percent of total funding was derived from the Atlanta Public School system, 4 percent from various contributions, 3 percent from after-school programs, 3 ½ percent from other program income, and less than 1 percent from other sources. Through two successful fundraising projects, NCS has raised \$50,000 through the Giving Tree Annual Campaign and \$43,000 through the Fall Fling since 2007.

Each year, NCS develops a Fact Sheet that provides a capsule view of the school. The Fact Sheet contains information from the current year on key statistics related to: (1) Admissions and Registration; (2) Graduation and Retention; (3) Test Scores; (4) Housing; (5) Faculty; (6) Finance; and (7) Alumnae.

A copy of the current Fact Sheet is located on NCS's web site at <http://www.neighborhoodcharter.com/factsheet.html>

MISSION AND MEASURES OF SUCCESS

Mission

The mission of the Neighborhood Charter School (NCS) is to provide a learning environment for all students that demands high educational standards and high levels of parent/guardian involvement and responsibility.

Environmental scan participants were asked to share their perceptions of the Neighborhood Charter School's mission. A mission statement provides information as to why the organization exists and provides the basis for why people are committed to the organization.

Overwhelmingly, all external constituent groups (representatives from constituent groups such as the Atlanta Public School administration, community representatives and political officials, educational professionals from other schools, funders, and former parents) indicated that the current mission statement is directionally correct. The phrases, "demands high educational standards" and "high levels of parent/guardian involvement and responsibility," seemed to resonate with most respondents. Most of the external constituents interviewed indicated that they felt little or no need to change the wording of the current mission statement.

Conversely, most of the internal constituents (parents, faculty/staff, and board members) stated that the mission fails to describe "bedrock ideas" and that the current statement does not "describe ourselves in a way that is inviting and draws people to us." Specific concerns include:

- In general, the statement is not welcoming and is too broad
- There is nothing unique about the statement (e.g., it's too bland, generic, and/or vague and doesn't speak to our uniqueness or our distinguishing factors)
- It doesn't reflect a constructivist/student-centered approach/project-based approach
- It doesn't address culture and how we encourage individual students to be their best, nor how NCS faculty and staff meet students "where they are"
- The word "demands" isn't welcoming

Key ideas or phrases that individuals would like to see reflected in a revised mission statement include:

- *Fosters, encourages, or promotes* in place of the word "demands"
- Engaging and interactive learning environment
- Recognition of the unique learning styles of all types of students
- Importance of diversity; individuals are accepted for who they are
- How the sense of community and involvement fosters a better learning environment

Based on the above comments, it is apparent that the strategic planning process provides an opportunity to revise the current mission statement, so that some of the key elements that make the Neighborhood Charter School unique are reflected.

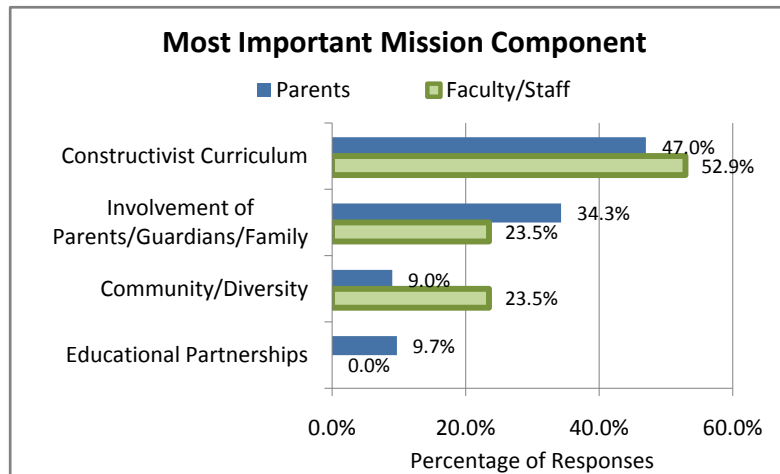
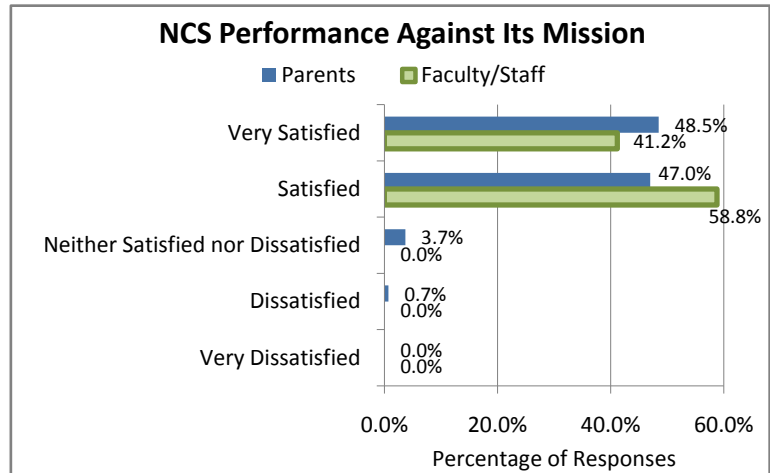
Mission Priorities and Performance

In the environmental scan survey, survey participants were asked to rate their overall satisfaction with NCS’ performance against key elements of its mission. Overwhelmingly, over 95 percent of parents and 100 percent of faculty/staff are satisfied with NCS’ performance against the mission.

Survey participants² were also asked which of the four elements of the current mission statement is most important to them. Not surprisingly, the *Constructivist Curriculum* was rated as the most important component of the mission by both parents (47%) and faculty/staff (52.9%).

Parents rated *Involvement of Parents, Guardians and Family* as the second most important component (34.3%), while faculty/staff rated both *Involvement of Parents, Guardians and Family* and *Community/Diversity* second (both at 23.5%).

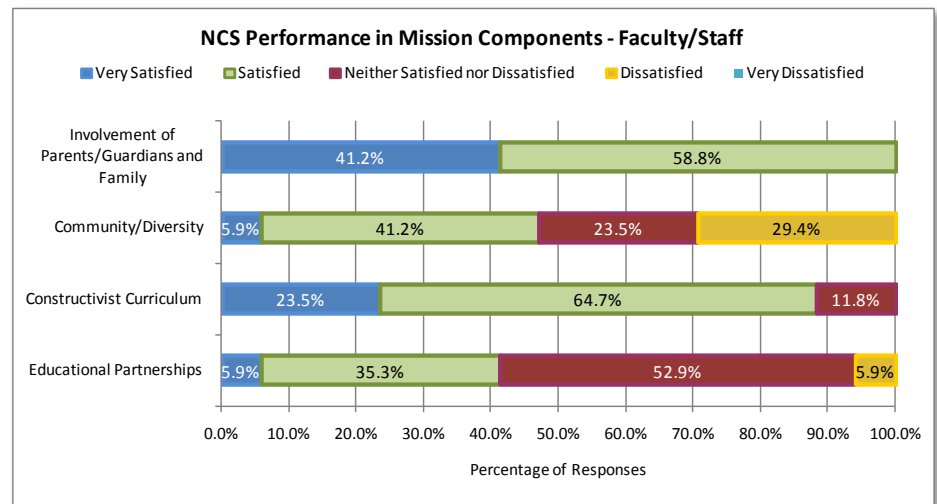
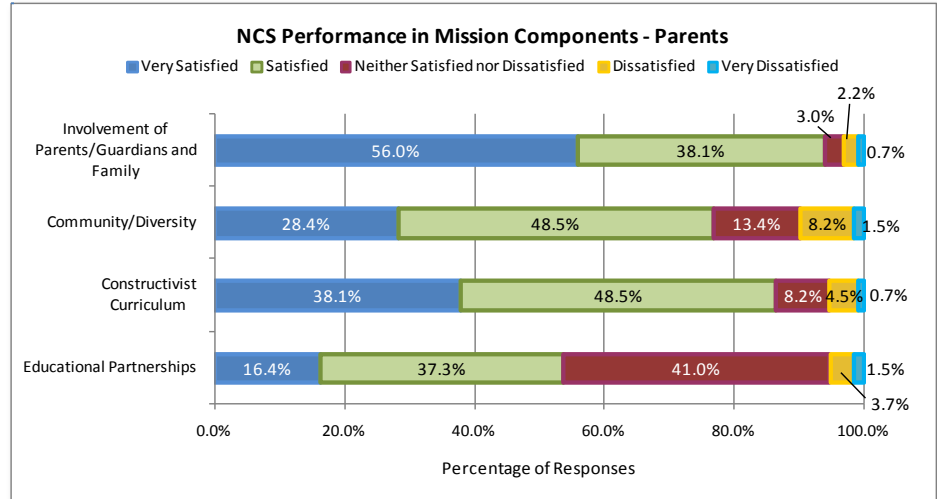
Interestingly, no faculty/staff rated *Educational Partnerships* as the most important element of the mission, but close to 10 percent (9.7%) of the parents rated this element as most important – particularly African Americans. Of the thirteen parents who voted *Educational Partnerships* as the most important element of the curriculum, six were African American (i.e., African Americans comprised 46% of the total number of parents who voted this component as most important).



² Survey demographics and data for all charts are provided in the Appendix.

Survey participants were also asked to rate their satisfaction with NCS’ performance against the four elements of the school’s current approach. Overall, parents and faculty/staff are satisfied with how well NCS is addressing the key elements of its current approach; however, the data suggests that NCS has opportunities for improvement in the area of *Educational Partnerships*. Forty-one percent of the parents who participated in the survey were neither satisfied nor dissatisfied with this element of the school’s approach. This suggests a need for clarity about what is being done in this area and/or a need to improve the current efforts to increase satisfaction.

Interestingly, of the 53.7 percent of the parents who were satisfied with NCS’ performance in the area of *Educational Partnerships*, 77 percent were African American (i.e., 77.3% of the African American parents were either very satisfied or satisfied with NCS’ performance).



Measures of Success

During the environmental scan process, participants were asked to share their perspective on how to measure NCS’ success against its mission. In other words, what indicators of success should be reviewed when evaluating NCS?

Although traditional indicators such as test scores and grades were acknowledged as important, parents and faculty/staff also evaluate performance based on non-traditional indicators that are harder to quantify and evaluate.

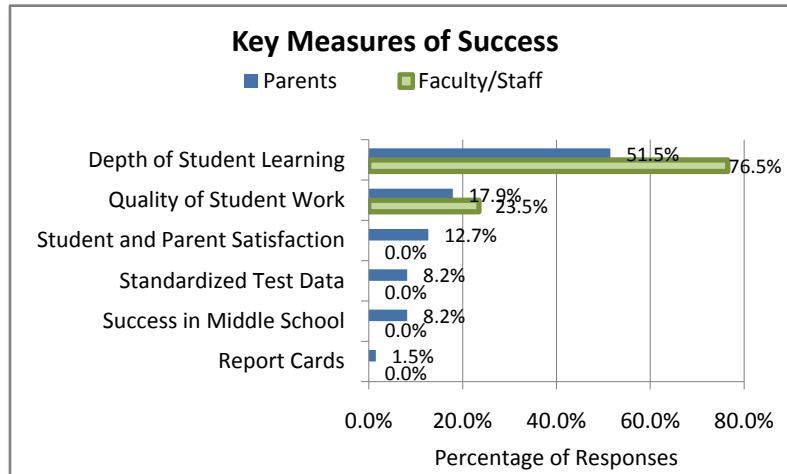
The table here and on the next page provides a snapshot of the most commonly identified success indicators:

Measures of Success Category	Potential Indicators
<p>Constituent Satisfaction (parents, teachers, community, board, students, faculty/staff)</p>	<p><i>Students</i></p> <ul style="list-style-type: none"> • Year-to-year student retention • Student behaviors and attitudes <ul style="list-style-type: none"> ○ Excitement about learning and coming to school/happiness with school ○ Level of curiosity ○ Generous, kind spirit ○ Ethical/responsible behavior ○ Respect for others <p><i>Faculty/Staff:</i></p> <ul style="list-style-type: none"> • Year-to-year faculty retention • Ability to attract best and brightest teachers • Level of professionalism <p><i>Community</i></p> <ul style="list-style-type: none"> • Length of residency of community members • Neighborhood move-in statistics (do families move in because the location is in NCS’ registration zone?) • Economic development indicators (property values) <p><i>APS</i></p> <ul style="list-style-type: none"> • Relationship • Renewal of charter <p><i>Partners</i></p> <ul style="list-style-type: none"> • Retention • Increased support

Measures of Success Category	Potential Indicators
Formal Assessments and Standardized Tests	<ul style="list-style-type: none"> • Stanford-9, complete battery, (Grades 3, 4, 5) • Criterion Referenced Competency Tests (CRCT) • Georgia Writing Test, (Grades 3 and 5) • Report cards
Quality of Student Work/Depth of Student Learning)	<ul style="list-style-type: none"> • Performance after they leave NCS • Confidence (ability to ask questions, take risks, independent thinking) • Ability to process new information • Visible progress of individual students • Application of knowledge to real-life situations • Ability to easily transition to middle school
Diversity	<ul style="list-style-type: none"> • Percentage of students, parents, faculty and staff against key dimensions articulated in definition of diversity • Perceptions of inclusiveness
Volunteer and Community Engagement	<ul style="list-style-type: none"> • Level of board engagement • Level of parental volunteers (percentage of parents who meet volunteer hour goals) • Strategic partnerships (number of partners, type of partners, number of new and creative collaborations, etc.)
Organizational Health	<ul style="list-style-type: none"> • Overall performance against charter and mission • Reputation • Leadership effectiveness (administrative and board leadership) • Financial management and stability indicators (i.e., budget performance, fundraising performance, etc.) • Partnership resources (attractiveness to potential partnership, retention of partners, etc.) • Registration demand (number of families on the waiting list) • Visibility (number of media/public relations mentions)
Teacher Quality	<ul style="list-style-type: none"> • Certifications • Quality of teaching • Time spent with students and parents • Quality of feedback to students and parents • Effectiveness of classroom management

The survey also provided participants with the opportunity to rate the most important type of success measure for NCS to use in evaluating itself and its success. Overwhelmingly, both parents (51.5%) and faculty/staff (76.5%) indicated that measures that inform them about the *Depth of Student Learning* are the best indicators of success. Both groups rated *Quality of Student Work* as the second most important indicator of success (parents 17.9% and faculty/staff 23.5%).

To varying degrees, parents rated the other four measures of success as important (see chart and graph below). However, none of the other measures of success were rated as important by the faculty/staff survey participants (i.e., all other measures received zero responses).



STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT ANALYSIS)

The following themes were identified from information gathered during the environmental scan activities and contain perceptions of internal strengths and weaknesses and external opportunities and threats (SWOT). For purposes of strategic planning, this information should assist NCS in identifying what is important to sustain or improve within the organization and what, outside the organization, may influence organizational success.

<p style="text-align: center;">STRENGTHS</p> <ul style="list-style-type: none"> • Parental/Family Involvement • Constructivist Curriculum and the Student Development Process • Sense of Community and Community Support • Quality of Faculty and Staff • Building/Facility • Communication 	<p style="text-align: center;">WEAKNESSES</p> <ul style="list-style-type: none"> • Human Resources • Curriculum • Financial Stability and Resources • Diversity • Communication and Outreach • Assessment and Demonstrated Outcomes • NCS Student’s Transition to Middle School • Building/Facility
<p style="text-align: center;">OPPORTUNITIES</p> <ul style="list-style-type: none"> • Best Practices Model • Partnerships • Partnership/Merger with Atlanta Charter Middle School • Public Relations and Marketing • Assessment and Demonstrated Outcomes 	<p style="text-align: center;">THREATS</p> <ul style="list-style-type: none"> • Implications of Current Economic Environment • Decreased Educational Funding • Increased Competition • Scarcity of Teachers

Current perceptions have been included in this report, regardless of the current implementation of NCS’ strategic initiatives. Therefore, the feedback provided in the SWOT may also be useful to leadership as they assess the effectiveness of the implementation of, and communication about, current strategic initiatives.

Strengths

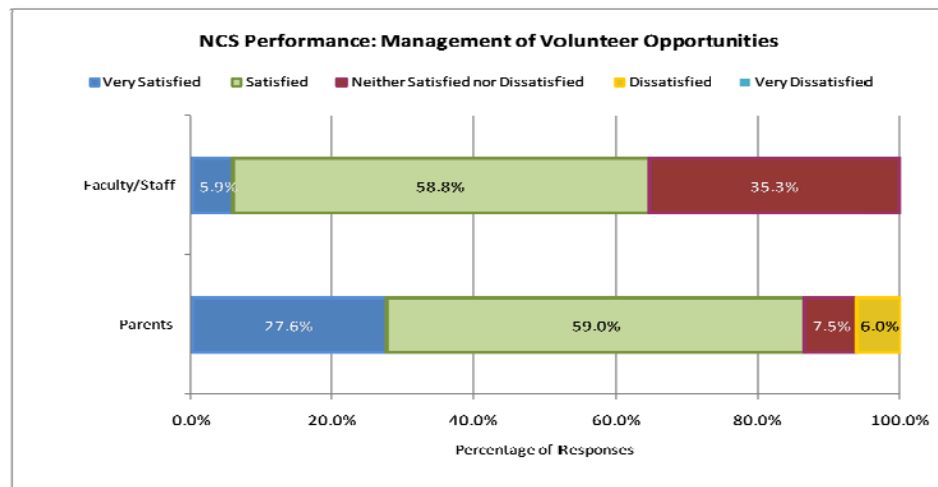
Parental/Family Involvement	Constructivist Curriculum and the Student Development Process	Sense of Community and Community Support
Quality of Faculty and Staff	Building/Facility	Communication

Parental/Family Involvement

Overwhelmingly, all constituent groups expressed parental/family involvement as the core strength of NCS, particularly when compared to other public schools. Parents are involved at all levels within the school and are empowered to take the initiative in their volunteer efforts. There is a sense of empowerment which contributes to parents feeling ownership and commitment to the school and students. Parents also shared that the high level of parental involvement has a positive effect on “building a sense of community,” a key aspect of the school culture that is considered very important to parents, faculty/staff, and students alike.

Students who participated in the student focus group expressed a positive perception about the level of parental involvement; they particularly like having parent helpers in the classroom. The students shared that teachers and parents work well together and it is particularly helpful when parent volunteers have children of the same age as the students with whom they are interacting. Students feel that a parent’s personal experiences with their children help the parent relate better to other students.

Although parental/family involvement was noted consistently as a strength, areas for improvement were also identified. Survey respondents rated their satisfaction with the management of volunteer opportunities; both parents and faculty/staff were largely satisfied, parents at 86 percent (27.6% very satisfied and 59% satisfied) and faculty/staff at 64 percent. It should also be noted that approximately 35 percent of faculty/staff indicated that they are neither satisfied nor dissatisfied with the management of volunteer opportunities. Further investigation with faculty/staff about the management of volunteer



should be conducted to better understand specific challenges and opportunities for improvement.

Parents and faculty/staff alike recognized that work schedules and family obligations at times prevent parents/guardians from participating in some of the more “traditional” volunteer opportunities. It was suggested that NCS develop feedback mechanisms to understand the needs of parents and to identify creative alternatives that can accommodate non-standard work schedules and/or family constraints.

Several parents expressed concerns over situations they encountered during their first year at NCS. The “tight knit” community environment is a benefit “once you’re in,” but initially it can feel “cliquish.” Several parents suggested the idea of formalizing an orientation/mentoring program for first-year parents. The formal orientation would provide parents with the relevant information needed to better navigate their transition into the NCS environment. Including a mentoring component would give first-year parents a “go to” person who could answer questions and help them understand what to expect.

One parent also expressed concern that NCS doesn’t always leverage the skills of NCS families and community members. Implementing a volunteer database would allow parents and volunteers to indicate what specific skills, talents and resources they can contribute to support the school’s growth and success. Additionally, a database, if implemented properly, could help to identify a broader range of volunteers and help address the concern that the same people tend to be involved in key activities.

Constructivist Curriculum and the Student Development Process

The curriculum and process used for student development was also consistently identified as a strength by parents, faculty/staff and members of the community who are very familiar with NCS and its teaching philosophy. However, it was not mentioned as a strength by those who were less familiar with the school.

Specific components of the curriculum that were repeatedly mentioned include: (1) student-centered/guided learning approach that fosters exploration, the sharing of ideas, and respects the individual learning style of the student; (2) an approach that helps children feel empowered and gives them a voice in the learning process and helps them develop the confidence to interact with adults on an equal level; (3) a safe learning environment that allows students to challenge ideas and take risks; (4) project-based, hands-on learning approach that incorporates playing, investigation and excitement into problem-solving; (5) critical thinking opportunities versus an emphasis on tests and memorization; and (6) an integrated curriculum with related arts to help students make connections about what they learn.

Although students do not identify the key components of the curriculum using the same language as adults, many of the same strengths were identified. Students see their teacher’s effort to make learning fun and to continuously “keep students happy” through activities such

as Math Bingo and field trips that allow them to actually experience a subject before studying it. They appreciate the project-based approach and the variety of projects that are available to them. One student expressed this idea by commenting, “If you’ve done one thing, you can try something new – the projects are new and different.”

In addition to the strengths, some weaknesses were identified in the current curriculum and student development approach. An overview of those weaknesses is provided in the Weaknesses Section beginning on page 17. They include: (1) balancing constructivist approach with traditional approach (particularly in the area of math, phonics, and spelling); (2) lack of assessment and metrics to demonstrate the value and results of the constructivist approach and curriculum; (3) specific curricula and approaches to better address the needs of gifted and special needs students; and (4) use and integration of technology into the curriculum.

Sense of Community and Community Support

All constituent groups mentioned aspects of how NCS creates and connects individuals to its community and that a strong sense of community is felt and shared. Those interviewed acknowledge and appreciate the community support and buy-in that has been created from the school’s inception and early beginning. A little over 97 percent of parents and 100 percent of faculty/staff who participated in the survey indicated that they have found their experience at NCS to be welcoming. One parent articulated the sense of community by saying that the environment “makes you feel like we are all in it together.” Faculty and staff demonstrate a respect for students which helps to create a safe, nurturing environment and contributes to students “finding their voice” and feeling that they are “heard.”

Although it was overwhelmingly felt that the current sense of community is a strength, it was also acknowledged that at times the close-knit/family aspects of the community can be perceived as insularly and that “gossip travels fast.” Several parents also expressed concerns about how the sense of community might be negatively impacted as the school addresses issues related to the changing demographics of the neighborhood and the implications of creating a more diverse student body. While supportive of the concept of ensuring that NCS has a diverse student population, these parents want to make sure the sense of community is not lost in the process.

Quality of Faculty and Staff

Research indicates that the quality of faculty and staff is one of the most critical factors for success in the educational process and those constituents who participated in the environmental scan echoed that sentiment. Parents are particularly pleased with the faculty and staff and the positive effect their commitment and devotion have on students.

Parents see the talent of the faculty and the passion they have for teaching. They also believe that the flexibility afforded to the teaching staff improves the quality of instruction by allowing teachers to meet the needs of each student. Parents appreciate the consistency that NCS is

able to achieve, due to the high retention rate of teachers year to year. Additionally, the low teacher/student ratio and the model of two teachers per classroom was often mentioned as a key support mechanism that further enhances the quality of teaching at NCS.

Students see the difference in their teachers as well. Students like that teachers are very caring and for those students who have attended other schools, it is a noticeable difference. One student commented that the teachers at NCS are “the best teachers I’ve ever had and they treat us as equals.”

Building Facility

Without question, the physical space/building is considered a defining strength for the school. Part of the appeal for parents is the close proximity to the surrounding Grant Park neighborhood, but parents have a real appreciation for the physical structure itself. The historic nature of the building, along with the exposed bricks, high ceiling, and natural lighting are all part of the appeal. Additionally, the classroom design and décor are also valued by parents, as is the physical set-up and layout of the classroom space. The display of student art was also mentioned by many parents as something that enhances the look and feel of the school.

Concerns about the facility were also identified and are incorporated in the Weaknesses section of this report. They include the lack of ownership of the facility and the grounds/playground area.

Communication

All constituent groups expressed a positive view about communication and the overall effectiveness of the various communication strategies employed by NCS faculty and staff. NCS faculty and staff members are perceived as open in their communications with parents and students, most notably in the area of student progress.

The Morning Meeting in particular is viewed as an invaluable method of communication for parents to keep them abreast of not only what’s happening at the school, but about the progress and capabilities of the students. The Courier was also mentioned as a valuable tool to keep constituents up-to-date on key events and issues affecting the school and students. However, it should also be noted that several parents expressed concerns that the Courier is now available primarily on-line; they want to make sure that information is still made available to those parents/families without computers in their homes.

Funders and Atlanta Public School representatives indicated that board members and the principal keep them apprised of NCS’ progress and specifically identified the annual report as the publication that keeps them abreast of NCS activities and progress. Most external constituents who participated in the interview process feel that they are receiving an adequate

level of communication. However, they also indicated a willingness to receive more frequent communication from the school in the form of quarterly updates.

However, environmental scan participants across all constituent groups did identify opportunities for improvement in the area of communication. These opportunities are in three primary areas: (1) increased marketing and branding to build awareness and visibility for NCS and its program; (2) improved communication with the surrounding communities; and (3) increased clarity around the teaching philosophy and the outcomes associated with the constructivist approach to teaching and learning. The weaknesses related to communication are articulated in the Weaknesses section on page 29.

Weaknesses

Human Resources	Curriculum	Financial Stability and Resources	Diversity
Communication and Outreach	Assessment and Demonstrated Outcomes	NCS Students' Transition to Middle/Other Schools	Building/Facility

Human Resources

Despite the fact that one of NCS' strengths is a high-quality faculty and staff, a number of human resource needs were identified during the focus group sessions.

Although there is support for and positive perception about the current Principal/Executive Director, Jill Kaechele, parents, and board members in particular, expressed concerns for the lack of “bench strength” in the administrative leadership of the school. Having the role of principal and executive director combined into one position leaves Ms. Kaechele stretched too thin to provide the effective academic leadership necessary to strengthen the curriculum and student outcomes, while at the same time, provide the administrative and financial leadership required to effectively manage the school and the non-profit entity. The lack of “bench strength” also contributes to concerns related to succession planning, (i.e., ensuring stability and sustainability of NCS in the event of any unforeseen leadership transitions).



Filling the gap in the area of academic/curriculum leadership is a high priority and there are efforts underway to fill the role. The current strategy to address this gap is to combine the responsibilities of an assistant principal and academic/curriculum leadership into one role (i.e., someone who would serve as a strong partner to the principal/executive director).

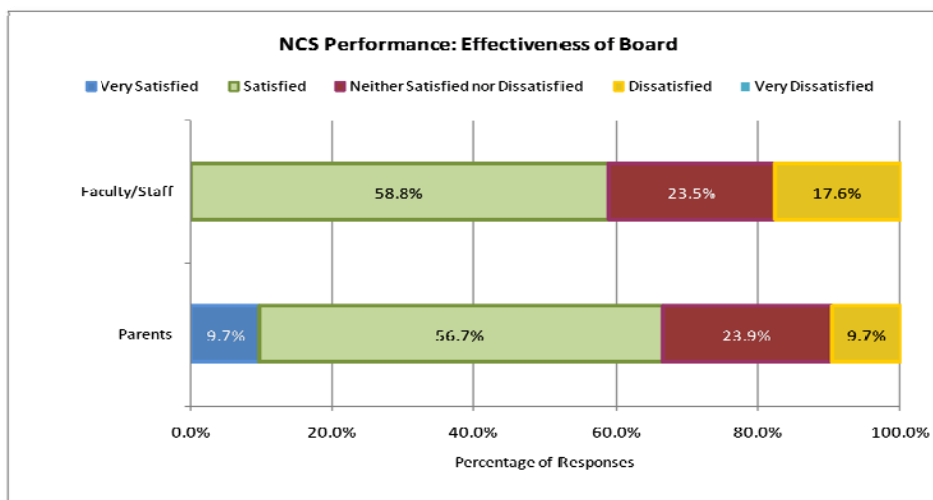
Another alternative expressed during a parent focus group is to split the role of principal and executive director. This approach would allow the principal to focus on academic leadership responsibilities (e.g., curriculum, developing faculty and staff, student achievement, etc.) while the executive director would focus on organizational and administrative leadership responsibilities (e.g., financial management, fund development, facility, board development, etc.).

Another area of concern related to human resources is in the area of board leadership and development. A number of parents and board members readily acknowledged that there have

been challenges in the past with the board and its effectiveness. Most of the focus group participants agree that the situation has improved and continues to do so.

Survey participants provide additional insights into the level of satisfaction with the effectiveness of the board. Survey responses indicated that the majority of parents and faculty/staff are satisfied with the effectiveness of the board, with parents being 66 percent satisfied (9.7% very satisfied and 56.7% satisfied) and

faculty/staff being 58 percent satisfied (58.8%). While this could be viewed as positive, it should also be noted that 23 percent of parents and faculty/staff indicated that they are neither satisfied nor dissatisfied, at 23.9%



and 23.5% respectively. Faculty/staff survey participants expressed the most dissatisfaction, with approximately 17 percent being dissatisfied and almost 10 percent of parents expressing dissatisfaction. This level of neutrality and/or dissatisfaction indicates a need to understand further the needs and expectations of both parents and faculty/staff in order to identify specific strategies for improvement.

During the focus group discussions, concerns were expressed about the lack of on-going board development to improve the effectiveness of the board, as was the absence of a succession plan to ensure that new board members are continually identified and cultivated. Additionally, parents indicated it would be helpful to have someone on staff who served as a liaison to the board in order to provide coordination and administrative support, and to increase the effectiveness and efficiency of the various board committees and taskforces.

There are also human resource challenges in faculty and staff positions and there is a consistent concern that “too many essential functions are done by volunteers.” During the focus group sessions with parents and faculty/staff, a need for the following positions/roles was identified:

- Curriculum Specialist/Expertise** – As identified earlier, the need for this role is seen as a priority if NCS is to continue to improve its curriculum, supportive programming and increase student achievement. In addition to providing leadership in this area, faculty and staff indicated a need for someone to be responsible for best practices research, as well as providing support to teachers in the areas of professional development and lesson planning. Additionally, faculty expressed a need for a position that strives to

strategically view the curriculum across grades, to help create greater seamlessness and integration throughout the academic program.

- **Media and Technology Support** – Without question, everyone understands the need to stay abreast of technological advancements and be proactive in the integration of current and new technologies into the classroom, media center and curriculum. Currently, the technology support position is part-time and as such, is unable to adequately fulfill all of the NCS' technology support needs. Supplemental technology resources are necessary to help teachers increase their knowledge and effective use of technology (both inside and outside the classroom). There is also a need for additional support to address the on-going technology maintenance issues associated with staying current across all hardware and software platforms.
- **Special Needs/Gifted Support** – Parents and faculty/staff acknowledged that the support for children with special needs has improved, but is still an area of concern. Although the constructivist approach is based on teachers addressing the needs of the individual student, many feel that NCS would benefit from additional resources to support a formal program/approach to address special needs and gifted students. For one former parent, the lack of a formal program for gifted students was the primary reason for the decision to leave NCS. In the area of special needs, both parents and teachers would like to see NCS hire additional resources in this area so it can become less dependent on APS resources and better respond to student needs.
- **Grant Writing/Fund Development Support** – The current economic environment was on everyone's mind as we discussed the issues and challenges that NCS will have to grapple with in the future. All constituent groups expressed concern for the continued decrease in funding for education at the national and state level. Decreases in funding, combined with growth in the number of charter schools, make the competition for financial resources (at the district level and within the philanthropic community) an increasingly difficult challenge for NCS to address. These intersecting issues require NCS to think strategically about its ability to raise the funds necessary to ensure financial stability and sustainability. Resources who have both the expertise and time to identify additional funding resources, cultivate donors, and develop proposals/grants on behalf of NCS is seen as a critical need.

The resources/support identified above was the most commonly identified roles across all constituent groups who participated in the environmental scan. To a much lesser degree, the need for the following resources was also identified: full-time school nurse, position to support community resources/diversity, and a Related Arts Associate Teacher.

Curriculum

The strength of the curriculum is clearly a point of distinction and differentiation for NCS. However, when parents were asked about curriculum improvements, they most often cited the need to balance a constructivist approach with a traditional approach (particularly in the area of math, phonics, and spelling). Although supportive of the constructivist approach, many parents expressed the viewpoint that this approach should not be used 100% of the time. This

issue became even more apparent as parents discussed concerns about their child’s transition from NCS to middle school and/or more traditional schools.

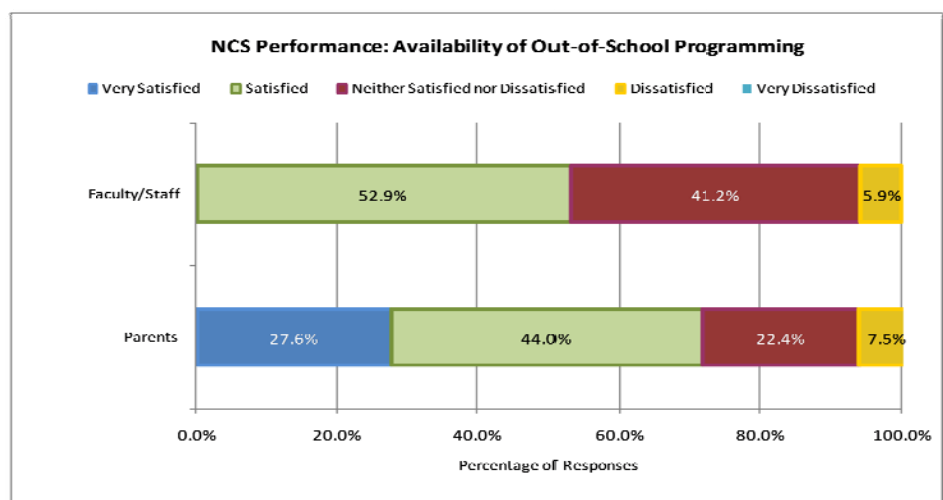
As mentioned in the section on Human Resources, parents would like to see specific special needs and gifted student programs and approaches incorporated into the curriculum. Addressing this concern will help with recruitment and retention efforts targeted at those parents and students who rank these factors high in their decision criteria.

Most everyone agreed that although it is specified in the charter, the emphasis on conservation and sustainability has been inconsistent at best. Several parents indicated that the degree to which conservation is addressed is primarily a function of whether a particular teacher views it as a priority. Overwhelmingly, there is a consensus that there is also a need to redefine and reinvigorate the relationship with the Atlanta Zoo. While students indicated that they like the fact that they attend an “all green school, where we recycle and conserve energy as much as possible,” most of the adults would like to see a comprehensive strategy for how this topic will be integrated and incorporated into the curriculum and the supportive programming.

From a technology perspective, many parents are pleased with the type and amount of technology in the classroom. However, some parents shared their desire for NCS to be more aggressive in incorporating technology into the curriculum, because they want to ensure that students keep pace and have the skills to compete in an increasingly diverse and global society. The use of technology to bridge geographic bounds is a strategy to increase students’ opportunities to interact with others throughout the city and the world. Keeping pace with the technological elements of the 21st Century Classroom is viewed as critical for many parents; they have a strong desire to increase the number of electronic white boards, laptops, and computer labs with a range of media services, available to both faculty/staff and students.

Students who participated in the focus groups had a lot to say about homework and the degree to which they are challenged. Almost all of the participants in the student focus group would like teachers to challenge them more, whether it’s through harder spelling words, word study, or by expanding the variety books. Fifth graders expressed a desire for more challenging homework to better prepare for the volume and the rigor they perceive will be required in middle school.

In the area of supportive programming, a review should be conducted to determine how NCS can better address the



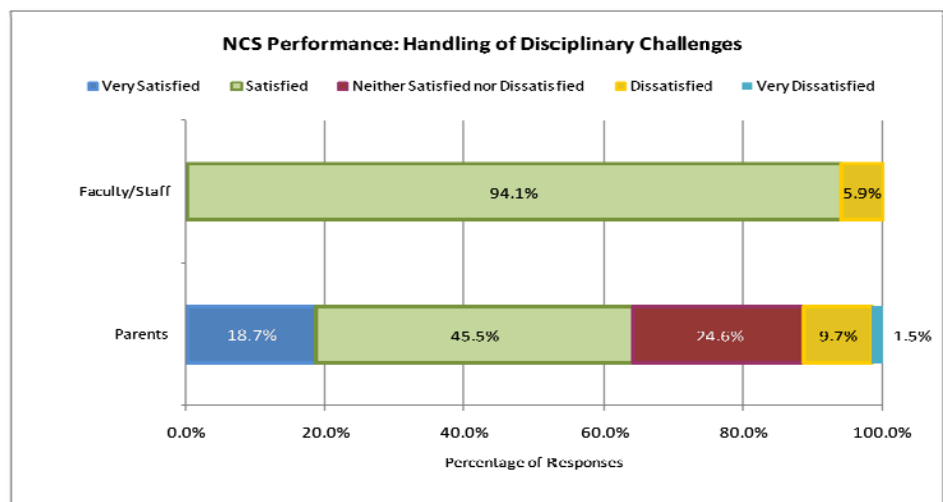
needs of parents and families in the area of out-of-school programming (e.g., before school, after school and summer school). Providing additional opportunities for programming beyond the school day is perceived as beneficial for not only the students, but for families who have conflicting work schedules and/or time constraints. Providing social services support was also indicated as a need for some NCS families.

Survey participants are mixed in their satisfaction with the availability of out-of-school programming. Faculty/staff are the most divided on this issue, with approximately 52 percent satisfied, 47 percent neither satisfied nor dissatisfied, and almost 6 percent dissatisfied. The majority of the parents are satisfied (26.1% very satisfied and 44.0% satisfied) with the availability of out-of-school programming.

Although not directly related to the curriculum, students were very vocal about NCS’ disciplinary policy and practices. Most of the students who participated in the focus group felt that a few teachers are lax when it comes to addressing disciplinary issues with “repeat offenders.” They feel like many of the “bad things” that happen around the school (e.g., clogging toilets, writing on the walls, etc.) are done by the same people (and most of the students know who those students are). Although they are not allowed to tell or “snitch” on fellow students (e.g., teachers must witness the infraction themselves), they feel that if most of the students know the offenders, teachers probably do too and therefore something should be done.

During the survey, participants also had an opportunity to rate their satisfaction with NCS’ handling of disciplinary challenges. Faculty/staff have the highest level of satisfaction with the process at 94 percent and the majority of parents expressed satisfaction at 64 percent.

However, it also appears that some parents are less favorable about the handling of disciplinary challenges, with approximately 35 percent indicating that they are neither satisfied or dissatisfied (24.6%), dissatisfied (9.7%), or very dissatisfied (1.5%).



Financial Stability and Resources

All constituent groups raised questions and concerns about the long-term financial viability of The Neighborhood Charter School. Funders and community representatives most often expressed concerns over the competition for funding/dollars and how well NCS is positioning itself to compete for funds. Faculty/staff, parents and board members alike expressed concerns about the expertise and the time required to develop effective proposals/grants to solicit donations from corporate sponsors and foundations. Clearly, NCS will need to continue to focus on its financial resources if it is to remain a viable entity in the future.

Ensuring that NCS establishes a clear brand, that includes information about how it is unique and distinct from other public and/or private educational institutions, was the most commonly suggested strategy for NCS to improve its funding opportunities.

Raising the visibility of the NCS brand will require the leadership to clearly articulate the value and results of a non-graded system/curriculum. As articulated by one funder, “the funding community is looking for more accountability and results and they want to see their investment be fruitful with visible results.” Additionally, there will be a need for NCS to increase and improve its marketing and public relations efforts in order to expand its pool of potential partners and donors. Becoming more visible at APS board/state board meetings and collaborating with other charter schools within the district and the Metro Atlanta area will also be an important strategy, to ensure that key community representatives and funders are aware of NCS’ value proposition and its student achievement, student outcomes, and results.

A few parents suggested the development of a plan to engage and solicit NCS alumni (former parents, students, faculty and staff) during fund raising activities, similar to the approach used by colleges and universities. Additionally, developing a strategy to engage individual donors (similar to the Obama model) will help broaden NCS’ donor base. Several members in the community focus group indicated their willingness to support the school on a “project-specific basis” (i.e., support a specific project that aligns with their passion and/or areas designated for charitable contributions). In all of the above conversations, the importance of “asking” for the donation/gift is critical -- if you don’t ask, you don’t receive. Additionally, employing strategies such as cause marketing and partnering with corporations and small businesses (e.g., Publix Supermarket, local restaurants, etc.) to receive a percentage of money spent/revenue generated from sales and/or programs was also identified as a potential fundraising strategy. Other partnerships with specific professions such as realtors, attorneys, etc. were also suggested.

In addition to raising funds, ownership of the building/facility was identified as one of the most critical aspects of NCS’ financial stability. Lack of ownership of the facility leaves NCS vulnerable to decisions made by APS related to the facility. Although board members and parents expressed doubts that APS would sell the building to NCS (based on past discussions), the current economic climate and financial pressures experienced by APS may make it an

opportune time to revisit potential alternatives to address the school's long-term facility requirements.

The retention of quality administrators, faculty and staff is also critical to maintaining financial stability. There is a recognized shortage of quality teachers and therefore the retention of such faculty and staff is a key aspect of NCS' formula for success. Faculty and staff expressed concerns about the lack of benefits and professional development opportunities. Continuing to develop a robust benefits package (e.g., state benefits, tuition reimbursement, other professional development opportunities, etc.) along with rewards and incentives, will be critical to ensure retention of critical resources.

Finally, NCS will need to have strong financial management processes and systems in place to ensure operational effectiveness. For the foreseeable future, continued cuts in state funding are anticipated and NCS will need to be proactive in the development of contingency plans. NCS, like all organizations in today's economic climate, can become "leaner, while continuing to improve their game."

Diversity

Among the respondents who participated in the environmental scan, the issue of diversity uncovered the widest range of perspectives. Early interviews and conversations with NCS constituents reinforced the need to better understand how NCS defines diversity and determine the degree to which diversity is an issue for the community.

When asked to identify/define the key dimensions of diversity at NCS, many of the same characteristics were articulated, regardless of constituent group. For most respondents, the definition of diversity is broader than just race/ethnicity, age, and gender; they don't want NCS' definition to be limiting in nature. The dimensions identified include socioeconomic status; race/ethnicity; culture; age; native language; place of origin; family unit; gender; religion; personal style; and learning style.

Perspectives about how well NCS addresses issues of diversity are varied. Some individuals feel that the school is doing an exceptional job of accepting, encouraging, and modeling behaviors that welcome and include all individuals. For example, in the area of socioeconomic diversity, it was noted that students who cannot afford the fees for field trips and other student-related activities are not excluded from participating in those events. Others feel that NCS definitely supports a diverse student population, but should focus on increasing the percentage of minority students, particularly African American students and families from the surrounding community. Although it was not a frequently voiced area of concern, it was mentioned that Asian and Latino students/families comprise a very small percentage of NCS' current student body.

The issue of the changing demographics of the surrounding community was widely discussed during conversations about diversity. Most constituent groups acknowledged that the

neighborhood demographics are changing; this shift is a factor that influences perceptions related to diversity and inclusiveness. Additionally, issues related to the “narrow geographic area” for the registration and enrollment zone contributes to concerns about diversity, as well as how effectively NCS reaches out and interacts with the surrounding communities. Although participants acknowledged that the charter specifies the enrollment/registration zones (the charter was recently approved for another ten years), many also felt that it is important to reach out to surrounding neighborhoods (e.g., Summerhill, Peoplestown, etc.).

Conversely, some, but not all, of the community focus group participants indicated that NCS grew out of the concerns and planning of a small group of committed parents and that the families in the surrounding neighborhoods have the same opportunities to develop similar alternatives for their children.

In particular, community representatives expressed concerns about NCS’ lack of outreach to the surrounding neighborhoods and would like NCS to investigate strategies for broadening the geographic enrollment zone. On this point, a few parents expressed concerns about the potential “unintended” consequences of expanding the registration zone; concerns that strategies to increase diversity will negatively impact the feeling of “a close knit community,” an attribute that is highly valued within the NCS culture.

During the faculty/staff focus group, several teachers expressed the desire for more sensitivity training and professional development to help them better address the needs of African American boys. It was indicated that better understanding of the African American culture and the implications of how the larger society impacts African American boys, is necessary to meet the individual learning and social needs of this demographic group.

As evidenced by the range of perspectives about diversity, it is clear that more discussions need to happen in order to develop a shared definition of diversity. Although there is a range of opinions on the matter, the overwhelming sentiment from the interviews and focus groups is that NCS needs to be more intentional in promoting diversity, inclusiveness and the facilitation of difficult discussions, within NCS and the surrounding community.

Regardless of their specific opinions about diversity and its definition, participants overwhelmingly did agree that as the broader society moves to a more diverse and global community, it will be important that NCS students learn and interact with teachers and students from diverse backgrounds and cultures. This issue is a sensitive one, and it requires the community to engage in the discussion on a deeper level if the Neighborhood Charter School is to create a shared definition for diversity. Once this occurs, NCS leadership, in collaboration with the surrounding community, will be better informed to develop the appropriate strategies and actions to address this issue.

Communication and Outreach

Although in the previous section communication was identified as a strength, specific opportunities for communication-related improvements were also identified.

Strengthening external marketing and public relations was mentioned repeatedly as an important strategy to advance the organization's funding efforts. Increased visibility within APS, the surrounding communities, and the broader Metropolitan Atlanta area will better position NCS with potential funders, individual donors, and partners to increase support for the school and the students.

Focusing time and effort to define the value proposition and NCS' niche will be critical to public relations efforts; creating greater clarity in these areas will help the internal constituents of NCS. In every environmental scan activity, whether with individuals and/or focus groups, participants shared the desire for increased clarity about the teaching philosophy and the outcomes associated with the constructivist approach to teaching and learning. Clarifying the message will (1) help potential parents/guardians make better decisions about whether NCS is the right school for their children; (2) help current parents better support their child's learning experience and development process while at NCS; (3) better position NCS with APS administration; and (4) support faculty/staff recruitment efforts.

While most of those interviewed indicated a positive perception of NCS' relationship with the community, opportunities do exist for improving communication and outreach, particularly in light of the shifting demographics of the surrounding neighborhood. When asked to describe their perception of NCS, several of the community representatives used words and phrases such as "elitist," "exclusive," and "not very diverse." One of the individuals interviewed indicated that they "sense that outreach is not a priority for them (NCS)." These perceptions can only be changed by NCS increasing its communication and involving itself with the community to build bridges.

Activities such as writing columns in the local newspaper, hosting yard sales, participating in neighborhood and civic association meetings (e.g., Neighborhood NPU, etc.) will continue to inform the surrounding community about NCS and encourage partnership. Increasing the visibility of faculty in the broader educational community will allow NCS to demonstrate its leadership capabilities and support the positioning of NCS as a model of best practices.

From a broader communication perspective, several parents suggested that improvements to the web site are needed. Several focus group participants shared information about the impending web site re-launch, which will feature a new design and increased functionality. Additional functions such as the ability to pay for lunch, make a donation, or pay event fees would be well-received by many parents. NCS should also consider how social networking and blogging technologies could showcase the work and progress of students, allowing them to share their experiences and create visibility for their projects and their accomplishments. Adding information about community and broader education issues would help individuals and

families stay up-to-date and better informed about issues that affect both NCS and their children's education.

In an area related to internal communications, one parent suggested the need for an archive to maintain the formal history of the organization and help communicate the NCS story. Documenting the history and journey of the school will create continuity, as parents and students graduate from NCS and move on to middle school. Greater transparency related to communication of policies and practices by the board was also expressed as an opportunity for improvement. While it was agreed that communication from the board continues to improve, a few parents indicated they would like to see more transparency related to board governance (i.e., how decisions are made about new policies and practices, etc.).

Other communication and outreach strategies identified during the focus groups include: (1) expanding the library hours so that it can serve as a community resource; (2) developing a glossary of terms to help others understand specifics about the NCS approach; and (3) exploring non-traditional media options beyond the Atlanta Journal Constitution.

Assessment and Demonstrated Outcomes

Most participants in the environmental scan activities have a positive perception of the learning outcome and achievements of NCS students. However, with the exception of report card grades and traditional test scores, there is concern that NCS lacks the proper assessment tools and metrics to demonstrate the value and results of the constructivist approach and curriculum, particularly when compared to students attending schools that are viewed as more traditional in approach. This concern was expressed by many of the individuals represented in the scan across key constituent groups such as board members, parents, faculty/staff and APS representatives.

At least one participant indicated that national and state approaches to testing might provide NCS with an opportunity to better position its philosophy of thinking beyond testing (i.e., learning through different means). However, regardless of the method of assessment, most participants are looking for quantitative and comparative data to help demonstrate what anecdotally, teachers/staff and parents are seeing – holistic student development and academic progress.

As one interviewee stated about the NCS approach: "...by focusing on curriculum versus testing, students feel safe and relaxed in their learning; the emphasis is on process and not product; students feel they can interact with adults on a more equal level and they feel safe to make mistakes. The only challenge related to this is that Atlanta is a conservative town, and many parents and community members are looking for test scores and performance indicators."

Jill Kaechele has a real passion for assessment and evaluation and views the development of methods to document, track and identify the progress of NCS students as one of her top

priorities. In light of the importance of this issue, assessment and evaluation is one of the research areas for best practices within the environmental scan.³

NCS Student's Transition to Middle/Other Schools

Faculty/staff, parents, and students are all concerned about how well prepared students will be to transition from NCS to other schools, particularly those with a more traditional curriculum and structure. Since NCS is not officially a feeder school to Atlanta Charter Middle School (ACMS), parents are concerned and frustrated about the uncertainty of where their child will enroll next. Although there is interaction between the two schools on a variety of levels (administrators, faculty/staff, students and parents), it is on a minimal and informal basis.

For some parents, the issue of where the child will go next is a contributing factor for leaving NCS before their child completes the fifth grade; particularly if their choice for grades 6-8 is not ACMS. Several parents pointed out that it should not be assumed that ACMS is the first choice for all students. As a result, it is important to understand that parents want to ensure vertical compatibility for their children, regardless of where the child enrolls when they leave NCS. This means they are looking for the “best fit” related to a school’s vision, mission and teaching philosophy/curriculum as their child matriculates into the sixth grade and beyond.

Students have their own concerns, i.e., will they be prepared to handle the level of homework in sixth grade and beyond? They want the opportunity for an observation day where they can “see how ACMS works.” Parents and faculty/staff also expressed the desire for a professional day for both students and teachers to visit ACMS and spend time to better understand what it might be like. Students also suggested that bringing former NCS students back to get their perspectives and have them relate their experiences would be very helpful.

Parents in particular are concerned about how well their children will transition into a more traditional, structured learning environment, regardless of whether they go to ACMS or another school. The transition to a traditional grading system and report cards, larger classroom sizes, and a less nurturing and more structured environment are all areas of concern expressed by parents. From an academic perspective, helping students make the successful transition in math appears to be the area of most concern for both parents and students.

From an operational perspective, many respondents think there are many benefits to NCS and ACMS developing a more collaborative relationship. In addition to curriculum alignment and student transition, individuals who participated in the environmental scan feel there are also opportunities for resource sharing. Several participants also suggested that NCS and ACMS should strongly consider merging into one school/entity. This would provide parents and students with a K-8 grade solution, thereby minimizing the uncertainty and anxiety of where students will go after fifth grade.

³ For more detail on the assessment and evaluation Best Practices research, please refer to pages 66-70.

Building/Facility

As articulated in the Financial Stability and Resources section, owning the current facility is considered as a major strategy to ensure NCS' future financial stability. The current lack of ownership also impacts the organization's willingness to make physical improvements, since making significant improvements to the leased structure is not considered a prudent investment.

Parents, faculty/staff and students all expressed concerns about the grounds and play areas. Older students would like to have a play area with age-appropriate structures geared toward their interests. Students are also concerned about playground safety. They would like better fence structures (the current fences are old, rusty and have exposed barbed wire). They also expressed concerns about areas near the fence that have big holes, where "your foot gets stuck." Students feel the auditorium is too small for the number of children and several would like to see a basketball court installed.

Opportunities



Best Practices Model

NCS frequently receives requests from other educational professionals about its model and curriculum. Many environmental scan participants would like to see NCS increase its local and national visibility as a “model approach for teaching and learning.” Parents in particular want to make sure any efforts to showcase NCS’ model is not at the expense of the students. Or as one parent articulated, “don’t divert resources to support other schools at the detriment of the NCS student.”

While there are quite a number of things that NCS does that are considered “best practices,” participants in the environmental scan want the leadership, faculty and staff to continue to investigate how to incorporate best practices from other schools/programs into the NCS approach. It was suggested that NCS reach out to other charter schools across Atlanta and the country to learn what they are doing and how NCS might incorporate the applicable ideas into its own curriculum and approach.

Documenting the Neighborhood Charter School story and approach will be critical in order for the school to position itself as a best practices model. Members of the community suggested that a template or guide be developed for other neighborhoods/schools (e.g., tips and tools for getting started, providing suggestions for resources, strategies to engage the community and build support, etc.). The process of developing a template and documenting the story/approach for others will also provide internal benefits. This body of work could be leveraged to build the case for support and help establish relationships with donors, funders and partners. It will also provide the content for a targeted public relations and marketing campaign to the broader community, as well as support student and faculty/staff recruitment efforts.

Partnerships

Strengthening current partnerships and identifying new ones is viewed as a key opportunity to improve the curriculum and increase resources. For example, reinvigorating the partnership with the Atlanta Zoo will help NCS better address the components of its charter that are related to conservation and sustainability. Identifying corporate and business partnerships is a key strategy to addressing financial stability and sustainability.

Other relevant community partnerships were identified: the Grant Park Conservancy; Georgia Aquarium; Cochran Mill Nature Center; Margaret Mitchell Museum; and the Atlanta Symphony Orchestra were all suggested as potential partners to support various aspects of the curriculum.

Whether the objective of the partnership is to support the curricular or financial needs of the school, participants felt that more emphasis should be placed on identifying and cultivating partners in the future.

Additional Opportunities

Interestingly, the other three opportunities identified during the environmental scan are largely associated with how effectively the Neighborhood Charter School addresses its weaknesses in key areas. The table below provides a summary of opportunities already discussed in the Weaknesses section and their implications for NCS and the future.

Opportunity	Implication
Partnership/Merger with Atlanta Charter Middle School	A stronger partnership between NCS and ACMS would provide a K-8 solution for students and address (or at least help minimize) the concerns about a seamless transition for fifth grade students.
Public Relations and Marketing	Strengthening external marketing and public relations efforts will increase visibility to support fund development efforts, recruitment and also position NCS as a best practices model.
Assessment and Demonstrated Outcomes	Developing a comprehensive assessment and measurement approach will (1) support NCS' efforts to continuously improve the curriculum, (2) provide greater clarity about the value of the teaching and learning approach for both internal and external constituents, and (3) contribute to more effective fund development efforts and PR efforts.

Threats



Implications of Current Economic Environment

The current recession, as well as recent events in the financial and global economy, is creating a great deal of uncertainty and concern. The loss of jobs has an impact on the financial and emotional health of families and it is anticipated that increases in social services and support for families will be needed. Additionally, the downturn in the housing market and the increased number of foreclosures also has implications for the demographics of the surrounding neighborhoods. Finally, the current economic downturn is expected to have a negative effect on donations by foundations, individual donors and corporations/small business.

Decreased Educational Funding

Currently, states and local districts are experiencing a decrease in educational funding. “Budget woes continue to affect education funding around the nation, as states struggle to ward off major shortfalls under a teetering economy.”⁴ Although the economic stimulus has earmarked funding for education, the “trickle-down effect” is not expected to be immediate, nor is additional funding for NCS guaranteed. This, coupled with the economic downturn, requires NCS to focus simultaneously on (1) the prudent management of resources, (2) the development of contingency plans in the event of further cuts in its operational budget, and (3) a focused fund development strategy to position itself in an increasing competitive fundraising environment.

Increased Competition

As the educational landscape continues to change across Metropolitan Atlanta and the nation, the competition for students is expected to increase. It is anticipated that an increasing number of charter schools and other school reform models will continue to be implemented. This will increase the competition for students, as well as for resources (both human and financial). Clarity of message and outcomes will be a critical factor in positioning NCS to secure the needed resources to achieve its mission, goals and objectives. Additionally, the positioning of NCS as a “best practices model” is viewed as an important strategy to ensure NCS remains relevant and competitive.

⁴ *The Associated Press, November 21, 2008*

Scarcity of Teachers

Nationwide, some 2.2 million teachers will be needed in the next 10 years due to teacher attrition, retirement and increased student enrollment.⁵ There is a wealth of research to articulate the challenges the nation faces as it focuses on teacher quality and teacher supply. Many would agree that one of the most critical success factors associated with improved student achievement is the quality of instruction; hence the quality of the teacher. NCS will need to ensure that it strategically develops a variety of recruiting and retention strategies to ensure that the quality of teachers remains a strength.

⁵ Source: National Center for Education Statistics

TRENDS ANALYSIS

Societal and Environmental Trends

Feedback from interviews and focus groups provided the initial context for examining broad environmental and societal trends, as well as education-specific trends. In addition to input from NCS's internal and external constituents, statistics from sources such as the United States Census Bureau, Department of Labor, Department of Education and a variety of state and national educational agencies, including the Georgia Partnership for Excellence in Education, were researched and synthesized to form the ensuing Trends Summary.

The following **broad societal and environmental trends** will have significant implications for educators, students and the communities in which they live, learn, work, and play. The current economic outlook, globalization, shifting demographics, technological advancement, environmental concerns and security issues are dramatically changing the way Americans must behave, think, interact and transact. To prepare us to successfully compete, collaborate and connect in the 21st century, education is necessarily evolving into a lifelong learning philosophy. Lifelong learning is a philosophy gaining strength in our present culture. This approach encourages citizens to embrace learning opportunities at all ages and in all spheres, from work to home to leisure, through both formal and informal channels. The global and digital age in which we live requires us to become well-versed in "21st century skills"⁶ such as multicultural literacy, information and technological literacy⁷, creative and critical thinking, multi-media communication, civic responsibility and continuous improvement. Not only is the content changing for today's lifelong learners, but curriculum is being delivered in increasingly customized, innovative and integrated ways to optimize technology and to respond to different learning styles and needs at all levels.

⁶ 21st century learning skills is a broadly-defined term encompassing the emerging pedagogies and models relating to the skills required to live and work in the 21st century, which is characterized by its global and digital nature. 21st century skills include, but are not limited to: multicultural; technological and information literacy; qualitative and quantitative literacy; multi-media communication; social/civic responsibility; teamwork; continuous improvement, etc.

⁷ J.A. Banks defines multicultural literacy as: "the ability to understand and appreciate similarities and differences in customs, values, and beliefs of one's own culture and the culture of others." The American Library Association states that to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. The North Central Regional Library defines technological literacy as "knowledge about what technology is, how it works, what purpose it can serve and how it can be used efficiently and effectively to achieve specific goals."

Broad Societal and Environmental Trends

Trend: United States Economic Forecast for 2009

<p>Current Realities</p> <p>In February 2009, the Federal Reserve downgraded its forecasts for the nation’s economic performance in 2009:</p> <ul style="list-style-type: none"> • Projecting unemployment will rise this year between 8.5 and 8.8 percent • Projecting the overall U.S. economy will contract between 0.5 and 1.3 percent this year • Emphasizing that the economy has been in recession since December 2007 	<p>Implications for the Future</p> <p>The U.S. economy continues to weaken, as noted by decreases in consumer and business spending, declining manufacturing activity, housing and commercial real estate slumps, declining lending activity, and rising unemployment. The prolonged and deep recession, specifically relating to job loss and decreased spending due to tighter credit conditions, are negatively shaping the consumer and business psyche – a phenomenon that could have longer reaching impact. The economy is forcing people to make difficult choices about housing, employment, health care, and even education.</p> <p>The economic crisis is at the forefront of public policy, yet the timing of recovery remains unknown. <i>The Nation’s</i>, “The First 100 Days,” described the situation: “Obama faces major challenges: a “cratering” economy, a broken healthcare system, two wars, poverty and growing inequality, and the strained reputation of the United States in the world.” As noted in the Georgia Partnership for Excellence in Education’s (GPEE), “Top Ten Issues to Watch in 2009” Report, “Education is notably omitted from the list.”</p>
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Trend: More Global, Knowledge-Driven Economy and Labor Force

<p>Current Realities</p> <p>Gary Marx, author of <u>Sixteen Trends: Their Profound Impact on Our Future</u>, believes that social and intellectual capital will become economic drivers, intensifying competition for well-educated people.</p>	<p>Implications for the Future</p> <p>The economy and labor force are becoming more knowledge-driven and globally integrated, thus simultaneously increasing worldwide competition and collaboration. To compete economically and to build relationships without borders, individuals must understand and embrace different cultures, stay abreast of technological innovations, and continuously develop deeper skill sets, knowledge and experience.</p>
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Trend: More Global, Knowledge-Driven Economy and Labor Force (cont.)

Current Realities	Implications for the Future
<p>According to the Bureau of Labor Statistics, growth in employment between 2006-2016 is projected to be concentrated in the service-providing sector of the economy. Management, scientific and technical consulting services; employment services and general medical and surgical hospitals lead industries in projected wage and salary growth.</p>	<p>Globalization is already influencing the content of classrooms from pre-kindergarten through college. In addition to traditional disciplines, developing models, such as 21st Century Learning initiatives, support learning in areas such as global and/or multicultural literacy, problem-solving, innovation, creativity, digital/information literacy, teamwork, and civic responsibility.</p> <p>Beyond school, the current workforce is likewise confronted with a burgeoning need for continuous education in multicultural, information, and technological literacy. People are pursuing lifelong learning not only to stay competitive in the job market, but also to remove communication and cultural barriers to conducting business and living in today’s environment</p>

Shifting Demographics are Changing the Composition of the U.S. Population

The rapidly changing composition of the United States is the result of a myriad of factors, including, but not limited to, immigration, fertility and birth rates, increasing life expectancy, outsourcing, level of education, and public policy. For the purposes of this study, demographic trends and implications will be addressed in five major areas: (1) Shifting race/ethnicity demographics; (2) Socioeconomic trends; (3) Gentrification; (4) Shifting age demographics; and (5) Gender trends.

Trend: Shifting Race/Ethnicity Demographics

Current Realities	Implications for the Future
<p>According to the U.S. Census Bureau, shortly after 2050, no single racial or ethnic group will constitute more than 50% of the population. By 2050:</p>	<p>Gary Marx, author of <u>Sixteen Trends: Their Profound Impact on Our Future</u>, describes the implications for the shifting demographics in America: “The United States is becoming a nation of minorities....Each community and nation, in an increasingly mobile world, will be challenged to constantly reframe its identity or face division, dissension and lost potential.”</p>

Trend: Shifting Race/Ethnicity Demographics (cont.)

Current Realities	Implications for the Future
<p>The Latino population is expected to grow from 12.6% of the U.S. population, to 24.5%.</p> <p>The Asian population is projected to grow from 3.8% of the U.S. population, to 8%.</p> <p>The African American share of the total population will increase slightly from 13% to 15%.</p> <p>The non-Latino White population’s share of the total population is projected to decline from more than 70% in 1999 to approximately 50%.</p>	<p>In an increasingly diverse and pluralistic society connected through technology and high-speed transportation, facilitating multicultural education should be a priority for educators, businesses and communities. Developing an understanding and appreciation of diverse groups, seeking common ground, and becoming more inclusive will be critical for forging thriving communities that attract and retain businesses and individuals in the future.</p> <p>Building social cohesion and communities that work for the common good, will require people to interact, communicate, negotiate and transact across racial, ethnic, socioeconomic and cultural lines. Acquiring the skills and knowledge to interact with diverse groups will require lifelong learning and a willingness to find common denominators.</p>

Trend: Socioeconomic Trends - Changing Income Distribution is Resulting in the Disappearance of the Middle Class and Growth in the “Working Poor”

Current Realities	Implications for the Future
<p>Census Bureau Statistics and the Department of Housing and Urban Development both report that from 1979 to 1997, the after-tax income of the top 1% of families rose 157% while the gain for families near the middle was only 10%.</p>	<p>The relative share of low and moderate income workers continues to decline as compared to their high- income counterparts, resulting in a “squeezing” or disappearance of the middle class and growing number of “working poor.” A confluence of factors such as rising housing costs, rising healthcare costs, automation, outsourcing, immigration, and changes in housing/family composition have increased income inequality between the top tier and the lower tier.</p>

Trend: Socioeconomic Trends - Changing Income Distribution is Resulting in the Disappearance of the Middle Class and Growth in the “Working Poor”(cont.)

Current Realities

According to a 2007 Center for Economic and Policy Research study, the share of “good jobs” (those paying at least \$17 an hour and offering health insurance and a pension) has fallen substantially in the 2001 – 2007 business cycle.

According to a United Nations survey, the United States has the highest child poverty rate of eighteen industrialized nations. Statistics indicate that one in five children in the United States lives in poverty

Implications for the Future

From an educational perspective, in order to succeed in today’s marketplace, individuals need education beyond high school; that education must be a combination of broad practical knowledge, specialized training and continuous learning. Although K-12 schools and higher education institutions are confronting pressing socioeconomic threats by adopting learning models to better prepare students for labor force and economic realities, the trends relating to income inequality will persist without governmental intervention relating to social responsibility, outsourcing overseas, cost of living, including housing and healthcare, wages and taxation.

Trend: Gentrification - Physical Redistribution of the Population

Current Realities

According to reports from the Fannie Mae Foundation, supporters of gentrification cite the benefits of urban renewal: (1) renewed investment in physically deteriorating areas, (2) improved access to lending capital for low-income mortgage seekers, (3) increased rates of lending to minority and first-time home purchasers to invest in appreciating areas, and (4) improved physical conditions for renters.

Implications for the Future

As an older, manufacturing-based economy gives way to the post-industrial service and knowledge-based economy, inner cities are re-emerging as cultural, political and economical centers, attracting new residents and businesses. Areas are undergoing gentrification, a contentious phenomenon, according to Merriam-Webster, “in which low-cost, physically deteriorated neighborhoods undergo physical renovation and an increase in property values, along with an influx of wealthier residents who may displace the prior residents.” Like the shifting socioeconomic and ethnic demographics, gentrification challenges social cohesion and thus requires groups to seek common ground and work toward a common good.

Trend: Gentrification - Physical Redistribution of the Population (cont.)

Current Realities

Critics, however, stress the human cost to lower-income residents who are often displaced due to rising rent and/or property taxes. Some believe that urban renewal and gentrification reduce crime rates, while others believe the crime has shifted to areas that are more depressed.

Implications for the Future

Educational institutions can play an important role in educating students and communities about urban development, affordable housing, intercultural communication and social responsibility. In addition, school board members and trustees must be aware of their campus, environment, and surrounding communities from the perspective of recruitment and retention.

Trend: Shifting Age Demographics

Current Realities

According to the U.S. Census Bureau, by 2030, 25% of the U.S. population will be 18 or younger, and 30% will be 55 or older. Worldwide, the elderly population is projected to nearly double by 2020 (growing from 6% of the population to 9%).

Increases in life expectancy and average age, coupled with declines in birth rates and fertility rates are contributing factors to this demographic shift.

Implications for the Future

According to the U.S. Census Bureau statistics, the elderly will soon outnumber their younger counterparts, resulting in:

- Increased strain on current medical and retirement systems that are not currently structured to support growth in the elderly population
- Legislative pressures to respond to the growing needs of the elderly
- Dramatic ramifications in the labor force as older employees postpone retirement and in some cases, retire *en masse*
- Expanded need for lifelong learning and continuous education so that elderly persons can remain in the workforce or continue to engage meaningfully in communities upon retirement

Trend: Gender : Equity and Role of Women

Current Realities

According to the Bureau of Labor Statistics, although there were more male high school graduates in 1998 than female, the college enrollment rate was markedly higher for young women – 69.1% were enrolled in college while only 62.4% of young men were enrolled.

The U.S. Department of Labor projects that the labor participation rates will continue to rise among women, and edge down among men, between 1998 and 2008.

Implications for the Future

Although there is a greater level of participation of women in the workforce over the last two decades, the reason cannot solely be attributed to expanding educational and job opportunities for women. In some cases, low male earnings and increasing standards of living have “pushed” women to be earners.

According to a study by The Pew Charitable Trusts, the higher education and subsequent increases in earnings for women can adversely affect family formation. U.S. Census Bureau Statistics reveal that in the period between 1970 and 2001, the overall marriage rate in the U.S. declined by 17%.

In spite of great strides in the women’s movement, inequality and negative portrayals of women still exist; reflecting in part today’s culture and values.

Trend: Prevalence of Technology at Home, Work and Play

Current Realities

The following statistics are from the World Future Society report, “53 Trends Shaping the Future”:

According to the National Telecommunications and Information Administration, 54% of the U.S. population was online by 2001. By early 2004, 75% were internet-connected.

Implications for the Future

Computers are no longer viewed as a means or tool to complete a work task, but rather technology is omnipresent from home to work to nearly every place in between. Wireless connections, laptops, cell phones, handheld information, entertainment devices and advances in transportation (i.e., high speed rails) connect individuals almost seamlessly by removing barriers such as time, distance and even language. Lifelong learning is a necessity not only to succeeding in the workplace, but also to thriving in communities that increasingly know no boundaries.

Trend: Prevalence of Technology at Home, Work and Play (cont.)

Current Realities

Although still prevalent, the “digital divide” is narrowing: By early 2004, 61% of black children and 67% of Hispanic children had internet access at home, compared with 80% of white children.

The number of telecommuters in the United States grew 63.2% between 1999 and 2003.

All of the technical knowledge we work with today will represent only 1% of the knowledge that will be available in 2050.

Implications for the Future

According to the World Future Society report, new businesses and jobs are emerging based on the production and exchange of information. Conversely, jobs are being replaced by automation and outsourcing overseas, in an effort to be more efficient, yield more products and services, and increase profitability.

Educators are now teaching such courses as information literacy, digital communications and composing, and digital literacy to better prepare students for an ever-changing, technology-rich environment. Additionally, technology is changing the way content and instruction is delivered to students. The evolution of distance learning, online education, and connected learning⁸ are the results of students’ needs for education, but also for flexibility and variation in learning styles.

Trend: Increasing Environmental Sensitivity

Current Realities

Air: The World Health Organization estimates that three million people die each year from the effects of air pollution.

Global Warming: Though causes of global warming are still debatable, recent analyses say there is a 90% chance that the planet’s average annual temperature will rise between three and nine degrees Celsius over the next century.

Implications for the Future

People are becoming increasingly sensitive to environmental concerns, including but not limited to: air quality and pollution; global warming; recycling and waste disposal; water conservation; energy solutions; and environmental justice. Sustainability practices and resource conservation are important considerations for renovations, new developments and maintenance, both residentially and commercially. Individuals and organizations must evaluate living, working, recreational and collaborative spaces, not only through the lenses of accessibility, safety and comfort, but also with heightened environmental consciousness.

⁸ Although there are many definitions depending on the source, “connected learning” refers broadly to the effective use and integration of technology into instruction at all levels of education to facilitate the learning process.

Trend: Increasing Environmental Sensitivity (cont.)

Current Realities

Waste Disposal: According to the Environmental Protection agency, 70% of U.S. landfills will be full by 2025.

Water: Water pollution and increasing usage threaten the world’s water supply and agricultural productivity. According to “53 Trends Now Shaping the Future,” by 2050, fully two-thirds of the world’s population could be living in regions with chronic, widespread water shortages.

Environmental Justice: There is mounting concern that certain segments of society bear a disproportionate amount of adverse health and environmental effects

Implications for the Future

In the educational arena, environmentally sound philosophies will increasingly offer a competitive edge in recruiting teachers, staff and students. Individuals will seek institutions that not only embrace sustainability practices, but offer curriculum and job opportunities in environmentalism and resource conservation.

An example of an organization working to implement environmentally-sound philosophies in the educational arena is The Green Schools Initiative. The Green Schools Initiative encourages a proactive approach and outlines positive changes that K-12 schools can make to promote ecological sustainability and children’s environmental health. In [The Little Green Schoolhouse Report](#) they outline a framework for action stating that “schools can provide a healthy environment for students and staff, while promoting ecological sustainability, by using alternatives to toxic chemicals, pursuing green building and maintenance practices, changing their resource consumption patterns, serving nutritious food, and teaching students to be stewards of their communities, the earth and its resources.”

Trend: Increasing Security and Safety Measures (especially on school/college campuses)

Current Realities

From the Crime Awareness and Campus Security Act of 1990, The Department of Education is committed to assisting higher education institutions and schools in providing students nationwide a safe environment in which to learn and to keep students, parents and employees well informed about campus security.

Implications for the Future

In a post-September 11th environment, security measures and federal regulations have increased in America for nearly every sector in society, from transportation to telecommunications to agriculture and environment. Additionally, school shootings in Colorado, Wisconsin, Pennsylvania and Virginia are painful reminders of the vulnerability of our nation’s schools and colleges. Although debate continues over security versus privacy and liberties, social commentary leads us to believe that most Americans prefer a greater sense of safety at the cost of governmental intervention.

Trend: Increasing Security and Safety Measures (especially on school/college campuses) (cont.)

Current Realities	Implications for the Future
<p>According to the U.S. Department of Education’s National Center for Education Statistics, research in 2007 reveals that 60% of high schools, 42% of middle schools and 28% of elementary schools used security surveillance.</p>	<p>Ensuring safety on campuses must be a community effort and requires school coordination with board members and trustees; employees; students; parents; community leaders; service groups; business leaders; government representatives; law enforcement; and the media. Constituents must work together to organize prevention and intervention programs, employ best practices and continuously improve crisis plans.</p>

Educational Trends

Beyond the economic, societal and environmental trends, the following broad educational trends will have far-reaching effects for K-12 institutions, colleges and universities. To best prepare students of all ages for the future, through strong curriculum, practical experience and innovative teaching strategies, educational leaders must advocate continuous improvement through words and action. Partnerships with government agencies, businesses and civic leaders must be strengthened to ensure that thoughtful, integrated policies are implemented, supported and funded at every level of education.

In addition to the general educational trends, a research taskforce comprised of faculty and staff from the Neighborhood Charter School researched best practices in the following three areas: Defining constructivism, 21st Century Curriculum and Learning, and Assessment. A consolidation of their joint research follows the General Education Trends section.

Trend: Reductions in Educational Funding

Current Realities

According to the National Conference of State Legislatures, *State Budget Update*, in November 2008, 15 states are forecasting double-digit budget gaps in FY 2010; Georgia’s projected gap is \$2.1 billion (10.4% of the state’s general fund).

Implications for the Future

The slowing economy has reached the public education sector. As reported in the GPEE “Top Ten Issues to Watch in 2009:” “In state after state, shortages in revenue forced education departments to reduce spending, and, in some cases, make cuts in program or personnel....At the local level, some districts [in Georgia] have been forced to implement cost-saving measures that include reducing student transportation plans, eliminating staff in the district office, and cutting extracurricular activities.”

Policymakers in Georgia and other states continue to struggle with adequacy, equity and appropriate mechanisms and formulas for educational funding. Legislation at both the national and state levels will strive to connect funding to student achievement and school accountability; however, legislation relating to the overall economic crisis potentially will overshadow changes in the educational funding arena.

Trend: Curriculum and Learning in the 21st Century

Current Realities

According to 21st Century Schools, an organization specializing in staff development and curriculum design, 21st century curriculum should be interdisciplinary, project-based, research-driven, and connected to the local, state, national and global communities.

Implications for the Future

In today’s demanding economic and international environment, Americans will require learning beyond high school; students will need broader, more practical knowledge in addition to traditional disciplines and skills in specific fields. Ultimately, employers seek individuals who can think logically, creatively and collaboratively to solve ongoing problems; prospective students will seek the schools and institutions who afford them active and collaborative learning experiences. At the K-12 level, innovative programs and curriculum build foundations for students in the areas of multicultural and information literacy, as well as developing skills such as integrative thinking, collaboration and creativity – skills needed to compete and succeed in a volatile global economy.

Trend: Curriculum and Learning in the 21st Century (cont.)

Current Realities

Further, education should address “the whole child,” and “whole person,” fostering skills such as: collaboration; critical thinking; oral and written communication; technology; citizenship; career development; and research. Service learning, multicultural appreciation and environmental awareness are also important components.

Implications for the Future

Although public policy for both K-12 and higher education continues to emphasize the importance of the sciences, technology, engineering and mathematics (STEM disciplines), new reports demonstrate the value and need for broader, practical knowledge and skills. Through integrated curriculum, educators are connecting learning and real life/work applications to increase relevance in the learning experience. This integration can occur through team planning and teaching around themes, as well as connecting community resources and businesses to school/work projects.

Trend: Individualized, Mobile and Interdisciplinary Learning

Current Realities

Customization: High-stakes standardized testing is increasingly criticized for limiting curriculum and potentially being “one-size-fits-all.” Thus, a movement toward personalization – teaching to an individual’s abilities, talents and learning styles - is changing the way instruction is delivered.

Mobility, Technological Integration and Connected Learning: Not only is technological integration in the classroom becoming imperative to prepare students to compete in a global economy, but the need for education “anywhere, anytime” has risen, as many people work and pursue education simultaneously.

Implications for the Future

Just as classroom content, coursework and programming are changing in order to better prepare students for economic success, more effective teaching and learning models are emerging as well. The demands for individualized instruction, coupled with innovative technology and interdisciplinary approaches are changing the way that teachers at every level plan, teach and evaluate progress. K-12 schools and higher education institutions will be challenged to balance societal needs (standards and expectations) with individual learning needs (cultivating interests and strengths). Curriculum must be designed to release the potential of the individual, while also ensuring that milestones necessary for future success are met.

In addition to institutional learning goals at both K-12 and higher education levels, the development of individual learning goals and monitoring progress against those goals is becoming more common. This form of customized learning has the opportunity to benefit minorities who historically do not perform as strongly on standardized tests.

Trend: Individualized, Mobile and Interdisciplinary Learning (cont.)

Current Realities	Implications for the Future
<p>Interdisciplinary Learning: Essentially, interdisciplinary learning is a curriculum approach that employs different disciplines to address a problem or theme. The approach is used increasingly because it builds critical and creative thinking skills, along with reasoning, by engaging students in real-world, multi-faceted scenarios.</p>	<p>Technology offers a further customized experience for educators and students. Integrating technology into the classroom at the elementary level is a foundational piece to developing technological, information, and digital literacy. Additionally, faculty and staff can benefit from the convenience and customization of online learning opportunities.</p> <p>Interdisciplinary learning encourages students at all levels to make connections, to think both analytically and innovatively, and to explore problems from different perspectives. This type of learning builds critical skills to prepare students for the dynamic workforce of the future. It is imperative that faculty has time to plan, funding to execute and the necessary support from internal and external leaders.</p>

School Structure and its Impact on Learning

The organization of schools and colleges has the potential to affect student learning outcomes, particularly in K-12, but also for higher education. In K-12 school systems, board members and administrators are continuing to evaluate grade-level models, single-sex education, and choice, magnet and charter programs to improve student achievement and to facilitate learning and development for the whole child. Additionally, as families and individuals are offered greater choice in the schools they attend, competition for students increases – placing additional pressures on schools to perform at the highest level.

Trend: School Structure and its Impact on Learning

Current Realities

K-12 Structure: Neighborhood Zoned vs. Choice vs. Magnet vs. Charter
 There is continued debate over school structure. Proponents of geographic or neighborhood zoning cite community building and transportation ease as key benefits, preferring that children live, learn and play with other children in close proximity. Those advocating choice and magnet programming in K-12 are seeking the best educational match for their child’s abilities and talents and often are responding to the disparity among schools in their districts.

Grade-level Models
 School districts nationally are struggling with decision-making about grade-level models that will afford the greatest opportunity for success. Essentially, schools are wrestling with the middle school years, whether to treat them as elementary, or combine them with junior high or some variation in between.

Implications for the Future

Most parents seek the best education for their child. Ideally, neighborhood schools offer equal rigor, relevance and special programming that meet the array of children’s abilities and needs. However, because school systems usually do not have equal distribution of resources, nor do students have the same educational needs/learning styles, parents may seek alternatives to their geographic zone. Some districts offer a choice program, though often this is not without cost to the families and school systems due to logistics. Magnet programs and schools are an opportunity to cultivate a specific strength in a child, but critics believe that this structure can create a “brain drain” from the zoned schools and ultimately result in a less diverse environment for both magnet students and zoned students. Charter schools, which are publicly funded but operate independently of the public school district, also offer alternatives to families seeking greater choice. During his campaign, President Obama proposed doubling funding for the Federal Charter School Program to support the creation of more successful charter schools.

In addition to how school systems are structured, administrators are evaluating how grades are grouped. Research is inconclusive as to the grade-level clustering that affords the greatest student achievement and development. School districts must study best practices and evaluate their constituents when making decisions relating to grade-level structure. Unfortunately, changing grade-level models often becomes a funding, logistics and facility issue.

In recent years, educational policy has focused heavily on early learning (pre-kindergarten initiatives) and facilitating high school graduation. However, research indicates that success in the middle years is a key predictor of high school success and completion. From ACT’s, “The Forgotten Middle:” “It is crucial that we intervene with students in the Forgotten Middle...to ensure that they enter high school ready to benefit from high school course work.”

Trend: School Structure and its Impact on Learning (cont.)

Current Realities

Organization based on Gender:
 In 2006, President Bush signed legislation that made single-sex education legal; the U.S. Department of Education endorsed it as a potential strategy for increasing student achievement. According to the Georgia Partnership for Excellence in Education, this legislation is in part a response to the declining achievement of boys across all racial/ethnic backgrounds.

Implications for the Future

Single-sex schooling may offer an optimal learning environment for both males and females. Potential benefits include: increased student achievement; reduction in discipline referrals; increased attendance; increase in diversity of selection of courses in high school and college; and increase in diversity of non-traditional gender-specific career choices. In K-12 systems, single-sex classrooms and schools are being piloted, especially for the middle school/junior high years in an effort to limit distractions from the opposite sex, heighten focus on studies and improve self-confidence for both boys and girls.

Trend: Measuring Success

Current Realities

No Child Left Behind (NCLB)
 The purpose of the No Child Left Behind Act of 2001 is increasing student achievement – for all students – through accountability of states, school districts and schools. Key components are standardized testing, benchmarks for teacher competence, and added emphasis for underserved communities.

Implications for the Future

Measuring individual and institutional success based on matriculation, graduation and even test scores is increasingly criticized as not being reflective of performance, progress and potential. Additionally, standardization as a measure has raised concerns over achievement gaps of minorities, the indigent and the disabled, most specifically in K-12. At the college level, a movement is underway to adopt more uniformly Essential Learning Outcomes and to find better means of tracking individual success beyond college.

On the other hand, the congressionally-mandated National Assessment of Educational Progress (NAEP) is a widely accepted research tool for making state-by-state comparisons of what American students know in various subject areas by grade level. Although Georgia has made gains in these assessments, there remains a severe achievement gap across demographics – gaps that must be addressed.

Trend: Measuring Success (cont.)

Current Realities

Continuous Quality Improvement
 In *Preparing Schools and School Systems for the 21st Century*, a study released at the turn of the century by the American Association of School Administrators, says that continuous improvement should be a “driving force in every school and school system.... Educators cannot let the system stiffen or become atrophied in our fast-changing world.”

Implications for the Future

To meet the changing needs of constituents, increasingly K-12 school systems, colleges and universities are developing strategic plans and establishing measures of excellence in an effort to monitor forward progress, gaps, and develop approaches to continuously improve student achievement, customer and employee satisfaction, operational efficiency, and the bottom line.

Trend: Faculty and Staff Quality and Supply

Current Realities

K-12: Attracting and Retaining Quality Teachers
 According the National Education Association, while student enrollment is rapidly rising, more than one million veteran teachers are nearing retirement. Experts predict that overall, the U.S. will need more than two million new, highly qualified teachers in the next decade.

Implications for the Future

From a policy standpoint, the Georgia Partnership for Excellence in Education asserts, “Without a knowledgeable, skilled educator in the classroom, we will never realize the full potential of a more rigorous curriculum, expanded early learning opportunities, or an improved governance structure.”

At both K-12 and higher education levels, schools and institutions are facing teacher and faculty shortages. Educational entities must address both sides of the equation: recruitment *and* retention of quality instructors. To recruit and retain diverse, quality educators, compensation packages, search processes, reward systems, career opportunities, professional development, and teacher/faculty support systems must be evaluated and strengthened.

Trend: Faculty and Staff Quality and Supply (cont.)

Current Realities

According to GPEE, “Data on Georgia’s teacher workforce reveal that in addition to facing a high number of math and science teachers who lack full certification in their teaching field, our state has similar challenges in recruiting educators with a certificate in special education.”

Implications for the Future

Many states have initiatives to recruit and provide incentives from other professional fields to fill teaching vacancies. Most sources believe that retention must be viewed as having equal importance to recruitment when it comes to ensuring high-quality teachers in our public schools.

In addition to policy changes relating to teacher quality and supply, in Georgia the Commission for School Board Excellence recommends policies relating to school board governance and accountability; board roles and responsibilities; performance standards and education; and board candidacy and elections.

BEST PRACTICES RESEARCH

Overview

In addition to understanding general environmental, societal and educational trends, NCS requested that Matthews Consulting Group conduct best practices research interviews with leaders in the progressive education arena. However, upon further assessment, the Principal of Neighborhood Charter School suggested that Matthews Consulting Group research best practices in several specific areas and provide a summarized report to NCS.

Because this recommendation required more time, resources and effort than initially proposed, Matthews Consulting Group proposed a collaborative approach that would engage teachers and staff in a joint research effort. On a volunteer basis, a research taskforce was assembled to gather best practices research in three areas: (1) Defining 21st Century Curriculum and Learning; (2) Defining Constructivism and its Core Components; and (3) Summarizing Assessment Approaches.

The Taskforce was comprised of the following volunteer representatives:

Research Component	Volunteer
Defining 21 st Century Curriculum and Learning	Cheryll Booth Jill Hanson (Lead) Chelsea Jackson Shari Lobban
Defining Constructivism and its Core Components	Tamira Moncur Annie Perry (Lead) Stephanie Turner
Summarizing Assessment Approaches	Crystal Francois Endia Jones Lara Zelski

The following report is a consolidation and synthesis of the research provided by the Taskforce volunteers. Although the wealth of information and resources provided were all reviewed, not all resources could be referenced specifically, given the objective of condensing the information in a short window of time. The data and definitions should provide a foundation for continued exploration of the three areas as they relate to NCS' strategy and philosophy.

Defining 21st Century Curriculum and Learning

Shifting cultural, socioeconomic and age demographics, globalization, and the explosion of technology and communications media are changing the shape of everyday life at work, home and play. To compete in today's rapid-paced and unpredictable environment, students need to have the skills to interact with people and information in different ways. Students not only need knowledge in traditional disciplines, but they must become critical and creative thinkers and problem solvers; in other words, they must learn how to apply and use their knowledge. Regardless of the future path chosen, students need a broader array of skills to succeed in the 21st century. Although various sources define 21st century skills differently, the Partnership for 21st Century Skills (P21), a primary authority, promotes the following 21st century interdisciplinary themes in addition to core subjects⁹ (P21, 2004):

- Global awareness
- Financial, economic, business and entrepreneurial literacy
- Civic literacy
- Health literacy
- Learning and innovation skills (i.e., creativity, innovation, critical thinking, problem solving, communication and collaboration)
- Information, media and technology skills
- Life and career skills

The following report, based on research gathered by Cheryll Booth, Jill Hanson, Chelsea Jackson and Shari Lobban, representatives of NCS, defines 21st century curriculum and learning and summarizes some of the skills and support systems associated with preparing elementary school students to compete and succeed in the 21st century. At the elementary school level, the NCS research team focused their efforts on: global awareness; learning and innovation skills; information, media, and technology skills; and the support systems of 21st century professional development and learning environments.

Defining 21st Century Curriculum and Learning

As with other emerging and continuously improving paradigms, 21st century curriculum, learning and skills are defined broadly and applied uniquely depending upon the school, the teachers and even the students who collaboratively shape instructional direction. According to 21st Century Schools (21CS), an organization focused on curriculum design and professional development, "Twenty-first century curriculum has certain critical attributes. It is interdisciplinary, project-based, and research-driven. It is connected to the community – local, state, national and global... The curriculum incorporates higher order thinking skills, multiple intelligences, technology and multimedia, the multiple literacies of the 21st century, and authentic assessments." (21CS, 2008)

⁹ Core subjects include English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics (P21, 2004).

In contrast to traditional education, learning in the 21st century is outcome-oriented (versus time- and fact-driven), active and engaging, theme-based and connected to students' interests and experiences; it thus affords greater student freedom. Students are not taught with the goal of passing tests and milestones, but rather they learn to think critically and creatively and how to solve real-life problems. To provide students experiential opportunities to explore, inquire and reflect, teachers must teach traditional subject matter in new ways and introduce new subjects altogether, making professional development and support for educators imperative for success.

Global Awareness

An important discipline noted by 21st century educational philosophies is global awareness and appreciation. Technology, trade and transportation innovations have created a world with relatively no boundaries, thus demanding a greater understanding of diverse cultures, the ability to collaborate and find common ground among differing perspectives, and a greater need to overcome language barriers to communicate effectively. Mike Eskew, former CEO of UPS, emphasized the need for today's workers to be more "global trade literate, sensitive to foreign cultures, and conversant in different languages." However, these needs are "not exactly strong points in the U.S., where fewer than half of high school students are enrolled in a foreign-language class and where social studies curricula tend to fixate on U.S. history" (Wallis and Steptoe, 2006).

The Partnership for 21st Skills describes global awareness as "learning from and working collaboratively with individuals representing diverse cultures, regions and lifestyles in a spirit of mutual respect and open dialogue in personal, work and community contexts" (P21, 2004). To achieve the outcome of global awareness, students must be exposed to cultures in different ways. Curricula must be designed and/or reworked to offer multicultural experiences, exchanges and interactions, which require commitment from school leaders, professional development for teachers, time, and funding.

Stanford International represents an example of how a public elementary school can and should embrace global education. Approaches used at Stanford International include: all students take some classes in either Japanese or Spanish; subjects taught in English have an international flavor and context; students are exposed to technology early; and foreign cultures are explored through the exchange of gifts, messages, and by joining in service projects. Another example of global-minded curricula is the international baccalaureate (I.B.) program offered in many districts. I.B. is a "rigorous, off-the-shelf curriculum recognized by universities around the world and first introduced in 1968 – well before globalization became a buzzword" (Wallis and Steptoe, 2006).

Learning and Innovation Skills

Learning and innovation skills, as defined by the Partnership for 21st Century Skills, encompass creative thinking, critical thinking, problem solving, communication and collaboration. In the book Critical and Creative Thinking, Sandra Klensz states that the goal of incorporating critical and creative thinking processes into K-12 curricula is “to develop individuals who value knowledge, learning and the creative process, who can and will think for themselves, yet recognize the limits of individual reflection and the need to contribute to and build upon mutual understandings of social situations” (Klensz, 1987). The abilities to think creatively and critically and to apply learning outweigh the amount of facts a student retains in terms of preparing them for an increasingly complex work and living environment.

Learning how to think versus learning what to think is necessarily more active, engaging and exploratory. Curriculum is characteristically more theme-, concept- and outcome-based versus time- or information-driven. Students are challenged with collaborative real-life projects and problems that require both individual reflection and teamwork. Students learn that there is often more than one right answer and almost always multiple paths to those solutions. Listening to other opinions and articulating their unique perspectives are central to collaboratively solving problems. Teachers, too, are challenged to be partners, not directors, in the learning experience as they develop flexible curricula that builds “students’ understanding of concepts, skills and processes of the various disciplines and fields and of their methods for constructing and evaluating knowledge” (Klensz, 1987).

Learning how to think, analyze, synthesize, listen, articulate and work with diverse opinions turns a class assignment into a community experience. Students need to develop “thinking abilities in order to move their learning beyond memorization or passive acceptance, to understanding and commitment to persevere until clarity and insight are achieved. Without a commitment to critical and creative thinking the values of rationality, truth and justice achieve little substance in the classroom” (Klensz, 1987). Increasingly, schools are realizing that thinking, not just knowledge assimilation, is an immediate educational goal if America’s students are to compete in the world marketplace. “Perhaps most importantly in today’s information age, thinking skills are viewed as crucial for educated persons to cope with a rapidly changing world. Many educators believe that specific knowledge will not be as important to tomorrow’s workers and citizens as the ability to learn and make sense of new information.” (Cotton, 1991)

Information, Media and Technology Skills

Citizens in the 21st century have unprecedented access to information via both paper-based and electronic media. Technology tools are continuously reinvented and improved, and communication and collaboration occur anywhere, any time and in any location thanks to the Internet, wireless broadband, cell phones and other mobile technologies. The challenge for educators is not only how to prepare students, but also how to stay current themselves with regard to information, media and technology. In the introduction to his book Web Literacy for Educators, Alan November points out, “We have some very important decisions to make if we

want to truly prepare our children for a world in which the Internet is the dominant media. Continuing our current strategy of filtering the Internet is no longer sufficient. Children need us to be exemplary role models.” (November 2008)

Information, Media, and Information, Technology and Communication (ICT) literacies are evolving curricular disciplines. The Partnership for 21st Century Skills defines each of these areas in their framework (P21, 2004):

- Information literacy comprises: (1) efficient and effective access to information; (2) critical evaluation of information and resources; and (3) accurate, creative and ethical use of information
- Media literacy involves both the analysis of media message construction and interpretation, as well as an understanding of how and when to use media creation tools and conventions
- Information, Technology and Communication literacy encompasses using technology appropriately and effectively to research, organize, evaluate and communicate information

Because resources and information come in all shapes, sizes and media, the American Association of School Librarians (AASL) defined the “Standards for the 21st Century Learner.” These standards outline the skills, behaviors/actions, responsibilities and self-assessment strategies in four key areas of 21st century learning and growth (AASL, 2007):

- Inquire, think critically and gain knowledge
- Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge
- Share knowledge and participate ethically and productively as members of our democratic society
- Pursue personal and aesthetic growth

The standards are based on a set of common assumptions that emphasize the importance and value of understanding how to appropriately, accurately and ethically find and use information (AASL, 2007):

- Reading is a window to the world
- Inquiry provides the framework for learning
- Ethical behavior in the use of information must be taught
- Technology skills are crucial for future employment needs
- Equitable access is a key component of education
- The definition of information literacy has become more complex as resources and technologies have changed
- The continuing expansion of information demands that all individuals acquire the thinking skills that will enable them to learn on their own
- Learning has a social context
- School libraries are essential to the development of learning skills

The bottom line is that the world has changed and continues to do so. We are bombarded with images, words and opportunities in a variety of media. Living, working and playing in the 21st century demands a deep understanding of how to find and use information efficiently, accurately and ethically; and how to leverage technology as a tool for effective research, information-sharing and communication. In his article, “Teaching Zack to Think,” Alan November summarizes, “The most vital skills will involve applying knowledge to produce information and facilitate communication. And one of the most important skills will involve evaluating the resources you decide to use. As much time as we spend teaching kids how to find things on the Net, we need to expend ten times more effort teaching them how to interpret what they’ve found.” (November, 2009)

21st Century Professional Development and Learning Environments

In order to deliver effective, experiential instruction to prepare the 21st century learner, support systems must be well-designed, implemented and continuously evaluated and improved. Although the Partnership for 21st Century Skills identifies the five support systems of (1) standards; (2) assessment; (3) curriculum and instruction; (4) professional development; and (5) learning environments, the research team focused on professional development and learning environments.

According to the Partnership for 21st Century Skills, professional development for teachers and administrators should help facilitate the integration of 21st century skills into classrooms and schools. Aligned with standards, curriculum and assessment, 21st century professional development programs share the following characteristics (P21, 2007):

- Ensure educators understand the importance of 21st century skills and how to integrate them into daily instruction
- Enable collaboration among all participants
- Allow teachers and principals to construct their own learning communities
- Tap the expertise within a school or school district through coaching, mentoring and team teaching
- Support educators in their role of facilitators of learning and use of 21st century tools

Teachers need training, mentoring and learning opportunities to explore instructional models and assessment strategies so that they may in turn create flexible, experiential, outcome-based lessons to support differentiated learning. In addition to understanding the relevance and content relating to 21st century skills, educators need to develop their own skills and strategies relating to the tools, technology and resources available to create engaging learning environments and lessons. Through online courses; mentoring; learning communities (online or in person); best practices research; and implementation and evaluation, teachers and administrators hone their own assessment skills and explore new strategies to engage tomorrow’s critical thinkers and problem solvers.

In a pilot project funded by the Microsoft Partners in Learning program, the Alabama Best Practices Center asked principals in 40 schools to select a five-teacher team to participate in a

21st Century Schools professional development community; the aim was to develop teacher-advocates who would spread awareness and interest in Web-based teaching strategies. The pilot worked better in some schools than in others, and certain factors seemed to influence success. For example, the teacher-teams needed to have a “critical mass” of comfortable and curious technology users versus reluctant users. Strong leadership, vision and support from principals, flexible “safe access” policies, sufficient funding and even teacher leadership were foundational to successfully implementing new teaching strategies (Alabama Best Practices Center, 2007).

Thus, in addition to well-trained, supported and committed teachers and educators, the learning environment plays a pivotal role in the development of 21st century learners. “Learning environments – the structures, tools and communities that inspire students and educators to attain the knowledge and skills that are required of them – must embrace a diverse and complex world of people, places, and ideas.” (Lang, 2009). Additionally, a learning environment is broader than a traditional classroom, as technology affords interaction, collaboration and information-sharing, regardless of place and time. As Paige Kuni, worldwide manager of K-12 education for Intel Corporation describes: “Learning supports are only valuable if they effectively reinforce human relationships, give relevance to learning and encourage student engagement.” (Lang, 2009)

Perhaps the key to a stimulating learning environment is adaptability, for the world changes in a flash and educators must be flexible in creating the spaces and opportunities for connections that will make learning engaging, challenging and applicable. It is not enough to have state-of-the-art technology; modern, ergonomic furniture and fixtures; or a green campus. The physical space should be tied to curriculum and learning; it should not exist separately from the real world. As Bernie Trilling of the Oracle Learning Foundation said, “The learning environments of the 21st century will encompass a powerful mix of face-to-face learning opportunities with digital connections to bridge cultures and blend virtual and real-life relationships.” (Lang, 2009). As such, learning environment choices – the physical space, the tools, the resources and connectivity to the broader community – should be determined based on what will most encourage student learning and enhance their experience.

Conclusion

Much political conversation focuses on reading and math scores and closing the achievement gaps. However, the conversation should focus less on summative tests and meeting minimum standards, and more on whether or not we are preparing our children to be critical thinkers and problem solvers who can survive in the 21st century. As Claudia Wallis and Sonja Steptoe wrote, we should be asking ourselves “...whether an entire generation of kids will fail to make the grade in the global economy because they can’t think their way through abstract problems, work in teams, distinguish good information from bad or speak a language other than English.”(2006)

To develop 21st century skills such as global awareness; learning and innovation skills information; and technology and communication literacies, teachers must engage students in authentic experiences and activities. Lessons should inspire students to think creatively and critically, working both individually and communally. The training and experience of the teachers, as well as the thoughtful and flexible design of the learning environment, are key factors in facilitating 21st century learning. In addition, administrators must be champions of new teaching strategies and technological integration. For students to achieve their potential, teachers must be able to identify their learning styles and flexibly respond by offering rich, differentiated experiences that cultivate strengths and address challenges. The child comes first-- not the test score, not the timeline, not the milestone chart. For American students to compete and to thrive in today's world, education must be a "whole child" development endeavor.

Defining Constructivism and its Core Components

Proponents of constructivism believe that students create and develop knowledge by engaging in thought-provoking, authentic experiences, where they are not only introduced to new concepts, but also have the opportunity to explore, question and apply them. The learning experiences, tasks and activities are often interdisciplinary and theme-based and require teamwork. Learning is about thinking, reflecting, questioning, applying and doing rather than simply hearing, reading and reciting back information.

Essentially, instruction is designed to actively engage and empower students in their learning process because, “autonomy and initiative prompt students’ pursuit of connections among ideas and concepts. Students who frame questions and issues and then go about answering and analyzing them take responsibility for their own learning and become problem solvers, and perhaps more important, problem finders.” (Brooks and Brooks 1999). Teachers, therefore, pose broad questions, share primary resources, provide real-life context, and encourage cooperative learning, but they do not focus solely on the right answer. They teach students how to think, to reason, to find information, and to solve problems.

Although there are many definitions of constructivism, it takes its roots from a handful of educational philosophies and pedagogies; the common themes of this progressive educational philosophy are summarized in this section of the report. The summary, based on research gathered by Tamira Moncur, Annie Perry, and Stephanie Turner of The Neighborhood Charter School in Grant Park, seeks to define constructivism, review its background and relevance, and outline the characteristics of a constructivist classroom and the role of the constructivist teacher.

Defining Constructivism

In Creating and Sustaining the Constructivist Classroom, Bruce Marlowe and Marilyn Page describe the main proposition of constructivism: “Learning means constructing, creating, inventing, and developing our own knowledge...Learning in constructivist terms is both the process and the result of questioning, interpreting and analyzing information; using this information and thinking process to develop, build and alter our meaning and understanding of concepts and ideas; and integrating current experiences with our past experiences and what we already know about a given subject.” (2005)

In other words, constructivism is not about how many facts a student has retained, how many books one has read, or how many “A”s someone has received. Constructivism focuses on in-depth understanding of “big ideas” and concepts and how students can apply their knowledge to solve complex, interdisciplinary problems. Constructivist lessons provide opportunities for students to use their personal experience and that of others, to explore possibilities and not simply to find the “one” right answer. Constructivism teaches students to think, to act and to reflect. In essence, constructivism prepares students for the real world.

“Rather than assimilate a body of knowledge about one’s world environment, constructivists believe we construct meaning based upon our interactions with our surroundings. These interactions provide the evidence and the opportunities for experimentation with the world and thus, construct our realities.” (Warrick, *Constructivism: Pre-historical to Post-modern*). The learner is at the center of the constructivist pedagogy, and the teacher is the champion, advocate, challenger, and guide all at once. Brooks and Brooks describe the vital role constructivist teachers play in engaging and empowering their students – teachers free their students from dreary fact-driven curricula, give students the power to follow trails of interest and reach unique conclusions, and enlighten them about the complexities of the world and the value of diverse perspectives (Brooks and Brooks, 1999).

Background and Relevance

The roots of constructivism draw from a number of educational philosophies and paradigms – Rousseau, Dewey, Piaget, Wigginton, Vygotsky, Montessori, and others. A common theme among their theories is that teacher-dominated classrooms, controlled curriculum and measuring by regurgitating information – what they view as traditional educational approaches – stifle creativity, curiosity, and independent thinking. Although the earliest theories centered on the individual learner, over time the focus has shifted to the social interactions of learners. “Curriculum is most powerful when teachers, with their experiences, interests, and knowledge (including state and district curriculum mandates), and students, with their experiences, interests, and knowledge come together. Curriculum developed this way goes beyond what any one individual can produce.” (Short et. al., 1996)

In John Dewey’s *Pedagogic Creed*, he states his beliefs that the educational process is psychological and sociological, and that a child’s instincts provide the starting point for education. “It is impossible to prepare the child for any precise set of conditions. To prepare him for the future life means to give him command of himself; it means so to train him so that he will have the full and ready use of all his capacities; that his eye and ear and hand may be tools ready to command, that his judgment may be capable of grasping the conditions under which it has to work, and the executive forces be trained to act economically and efficiently.” (Dewey, 1997)

The constructivist philosophy does not preclude assimilation of information (i.e., learning standards, knowledge targets, etc.), but rather is built on the premise that information gained in the context of experiences and interactions is more relevant and meaningful. Brooks and Brooks offer a comparison of traditional paradigms versus constructivist classrooms: “In traditional classrooms, students are trained to repeat specific procedures and chunks of information. When they are able to do this, they are said to have ‘learned.’ This is generally measured or assessed through multiple-choice or short-answer tests. In the constructivist classroom, deep understanding rather than imitative behavior is the goal (Brooks and Brooks, 1999).

The Constructivist Classroom

Each classroom will be unique to the teacher and students, as they share responsibility for creating a productive classroom climate and working together as a community. “When you walk into a constructivist classroom, you note the difference right away. Student art work of various kinds is displayed everywhere. Students are reading from ‘real books’...learning mathematics by manipulating figures and forms. Some constructivist classrooms even have their own library, consisting of trade books and books published by children in the class,” (Alkove and McCarty, 1992). The environment is filled with forms, objects, books and resources to facilitate dialogue and action. Students take an active role in creating the learning environment.

Because constructivism is learner/student-centered, a common misconception about the approach is that the teacher is not in charge and plays a diminished role as compared with traditional education. However, designing constructivist lesson plans requires time, intense reflection and continuous training and support. Implementing the lessons and evaluating performance demands a balance of focus, facts, flexibility, and creativity. According to Brooks and Brooks, “in the constructivist classroom, the teacher searches for students’ understandings of concepts, and then structures opportunities for students to refine or revise these understandings by posing contradictions, presenting new information, asking questions, encouraging research, and/or engaging students in inquiries designed to challenge current concepts.” They highlight five overarching principles evident in constructivist classrooms (Brooks and Brooks, 1999):

1. Teachers seek and value their students’ points of view
2. Classroom activities challenge student suppositions
3. Teachers pose problems of emerging relevance
4. Teachers build lessons around primary concepts and “big” ideas
5. Teachers assess student learning in the context of daily teaching

In the constructivist classrooms, teachers encourage students to explore, to question, to challenge and to engage in dialogue in an effort to create solutions to real-life, interdisciplinary problems and/or to build the paths to achieving tasks. Teachers thoughtfully design the framework for the lessons, but they must be observant, open to new ideas and be able to change their lesson plans based on students’ responses, inquiries and reflections. Student thinking, dialogue and initiative are key drivers of the ultimate instructional strategy and direction. Bob Strachota described his role as an educator in, On Their Side: Helping Children Take Charge of Their Learning: “I have to find ways to help children take responsibility for inventing their own understanding of the world and how to live in it. To do this I have to struggle against both my training and my instincts, which strongly urge me to be directive.”

Conclusion

Demand continues to grow for knowledge and service workers, and employers value and seek out critical and creative thinkers, problem-solvers and lifelong learners to compete in today's global economy. Traditional educational approaches with rigid teacher-directed curriculum and timelines, intense focus on passing state mandated tests, and emphasis on knowledge versus application, fail to prepare students for the volatile "real world" that awaits them.

In his article, "The Kind of Schools We Need," Elliot Eisner highlights characteristics of a more experiential, active and engaging learning environment – an environment that doesn't simply transfer knowledge, but rather teaches students to apply their knowledge (2002):

- Schools would not hold as an ideal that all students get to the same destination at the same time. They would take seriously the idea that a child's personal signature, his or her distinctive way of learning and creating, is something to be preserved and developed.
- Schools would recognize that different forms of representation develop different forms of thinking, convey different kinds of meaning, and make possible different qualities of life. Furthermore, the most important forms of learning are those that students know how to use outside of school, not just inside school.
- Teachers would be as interested in the questions students ask after units of study, as they are in the answers students give. Thus, teachers would encourage deep conversation in classrooms.
- Ultimately, schools would help students assume increased responsibility for framing their own goals and learning how to achieve them.

As an educational philosophy, Constructivism offers a framework to stimulate intellectual curiosity and develop critical thinkers and problem-solvers. Constructivism places the learner at the center and helm of his or her pursuit of knowledge and acknowledges that each learner brings unique experiences and interests to the table. Although individuals must take responsibility for their knowledge, development and ability to apply what they have learned, schools – their administrators and teachers – are still accountable and must therefore continue to improve the context and environment they provide for students to explore, discover and achieve.

Summarizing Assessment Approaches

Fierce debates continue over how much teachers are focusing on drilling and test preparation versus creating environments that encourage critical and creative thinking, real-life applications and preparing students to compete and succeed in the 21st century. Opponents to standardized testing believe the tests do not measure thinking and reasoning skills, fail to accommodate different learning styles, and by design do not measure an individual's progress and potential. However, without a testing standard, on what basis will educators, families and even legislators have for making important, data-driven comparisons and decisions for the future of America's children?

The following report, based on research gathered by Crystal Francois, Endia Jones and Lara Zelski of the Neighborhood Charter School, summarizes the strengths and challenges of formative and summative assessment. In her article, "The Concept of Formative Assessment," Carol Boston defines formative assessments as opportunities where teachers measure how students are learning and/or progressing over the course of instruction and then use the information diagnostically to enhance instruction. Although there are many approaches for formative assessment, this report probes the examples of analyzing student portfolios and conducting formal performance assessments. Summative assessments on the other hand, judge learning achievement at a point in time after instruction has taken place. Summative assessments do not create the opportunity for proactively altering instruction to meet student needs, but do provide administrators and educators with data for making large-scale comparisons and future decisions (Boston, 2002). In the cases of both summative and formative assessment, the rating scale and accommodations for students with special needs are important considerations for understanding and validating data and results.

Benefits and Challenges of Standardized Testing (Summative Assessment)

Government-mandated, standardized testing receives much political, educational and societal attention. Proponents support the use of point-in-time, summative tests as a way to ensure students are meeting educational standards and that teachers are held accountable for learning. The results provide administrators, schools boards and even funders with valuable information relating to the effectiveness of instruction. Additionally, standardized tests allow for large-scale comparisons of what students know and can do in various subjects by grade levels. According to the Georgia Partnership for Excellence in Education, "researchers agree that the congressionally-mandated National Assessment of Educational Progress (NAEP) is the best tool available for drawing state-by-state comparisons of what America's students know and can do in various subject areas at each grade assessed." Furthermore, in Georgia the Criterion-Referenced Competency Tests (CRCT) measure how well students acquire skills and knowledge described in the Georgia Performance Standards (GPS). These end-of-the-year assessments yield information on academic achievement at the student, class, school, system, and state levels; this information can be used by educators, families and legislators in making decisions about what students and schools need to do in order to continue to improve performance.

Benefits and Challenges of Formative Assessment

In general, “formative assessment helps support the expectation that all children can learn to high levels and counteracts the cycle in which students attribute poor performance to lack of ability and therefore become discouraged and unwilling to invest in further learning” (Ames, 1992; Vispoel and Austin, 1995). Types of formative assessment include teacher observation; classroom discussions based on thought-provoking and reflective questions; analysis of tests and homework to understand deep thinking and reasoning; reviewing portfolios (or collections) of work to gauge student development over time; and providing specific feedback to students in the form of comments and suggestions for improvement.

It is important for a student’s growth and development that the focus of learning is not simply to get the right answers. In their book, *In Search of Understanding: The Case for Constructivist Classrooms*, Brooks and Brooks suggest, “Students who learn in settings that encourage individual construction of knowledge do not see the content area boundaries so clearly. Learning about our world is inherently interdisciplinary. Solving our world’s problems requires creative thought. The big price paid by teachers who emphasize ‘rightness’ is losing the ability to evoke creative student work” (1999). If students are told only that their answer is incorrect or wrong, they may doubt their ability, have diminished self-esteem or lose sight of the path to achieving their learning objectives. For these reasons, “feedback given as part of formative assessment helps learners become aware of any gaps that exist between their desired goal and their current knowledge, understanding, or skill and guides them through actions necessary to obtain the goal.” (Ramaprasad, 1983; Sadler, 1989)

Formative assessments are effective when teachers have the time, training and support to consistently implement them, reflect on results and continuously improve instruction to achieve results. Instructional improvements based on assessment might include reviewing and/or re-teaching subject matter, providing applications of material, or trying alternative approaches – all in an effort to improve student success.

Portfolio Assessment

Student-constructed portfolios, a basis for formative assessment as mentioned above, allow educators to evaluate not only finished products, but also the developmental thought processes of students and the writing programs themselves. “Whereas in the past we rated papers based on text features such as ideas, organization, wording, mechanics, and flavor, we now can also examine the habits, preferences, and judgments of the writers in order to determine what they think as they produce.” (Graves and Sunstein, 1992). Arguing against the superficiality of timed writing tests, ratings based on traditional dimensions only (i.e., ideas, organization, mechanics, etc.), and single-work grading, portfolio assessment provides a broader, more authentic basis for assessing individual skills and has developed sufficiently to be adapted to larger scale settings.

Performance Assessments

Performance assessments offer opportunities for formative assessment and place greater emphasis on the application of learning (what a student can do) versus meeting a knowledge target (what a student knows at a point in time). In Classroom Assessment: Principles and Practice for Effective Instruction, McMillan defines a performance assessment as “one in which a teacher observes and makes a judgment about the student’s demonstration of a skill or competency in creating a product, constructing a response, or making a presentation.” (McMillan, 2004). Performance assessments connect both students and teachers in learning and continuous development processes. Students are engaged in an interdisciplinary application or problem-solving experience that requires reasoning, reflection and active-learning. Teachers establish multiple criteria for measuring performance and continuously examine instructional goals. McMillan further summarizes the characteristics of performance assessments as follows (2004):

- Students perform, create, construct, produce or do something
- Deep understanding and/or reasoning skills are needed and assessed
- Involves sustained work, often days and weeks
- Calls on students to explain, justify, and defend
- Performance is directly observable
- Involves engaging ideas of importance and substance
- Relies on trained assessor’s judgment for scoring
- Multiple criteria and standards are pre-specified and public
- There is no single “correct” answer
- If authentic, the performance is grounded in real-world contexts and constraints

The key challenges with using performance assessments to evaluate learning are reliability, sampling and time. Although carefully constructing the criteria; clearly articulating the task; and thoughtfully developing the scoring rubric and procedures all strengthen reliability, scoring is ultimately based on professional judgment, which is subject to variation and human error. Additionally, because student performance can vary greatly from one time to another, it is important to observe a sampling of the student’s work. However, it takes considerable time for students to do performance assessments, which often limits the available samples and prevents generalization of results. Furthermore, from an educator perspective, designing the tasks, developing the scoring rubrics, administering the task and providing thoughtful feedback is extraordinarily time-consuming. In spite of the challenges, when the teacher’s approach is “thoughtful, reflective and rigorous,” the strengths outweigh the weaknesses and offer insight into the deep understanding, reasoning and skills development of students.” (McMillan, 2004)

Assessment Rating Scales

Rating scales are used to indicate the degree to which a dimension or target is present and provide mechanisms for reporting and communicating levels of performance. According to

McMillan, three general scales are used: (1) numerical; (2) qualitative; and (3) combination combined; the following chart summarizes key characteristics of each scale (McMillan, 2004).

Type of Scale	Characteristics
Numerical	<ul style="list-style-type: none"> • Uses numbers on a continuum to indicate different levels of proficiency in terms of frequency or quality • More points on a scale permit greater discrimination, provide more diagnostic information, and permit more specific feedback to students
Qualitative And Combinations	<ul style="list-style-type: none"> • Uses verbal descriptions to indicate student performance • One type indicates the different gradations of a dimension, but does not reference a standard (e.g., a checklist) • A second type includes gradations of the criteria and an indication of its worth/weight (incidentally, this is the most common type of rating scale for performance assessments, as it combines both a qualitative and quantitative component)

An additional consideration relating to rating scales is whether the scale is holistic or analytic. A holistic scale “is one in which each category of the scale contains several criteria, and yield a single score that gives an overall impression or rating.” (McMillan, 2004). Holistic scales are valued for simplicity and summation. In contrast, an analytic scale is “one in which each criterion receives a separate score.” (McMillan, 2004). Although often more time-consuming to create and score, analytic scales offer better diagnostic information and feedback to both the learner and teacher.

Assessment Accommodations

Students with special needs require additional individualized assessments with appropriate accommodations, making it critical to identify disabilities and necessary customization. The 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) states that students with exceptional learning needs must have access to participate in the general curriculum; in addition, the No Child Left Behind Act and subsequent legislation require states and their school districts to do all that is possible to foster success for all students. Additionally, achieving learning objectives is important in building self-esteem, encouraging self-improvement, and eventually achieving self-actualization. To meet performance goals and standards, “a wide range of assessment approaches must be used, along with appropriate accommodations that enhance, not reduce, the chance of academic success. The intent of

accommodations in assessment is not to give students with exceptional learning needs an advantage, but rather to measure what they really know.” (Reick and Wadsworth, 2005). Traditional paper-and-pencil tests, assessing end-products, and providing multiple opportunities to demonstrate learning can be used in conjunction to measure progress for students with special needs; and appropriate accommodations should be individualized for specific needs.

Conclusion

A rapidly changing, global economy demands greater emphasis on critical thinking and the ability to apply learning to complex problems. Although administering a True or False test or multiple choice exam might be easier and faster, “assessment through teaching, through participating in student/teacher interactions, through observing student/student interactions, and through watching students work with ideas and materials tells us more about student learning.”

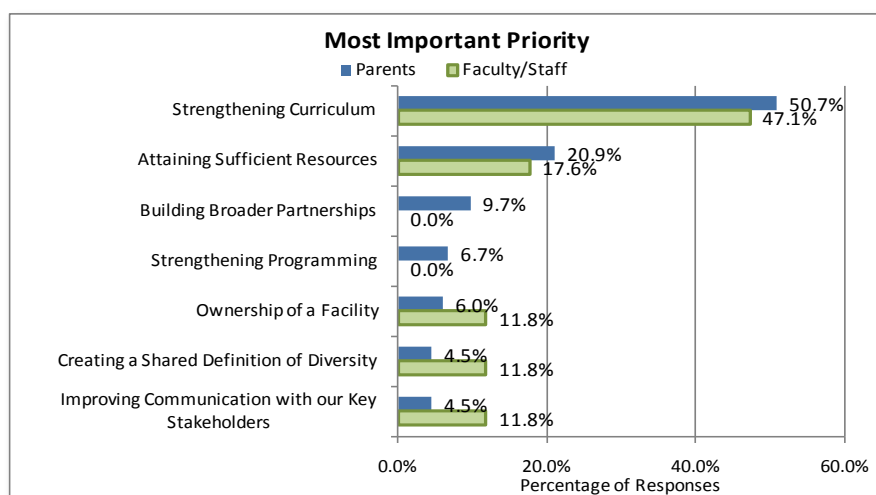
On the other hand, summative assessments provide information for larger-scale comparisons and help ensure educational standards. Continued exploration is required to understand how classroom formative assessments relate to external summative tests, and the roles both assessments can play within the Neighborhood Charter School.

VISION AND PRIORITIES FOR THE FUTURE

The purpose of the environmental scan and depth of analysis is to identify the opportunities, which if seized, will create a relevant, robust, innovative learning experience for NCS students. Interview and focus group participants were asked to identify key elements of “their ‘ideal’ vision for NCS and its future,” as well as identify specific priorities and areas of focus that must be included in the strategic plan, in order for NCS to achieve its vision and mission. Once themes and ideas emerged from these discussions, survey participants were given an opportunity to rate which of the identified priorities were most important, and as well, rate their satisfaction with NCS’ current performance in those areas.

To that end, this section highlights the key themes that emerged during the environmental scan activities related to vision elements and critical priorities; these themes will be used by NCS leadership during the planning process.

Parents (50.7%) and faculty/staff (47.1%) rated *Strengthening the Curriculum* as the most important priority. *Attaining Sufficient Resources* was rated as the second most important priority by parents (20.9%) and faculty/staff (17.6%).



Parents and faculty/staff differ on which areas are the most important after their top two choices. Parents want NCS to focus on *Building Broader Community, Corporate and Institutional Partnerships* (9.7%); faculty/staff selected *Ownership of a Facility* (11.8%), *Creating a Shared Definition of Diversity* (11.8%), and *Improving Communication with our Key Stakeholders* (11.8%) as equally important.

The survey also provides leadership with interesting insight into how well NCS is currently performing in the identified priority areas. This insight will be very important as NCS develops a vision for the future and identifies the appropriate strategies and implementation plans for continued success.

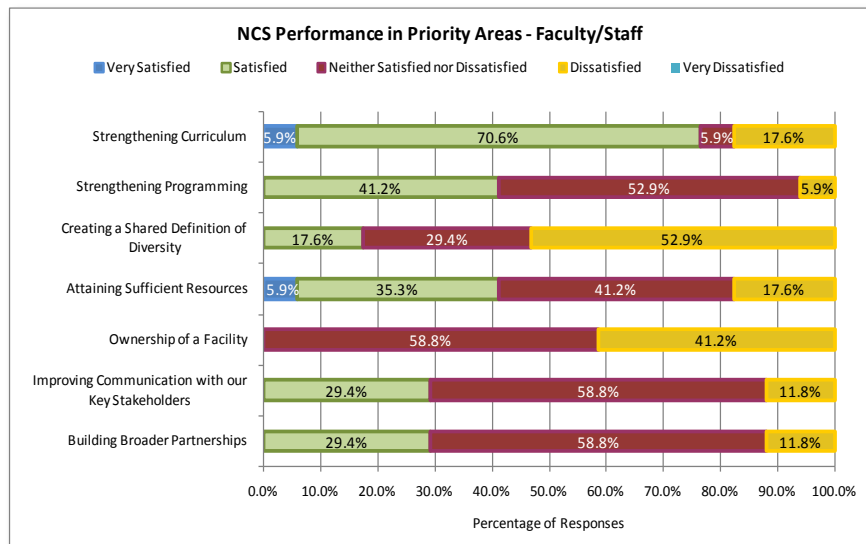
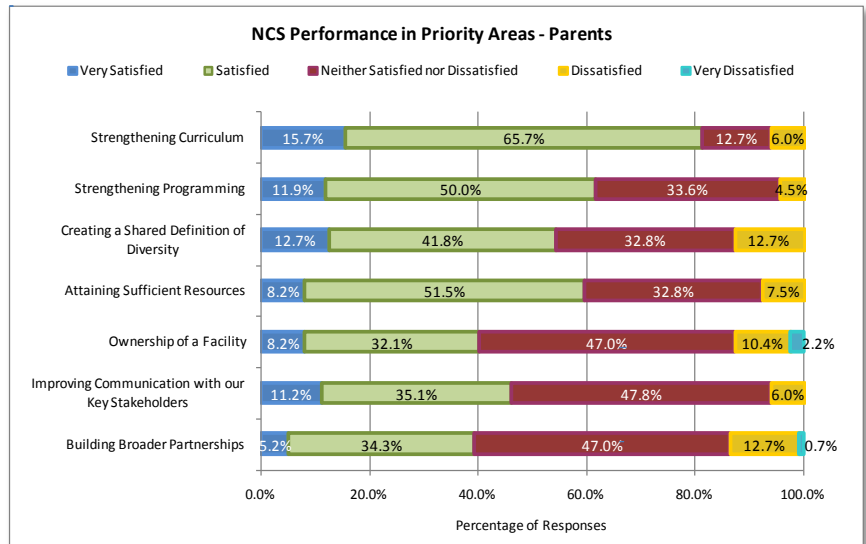
As one might expect from the feedback in the SWOT Analysis, survey participants are most satisfied with NCS’ performance in the area of *Strengthening the Curriculum*, with parents (15.7% very satisfied and 65.7% satisfied) and faculty/staff (5.9% very satisfied and 70.6% satisfied). The majority of parents are also satisfied with NCS’ performance in the areas of *Strengthening Non-Instructional and Supportive Programming* (very satisfied 11.9% and

satisfied 50%) and *Creating a Shared Definition of Diversity* (very satisfied 12.7% and satisfied 41.8%).

Parents are most dissatisfied with *Ownership of a Facility; Improving Communication with our Key Stakeholders; and Building Broader Community, Corporate and Institutional Partnerships*.

In each case, parents who participated in the survey rated their satisfaction with all of these priority areas as less than 50%.

Faculty/staff are either neutral or more dissatisfied with the performance of the other priority areas. In particular, there is overwhelming dissatisfaction related to *Ownership of the Facility* (58.5% neither satisfied nor dissatisfied and 41.2% dissatisfied). Faculty/staff also indicated a high degree of dissatisfaction in the areas of *Improving Communication with Our Stakeholders* and *Building Broader Community* (58.8% neither satisfied nor dissatisfied and 11.8% dissatisfied).



The data gathered during the environmental scan indicates that many of the priority areas for NCS and its future are also current weaknesses. This is an important data point for the leadership and steering committee to consider as it identifies its goals and allocates resources to support those goals. In other words, if NCS is to realize continued success, it must develop strategies that will overcome its current weaknesses in pursuit of building a foundation for continued and sustained success.

When environmental scan participants were asked to share their “ideal” vision and priorities for the planning period, the themes provided on the following pages emerged.

Priorities and Related Themes	
<p>Values and Culture</p>	<ul style="list-style-type: none"> • NCS is a diverse and inclusive neighborhood school. The student/family population is a reflection of the school’s goals; the school demonstrates that commitment through a registration process that better aligns with the changing demographics of the neighborhood. • Effective two-way, transparent communication exists between NCS and its key constituent groups (parents, community, APS, board, etc.). • NCS is a physically and emotionally safe and nurturing environment for its faculty/staff and students. • The learning process is student-centered/guided and there is the belief that every child can learn and use their talents and strengths to reach their greatest potential. • A high level of parental involvement is a critical component of the NCS experience. Parents feel that they are able to contribute their talents and resources to support the overall NCS vision and mission. • A strong sense of community is promoted and developed through the high involvement and interaction between NCS’ key constituent groups.
<p>Curriculum and Supportive Programming</p>	<ul style="list-style-type: none"> • The curriculum and support programming ensures that students are prepared for the increasing competitive global environment. • Related arts is well-integrated into the curriculum. • There is a high degree of synergy between grade-levels and the curriculum is aligned to support a student’s transition and progress from grade to grade. • Continuous improvements to the curriculum are made on an on-going basis and a higher level of academics is in place, as evidenced by the implementation of best practices and 21st century teaching and learning approaches. • Foreign languages are a critical component of the curriculum. • A visible conservation practice supports sustainability practices inside and outside of the classroom. • Innovative technologies are integrated into the curriculum to enhance teaching and learning.

Priorities and Related Themes	
<p>Student Outcomes</p>	<ul style="list-style-type: none"> • Student volunteerism is a highly visible part of the NCS experience. • Students participate in volunteer activities within the local and global community and understand the importance of contributing to, and taking responsibility for, their community and surroundings. • Early educational experiences contribute to student interest in life-long learning. • Students consistently achieve a high-level of academic achievement. • The learning experience promotes the student’s holistic development, ensuring that students have the foundation to become respectful, ethical, citizens of the world. • Students develop critical thinking and problem solving skills that allow them to apply their knowledge to real-live situations and experiences.
<p>Communications and Public Relations</p>	<ul style="list-style-type: none"> • NCS can clearly articulate its niche; the curriculum, programming and operations are aligned to support its unique position. • The NCS marketing and public relations strategy builds awareness and support for the school. • NCS is recognized locally and nationally as a community-based education model and is sought out as a best practices model. • An archive is maintained to retain key facts, stories and artifacts of NCS’ history and culture.
<p>Resources: Human Resources</p>	<p>Leadership</p> <ul style="list-style-type: none"> • NCS has the necessary administrative “bench strength” to effectively provide academic and operational leadership. • Formal succession plans are in place to ensure stable, sustainable administrative and board leadership. • Governance policies and effective decision-making processes exist to support the operation of the school, as well as the non-profit entity. • Board members understand the needs of key constituent groups and make decisions in the best interests of student development/achievement and the long-term sustainability of NCS.

Priorities and Related Themes	
<p>Resources: Human Resources (continued)</p>	<p>Faculty/Staff</p> <ul style="list-style-type: none"> • High-quality teachers are recruited and retained. • NCS has the proper human resources to effectively support its operations (board support, fundraising and grant writing, etc.); instruction (curriculum leadership, best practices development and implementation, etc.); and supportive programming (out-of-school programming, etc.). • Teachers are actively involved in a variety of pedagogical opportunities that help them look beyond day-to-day teaching. • Faculty and staff participate in a variety of collaborative experiences within NCS and with other members of the educational community.
<p>Resources: Financial Resources</p>	<ul style="list-style-type: none"> • A solid financial plan is in place and is being implemented to address NCS’ short and long-term financial goals. • Financial resources are properly aligned to support NCS’ vision, mission, goals and objectives. • Resources are available to support the fundraising and grant writing process. • Compensation, benefits and incentives are competitive and support recruiting and retention efforts.
<p>Resources: Facility and Infrastructure</p>	<ul style="list-style-type: none"> • NCS owns the current facility and spaces are improved and/or expanded as needed to support the on-going needs of individual students and the collective student body. • The surrounding grounds are beautiful and child-friendly. • Innovative technology equipment and infrastructure exists and is well-maintained in support of the 21st century instruction strategies and learning environment. • Interactive web site is used as an effective communication tool, as well as an effective delivery channel for key services (i.e., make a donation, pay bills, etc.)

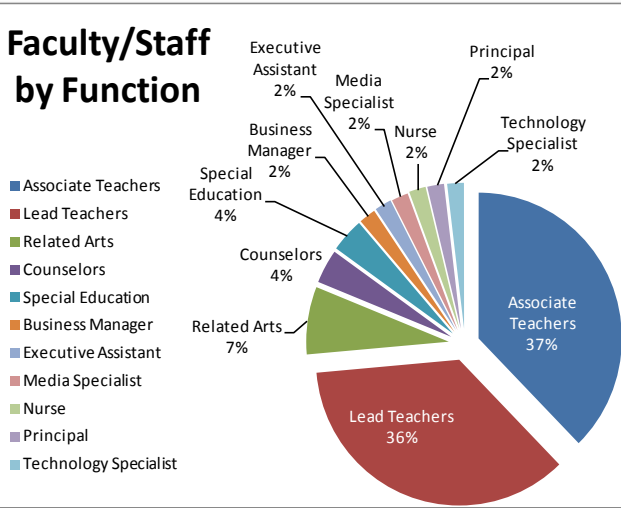
Priorities and Related Themes	
Seamless K-8 Solution	<ul style="list-style-type: none"> • A seamless K-8 solution is in place and well-functioning, either because (1) NCS is a part of the formal feeder pattern for ACMS or (2) NCS has merged with ACMS. • If NCS and ACMS are separate entities, there is a structure for resource-sharing and a high degree of collaboration with ACMS to support students' transitions.
Assessment and Evaluation	<ul style="list-style-type: none"> • Assessment and evaluation methods are in place to accurately (1) assess student progress and (2) demonstrate NCS' results, outcomes and approach; key internal constituencies (administrative and board leadership, faculty/staff and parents) are able to clearly articulate the value of the NCS experience. • Longitudinal student data clearly demonstrate student success beyond NCS.
Partnerships and Community Relationships	<ul style="list-style-type: none"> • NCS has a strong relationship with APS and is able to demonstrate success through visible and documented results and outcomes. • NCS partners and collaborates with other charter schools to support and improve the APS "brand." • NCS leadership is visible and actively involved in advocating for school reform and other educational issues. • A variety of partners are actively engaged and committed in support of NCS' curriculum, programming, and operations. • Outreach strategy engages the community (surrounding neighborhood and larger Metropolitan Atlanta area) in a variety of ways that are mutually-beneficial to the school and the community. • The registration process supports the needs of the community and NCS, and at the same time, demonstrates NCS' commitment to diversity and inclusiveness.

APPENDIX

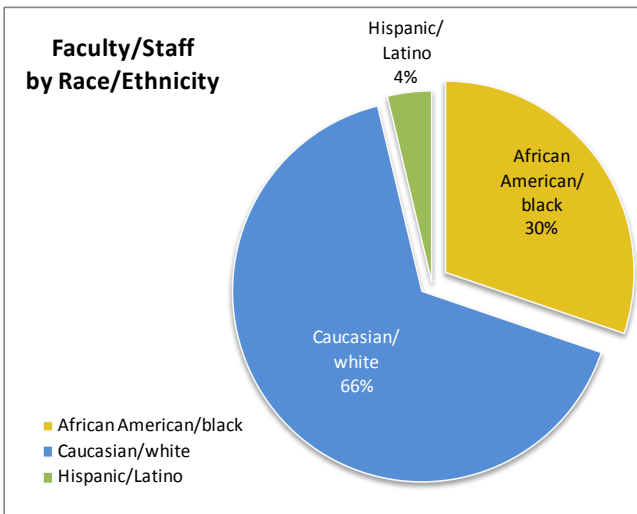
I. Individual Interview Participants

- Alice Johnson, Former Parent
- Allen Mueller, Atlanta Public Schools
- Brenda Muhammad, Atlanta Public Schools District 1 Representative
- Carolyn Barnwell, Galloway School Early Learning Principal
- David Weitnauer, Dobbs Family Foundation Executive Director
- Lizzy Smith, Woodruff Foundation Grants Officer
- Marcia Prewitt Spiller, The Children’s School Principal
- Matt Underwood, Atlanta Charter Middle School Principal
- Sally Radell, Former Parent
- Sharron Pitts, Atlanta Public Schools Chief of Staff

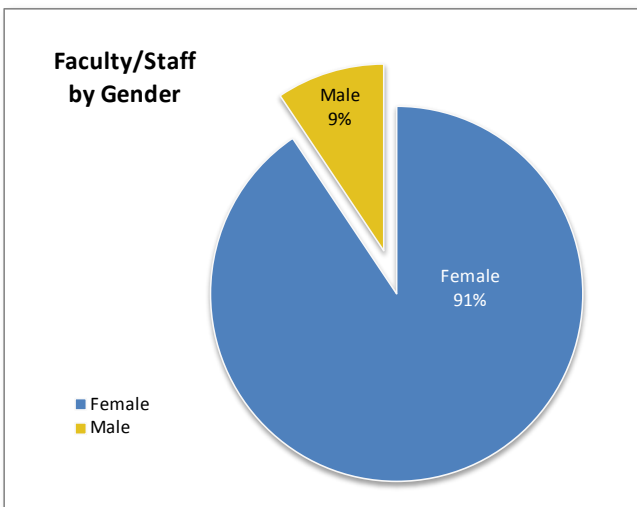
II. Neighborhood Charter School Demographics



Faculty/Staff by Function				
Type	Frequency	Full Time	Part Time	Percent
Associate Teachers	20	20	0	37.7%
Lead Teachers	19	19	0	35.8%
Related Arts	4	4	0	7.5%
Counselors	2	0	2	3.8%
Special Education	2	2	0	3.8%
Business Manager	1	0	1	1.9%
Executive Assistant	1	1	0	1.9%
Media Specialist	1	1	0	1.9%
Nurse	1	0	1	1.9%
Principal	1	1	0	1.9%
Technology Specialist	1	1	0	1.9%
Total	53	49	4	100.0%

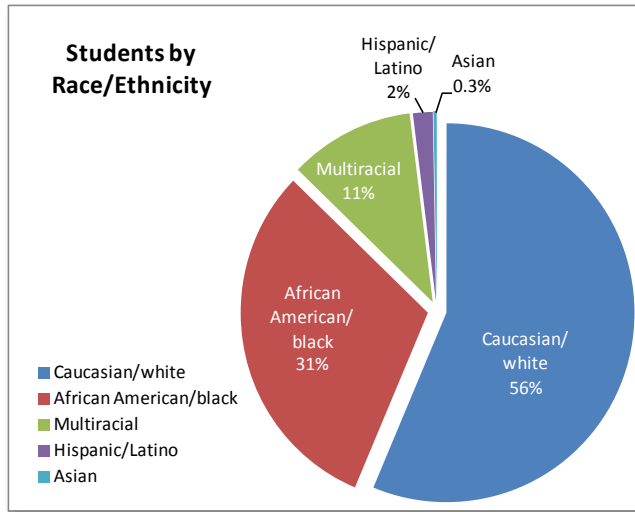


Faculty/Staff by Race/Ethnicity		
Race/Ethnicity	Frequency	Percent
African American/black	16	30.2%
Caucasian/white	35	66.0%
Hispanic/Latino	2	3.8%
Total	53	100.0%

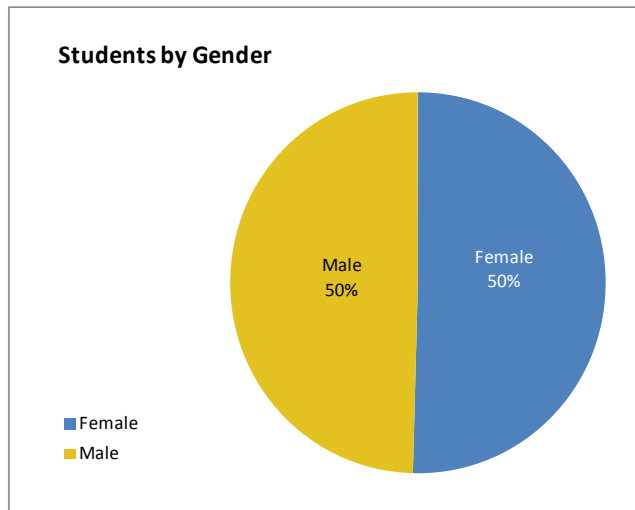


Faculty/Staff by Gender		
Gender	Frequency	Percent
Female	48	90.6%
Male	5	9.4%
Total	53	100.0%

II. Neighborhood Charter School Demographics (cont.)

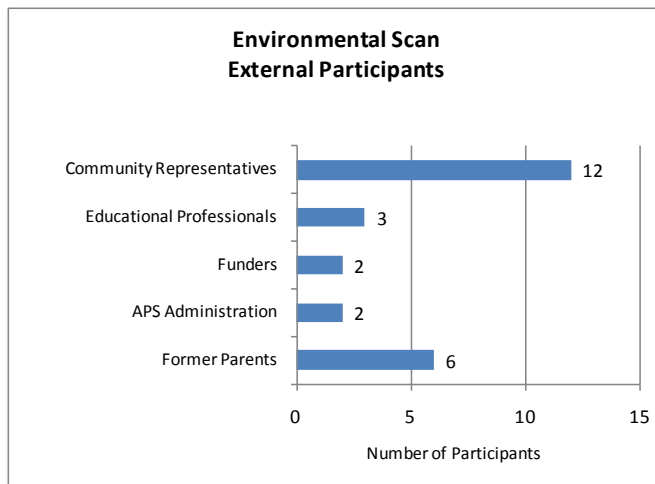
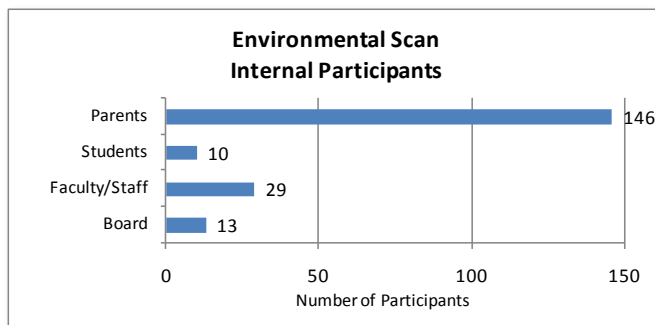
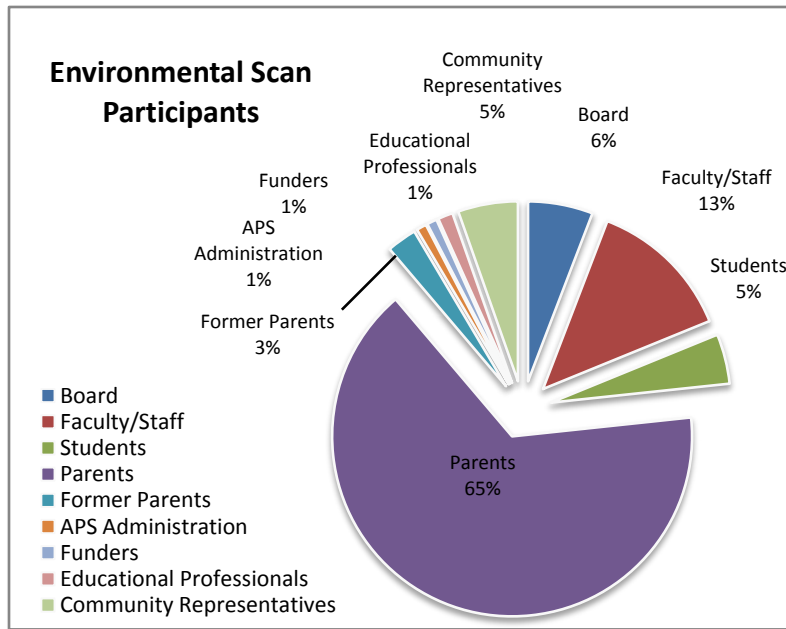


Students by Race/Ethnicity		
Type	Frequency	Percent
Caucasian/white	199	56.4%
African American/black	109	30.9%
Multiracial	38	10.8%
Hispanic/Latino	6	1.7%
Asian	1	0.3%
Total	353	100.0%

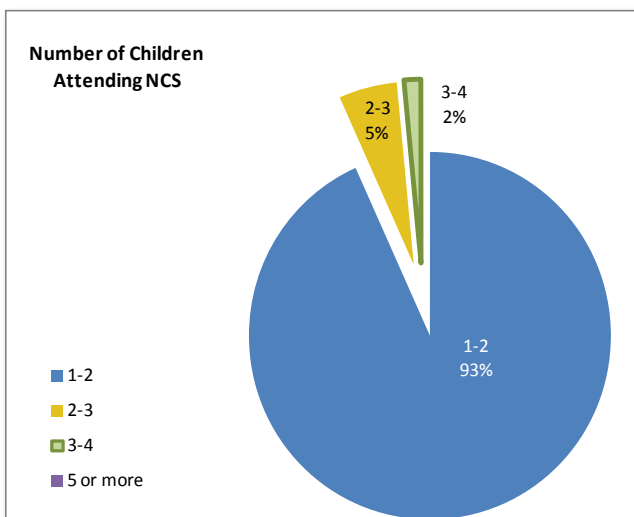
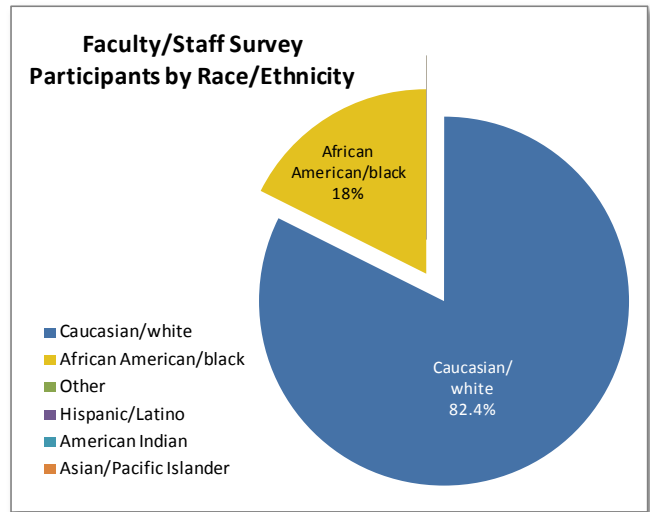
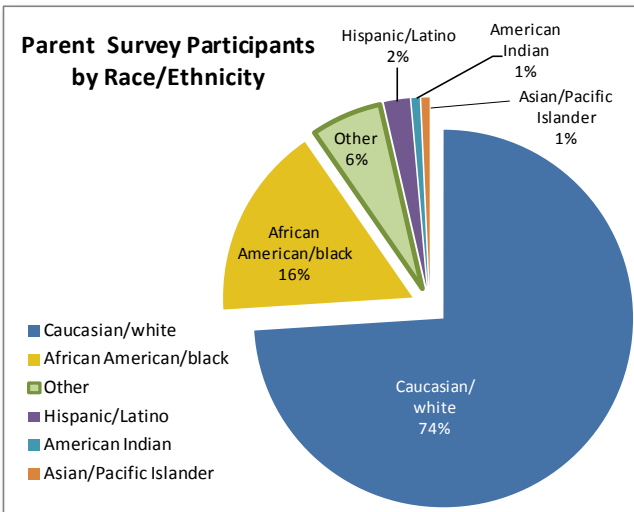
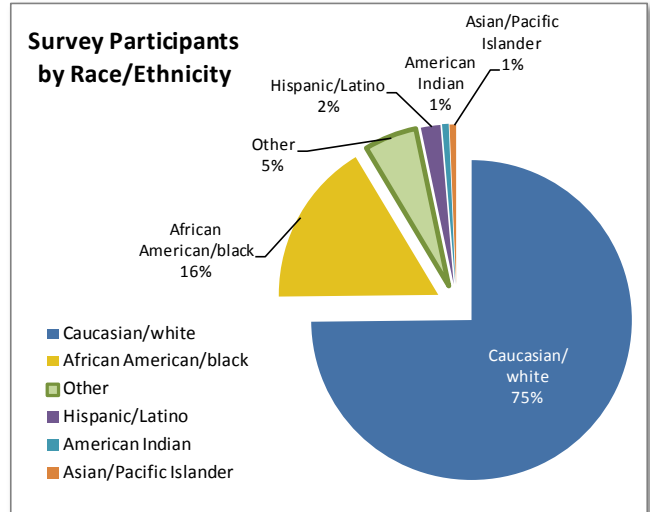
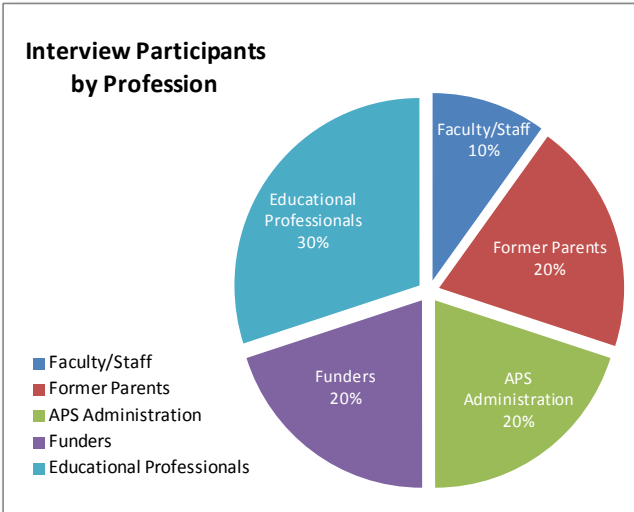


Students by Gender		
Gender	Frequency	Percent
Female	178	50.4%
Male	175	49.6%
Total	353	100.0%

III. Environmental Scan Participant Demographics



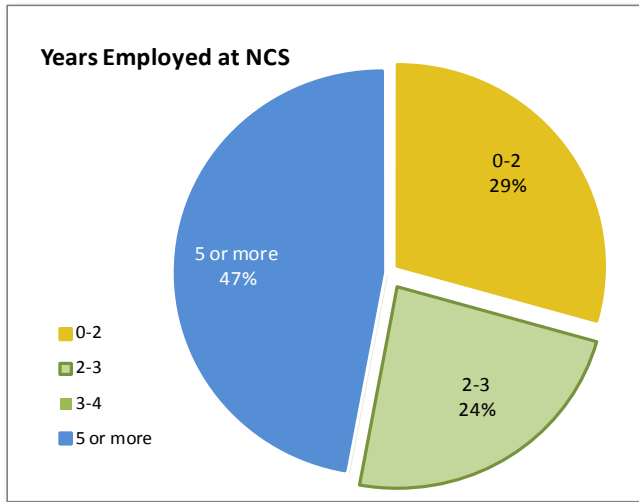
III. Environmental Scan Participant Demographics (cont.)



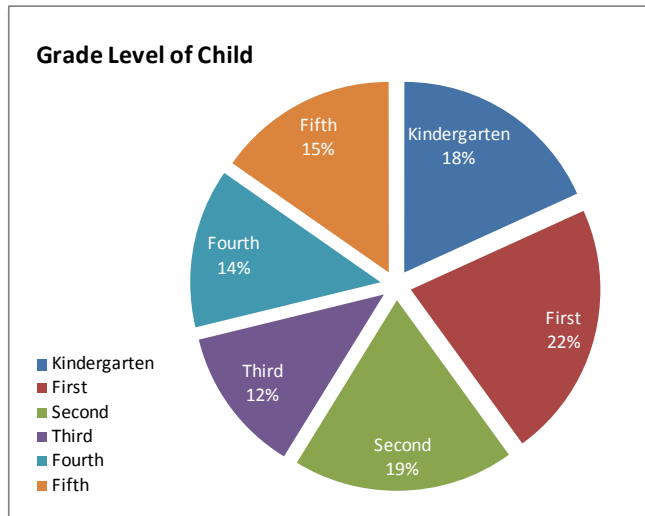
Number of Children Attending NCS

Response	Parents	
	Frequency	Percent
1-2	125	93.3%
2-3	7	5.2%
3-4	2	1.5%
5 or more	0	0.0%
Total	134	100.0%

III. Environmental Scan Participant Demographics (cont.)

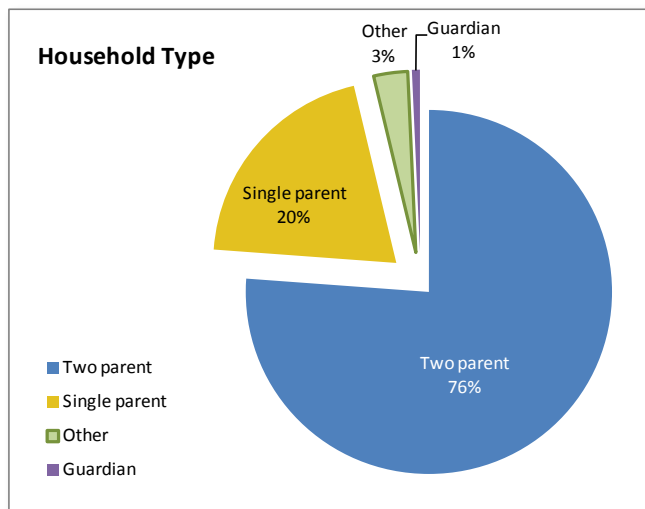


Response	Faculty/Staff	
	Frequency	Percent
0-2	5	29.4%
2-3	4	23.5%
3-4	0	0.0%
5 or more	8	47.1%
Total	17	100.0%



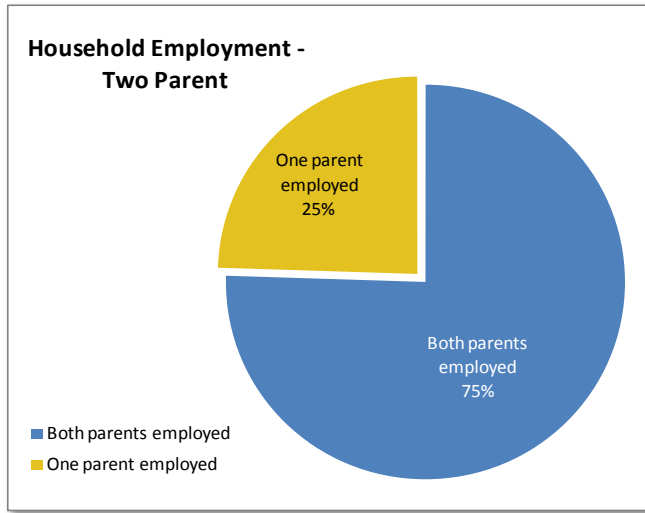
Response	Parents	
	Frequency	Percent
Kindergarten	31	18.6%
First	37	22.2%
Second	32	19.2%
Third	21	12.6%
Fourth	23	13.8%
Fifth	23	13.8%
Total	167	100.0%

*Participants were allowed multiple responses



Response	Parents	
	Frequency	Percent
Two parent	102	76.1%
Single parent	27	20.1%
Other	4	3.0%
Guardian	1	0.7%
Total	134	100.0%

III. Environmental Scan Participant Demographics (cont.)



Response	Parents		Total Households
	Frequency	Percent	Percent
Two parents employed	77	75.5%	57.46%
One parent employed	25	24.5%	18.66%
Total	102	100.0%	76.12%

IV. Detailed Survey Responses

Question 1

Rate your satisfaction with the performance of NCS against its mission:

NCS Performance Against Its Mission						
Response	Parents		Faculty/Staff		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Very Satisfied	65	48.5%	7	41.2%	72	47.7%
Satisfied	63	47.0%	10	58.8%	73	48.3%
Neither Satisfied nor Dissatisfied	5	3.7%	0	0.0%	5	3.3%
Dissatisfied	1	0.7%	0	0.0%	1	0.7%
Very Dissatisfied	0	0.0%	0	0.0%	0	0.0%
Total	134	100.0%	17	100.0%	151	100.0%

Question 2

The four primary components of NCS’s approach are listed below. Select the area that is most important to you.

Most Important Mission Component						
Response	Parents		Faculty/Staff		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Involvement of Parents/Guardians and Family	46	34.3%	4	23.5%	50	33.1%
Community/Diversity	12	9.0%	4	23.5%	16	10.6%
Constructivist Curriculum	63	47.0%	9	52.9%	72	47.7%
Educational Partnerships	13	9.7%	0	0.0%	13	8.6%
Total	134	100.0%	17	100.0%	151	100.0%

IV. Detailed Survey Responses (cont.)

Question 3

Rate your satisfaction with the performance of NCS in each of the four primary components of the school’s approach.

NCS Performance in Mission Components											
Response	Parents										Total Responses
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied						
Involvement of Parents/Guardians and Family	75	56.0%	51	38.1%	4	3.0%	3	2.2%	1	0.7%	134
Community/Diversity	38	28.4%	65	48.5%	18	13.4%	11	8.2%	2	1.5%	134
Constructivist Curriculum	51	38.1%	65	48.5%	11	8.2%	6	4.5%	1	0.7%	134
Educational Partnerships	22	16.4%	50	37.3%	55	41.0%	5	3.7%	2	1.5%	134
Total	186	34.7%	231	43.1%	88	16.4%	25	4.7%	6	1.1%	536

NCS Performance in Mission Components											
Response	Faculty/Staff										Total Responses
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied						
Involvement of Parents/Guardians and Family	7	41.2%	10	58.8%	0	0.0%	0	0.0%	0	0.0%	17
Community/Diversity	1	5.9%	7	41.2%	4	23.5%	5	29.4%	0	0.0%	17
Constructivist Curriculum	4	23.5%	11	64.7%	2	11.8%	0	0.0%	0	0.0%	17
Educational Partnerships	1	5.9%	6	35.3%	9	52.9%	1	5.9%	0	0.0%	17
Total	13	19.1%	34	50.0%	15	22.1%	6	8.8%	0	0.0%	68

IV. Detailed Survey Responses (cont.)

Question 4

As we think about planning for NCS’ future, which of the following areas is the most important priority?

Response	Most Important Priority					
	Parents		Faculty/Staff		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Strengthening Curriculum	68	50.7%	8	47.0%	76	50.3%
Strengthening Non-Instructional and Supportive Programming	9	6.7%	0	0.0%	9	6.0%
Creating a Shared Definition of Diversity	6	4.5%	2	11.8%	8	5.3%
Attaining Sufficient Resources	28	20.9%	3	17.6%	31	20.5%
Ownership of a Facility	8	6.0%	2	11.8%	10	6.6%
Improving Communication with our Key Stakeholders	2	1.5%	2	11.8%	4	2.6%
Building Broader Community, Corporate and Institutional Partnerships	13	9.7%	0	0.0%	13	8.6%
Total	134	100.0%	17	100.0%	151	100.0%

Question 5

Rate NCS’ performance in the following priority areas:

Response	NCS Performance in Priority Areas										
	Parents										Total Responses
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied					
Strengthening Curriculum	21	15.7%	88	65.7%	17	12.7%	8	6.0%	0	0.0%	134
Strengthening Non-Instructional and Supportive Programming	16	11.9%	67	50.0%	45	33.6%	6	4.5%	0	0.0%	134
Creating a Shared Definition of Diversity	17	12.7%	56	41.8%	44	32.8%	17	12.7%	0	0.0%	134
Attaining Sufficient Resources	11	8.2%	69	51.5%	44	32.8%	10	7.5%	0	0.0%	134
Ownership of a Facility	11	8.2%	43	32.1%	63	47.0%	14	10.4%	3	2.2%	134
Improving Communication with our Key Stakeholders	15	11.2%	47	35.1%	64	47.8%	8	6.0%	0	0.0%	134
Building Broader Community, Corporate and Institutional Partnerships	7	5.2%	46	34.3%	63	47.0%	17	12.7%	1	0.7%	134
Total	98	10.4%	416	44.3%	340	36.2%	80	8.5%	4	0.4%	938

IV. Detailed Survey Responses (cont.)

Question 5 (cont.)

Rate NCS' performance in the following priority areas:

NCS Performance in Priority Areas											
Response	Faculty/Staff										Total Responses
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		
Strengthening Curriculum	1	5.9%	12	70.6%	1	5.9%	3	17.6%	0	0.0%	17
Strengthening Non-Instructional and Supportive Programming	0	0.0%	7	41.2%	9	52.9%	1	5.9%	0	0.0%	17
Creating a Shared Definition of Diversity	0	0.0%	3	17.6%	5	29.4%	9	52.9%	0	0.0%	17
Attaining Sufficient Resources	1	5.9%	6	35.3%	7	41.2%	3	17.6%	0	0.0%	17
Ownership of a Facility	0	0.0%	0	0.0%	10	58.8%	7	41.2%	0	0.0%	17
Improving Communication with our Key Stakeholders	0	0.0%	5	29.4%	10	58.8%	2	11.8%	0	0.0%	17
Building Broader Community, Corporate and Institutional Partnerships	0	0.0%	5	29.4%	10	58.8%	2	11.8%	0	0.0%	17
Total	2	1.7%	38	31.9%	52	43.7%	27	22.7%	0	0.0%	119

Question 6

Rate NCS' performance in the following areas:

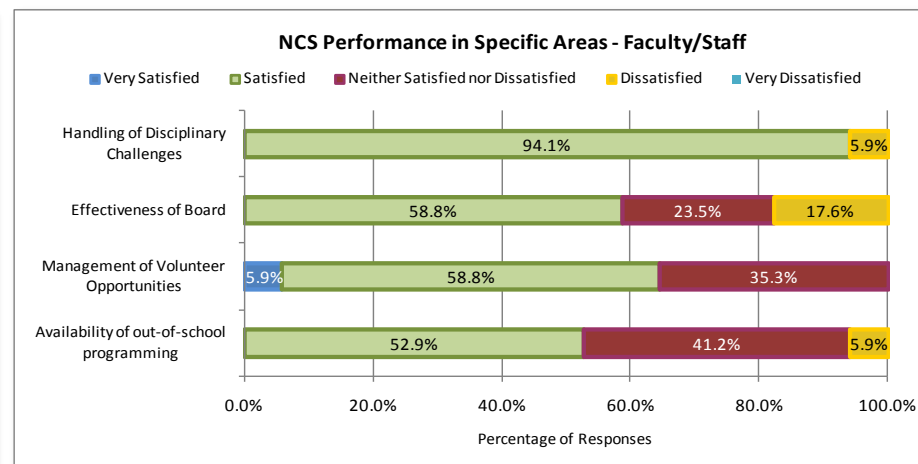
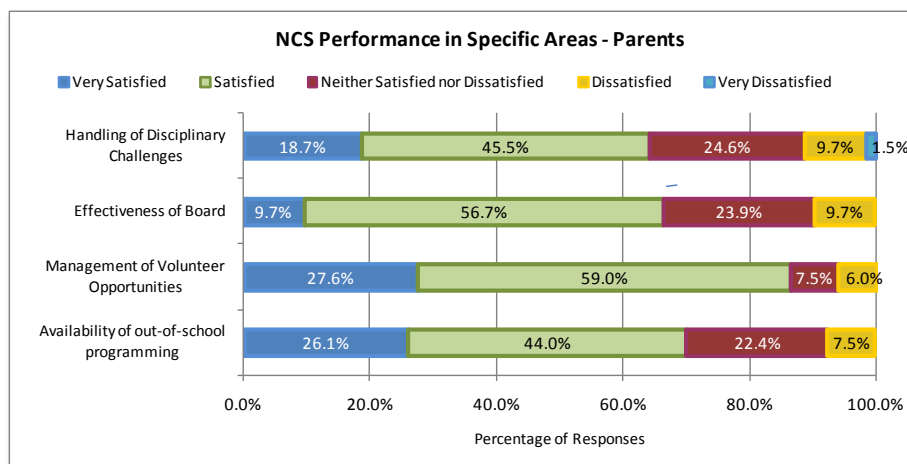
NCS Performance in Specific Areas											
Response	Parents										Total Responses
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		
Handling of Disciplinary Challenges	25	18.7%	61	45.5%	33	24.6%	13	9.7%	2	1.5%	134
Effectiveness of Board	13	9.7%	76	56.7%	32	23.9%	13	9.7%	0	0.0%	134
Management of Volunteer Opportunities	37	27.6%	79	59.0%	10	7.5%	8	6.0%	0	0.0%	134
Availability of out-of-school programming	35	26.1%	59	44.0%	30	22.4%	10	7.5%	0	0.0%	134
Total	110	20.5%	275	51.3%	105	19.6%	44	8.2%	2	0.4%	536

IV. Detailed Survey Responses (cont.)

Question 6 (cont.)

Rate NCS' performance in the following areas:

Response	NCS Performance in Specific Areas										Total Responses
	Faculty/Staff										
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
	Very Satisfied		Satisfied		Neither Satisfied nor Dissatisfied		Dissatisfied		Very Dissatisfied		
Handling of Disciplinary Challenges	0	0.0%	16	94.1%	0	0.0%	1	5.9%	0	0.0%	17
Effectiveness of Board	0	0.0%	10	58.8%	4	23.5%	3	17.6%	0	0.0%	17
Management of Volunteer Opportunities	1	5.9%	10	58.8%	6	35.3%	0	0.0%	0	0.0%	17
Availability of out-of-school programming	0	0.0%	9	52.9%	7	41.2%	1	5.9%	0	0.0%	17
Total	1	1.5%	45	66.2%	17	25.0%	5	7.4%	0	0.0%	68



IV. Detailed Survey Responses (cont.)

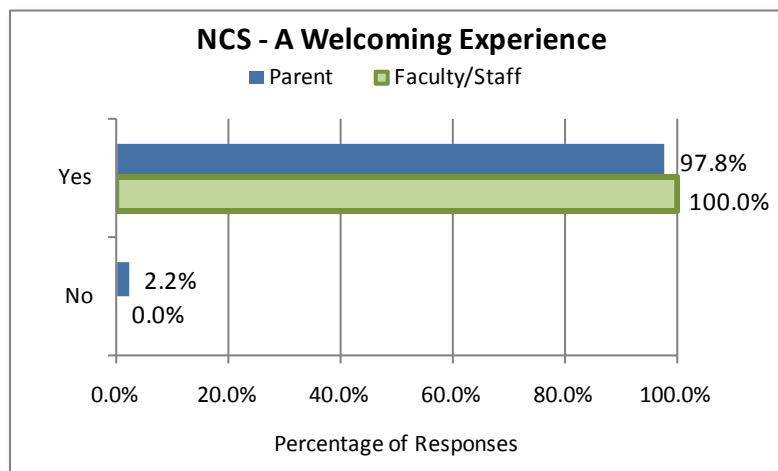
Question 7

Which of the following indicators is the best measure of success?

Response	Key Measures of Success					
	Parents		Faculty/Staff		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Standardized Test Data	11	8.2%	0	0.0%	11	7.3%
Student and Parent Satisfaction	17	12.7%	0	0.0%	17	11.3%
Depth of Student Learning	69	51.5%	13	76.5%	82	54.3%
Quality of Student Work	24	17.9%	4	23.5%	28	18.5%
Report Cards	2	1.5%	0	0.0%	2	1.3%
Success in Middle School	11	8.2%	0	0.0%	11	7.3%
Total	134	100.0%	17	100.0%	151	100.0%

Question 8

Has your experience at NCS been welcoming?



Response	NCS - A Welcoming Experience					
	Parents		Faculty/Staff		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	131	97.8%	17	100.0%	148	98.0%
No	3	2.2%	0	0.0%	3	2.0%
Total	134	100.0%	17	100.0%	151	100.0%

V. Resources

A. Trend Analysis Research Resources

The following resources were consulted, and in many cases cited, in order to develop the condensed Environmental, Societal and Educational Trends report.

Arce, R. *Hip-Hop Portrayal of Women Protested*. CNN.com, 2005.

Banks, J.A., & Banks, C.A.M. (Eds). *Handbook of research on multicultural education*. New York: Macmillan, 1995.

Booza, J., Cutsinger, J. & Galster, G. *Where did they Go? The Decline of Middle-Income Neighborhoods in Metropolitan America*. Brookings Institution, 2006. Available from http://www.brook.edu/metro/pubs/20060622_middleclass.htm.

Cetron, M.J., & Davies, O. *Special Report: 53 Trends Now Shaping the Future*. Bethesda, MD: World Future Society, 2005.

Challenger, John. *Working in the Future*. Bethesda, MD: World Future Society, 2005.

Closing Achievement Gaps: An Association Guide. National Education Association, 2007. Available from [://www.nea.org/achievement/index.html](http://www.nea.org/achievement/index.html).

Cohen, P., & Bianchi, S. *Marriage, Children, and Women's Employment: What do we Know?* Bureau of Labor Statistics, 1999. Available from [://stats.bls.gov](http://stats.bls.gov).

College Learning for the New Global Century. Washington, D.C.: The National Leadership Council for Liberal Education & America's Promise and the Association of American Colleges and Universities, 2007.

Current Population Survey. Washington, D.C.: Department of Labor, Bureau of Labor Statistics. 1998.

Experiences That Matter: Enhancing Student Learning and Success. Bloomington, IN: National Survey of Student Engagement, 2007. Available from [.nsse.iub.edu](http://nsse.iub.edu).

Faculty Trends and Issues. Policy Matters. Washington, D.C.: American Association of State Colleges and Universities, 2006.

Fletcher, M. *Middle-Class Dream Eludes African American Families*. Washington Post. Washington, D.C.: 2007. Available from [://www.washingtonpost.com/wp-dyn/content/article/2007/11/12/AR2007111201711.html](http://www.washingtonpost.com/wp-dyn/content/article/2007/11/12/AR2007111201711.html).

A. Trend Analysis Resources (cont.)

Georgia Partnership for Excellence in Education. *Top Ten Issues to Watch in 2007*. Atlanta, GA: Georgia Partnership for Excellence in Education, 2007.

Georgia Partnership for Excellence in Education. *Top Ten Issues to Watch in 2009*. Atlanta, GA: Georgia Partnership for Excellence in Education, 2009.

Gioia, J., & Herman, R. *Career Planning for the 21st Century*. Bethesda, MD: World Future Society, 2005.

Hartman, Joel. *Preparing the Academy of Today for the Learner of Tomorrow*. Available from [://www.educause.edu/PreparingtheAcademyofTodayfortheLearnerofTomorrow/6062](http://www.educause.edu/PreparingtheAcademyofTodayfortheLearnerofTomorrow/6062).

Hopfinger, J. *Magazines Address Gender Trends in Business*. 2006. Available from http://www.businessjournalism.org/pages/biz/2006/05/magazines_address_gender_trend.

Huber, M. T., Hutchings, P., & Gale, R. *Integrative Learning for Liberal Education*. Peer Review, Summer/Fall 2005.

Koch, D., Wesse, D. & Stickney. *New Trends in Student Housing*. Facility Manager Magazine. 1999. Available from [://www.appa.org/FacilityManager/article.cfm?itemnumber=606&parentid=259](http://www.appa.org/FacilityManager/article.cfm?itemnumber=606&parentid=259).

Marx, G. Sixteen Trends: Their Profound Impact on Our Future. Alexandria, VA: Educational Research Service, 2006.

My College Guide. 2007. Available from [.mycollegeguide.com](http://mycollegeguide.com).

Occupational Outlook. Washington, D.C.: U.S. Department of Labor, 1999/2000.

Public School Practices for Violence Prevention and Reduction: 2003-2004. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2007.

Ramaley, J. *The Real Versus the Possible: Closing the Gaps in Engagement and Learning*. [://educasuse.edu/TheRealVersusPossible%3AClosingtheGapsinEngagementandLearning/6064](http://educasuse.edu/TheRealVersusPossible%3AClosingtheGapsinEngagementandLearning/6064).

Roberts, P.C. *Loss of Jobs in America*. NewsMax On-line News Service. 2003.

Samson, R. *Special Report on Jobs: Future Careers: The High-Potential of Jobs Tomorrow*. Bethesda, MD: World Future Society, 2005.

A. Trend Analysis Resources (cont.)

Society for College and University Planning Trends in Higher Education. Ann Arbor, MI: Society for College and University Planning, 2007.

Sevier, R. *Still Dreading the Perfect Storm. Trusteeship*. Washington, D.C.: Association of Governing Boards of Colleges and Universities, July/August 2007.

Strauss, William. *Millennials Go to College: Strategies for a New Generation on Campus*. Washington, D.C.: American Association of Collegiate Registrars, 2003.

Sweeney, Richard. *Millennial Behaviors & Demographics*. Newark, NJ: New Jersey Institute of Technology, 2006.

Tapscott, D. *Growing up Digital: The Rise of the Net Generation*. New York: McGraw-Hill Companies, 1999.

The Condition of Education 2007. Washington, D.C.: The U.S. Department of Education's National Center for Education Statistics, 2007.

The Little Green Schools Initiative. *The Little Green Schoolhouse: Thinking Big About Ecological Sustainability, Children's Environmental Health and K-12 Education in the United States.* Available from [.greenschools.com](http://greenschools.com).

U.S. Census Bureau. Public Information Office. *U.S. Census Bureau News*. Washington, D.C.: U.S. Department of Commerce, 2005. Available from [://www.census.gov/Press-Release/www/releases/archives/population.004083](http://www.census.gov/Press-Release/www/releases/archives/population.004083).

What is 21st Century Education? 21st Century Schools, 1998. Available from [://www.21stcenturyschools.com](http://www.21stcenturyschools.com).

Windam, Carie. *The Student's Perspective*. Available from [://www.educause.edu/TheStudent%27sPerspective/6061](http://www.educause.edu/TheStudent%27sPerspective/6061).

Withrow, F., Long, H. and Marx, G. *Preparing schools and school systems for the 21st century*. Arlington, VA: American Association of School Administrators, 1999.

B. Best Practices Research Resources

The following resources were consulted, and in many cases cited, to develop the condensed Best Practices Research Report.

1. Defining 21st Century Curriculum and Learning

American Association of School Librarians. *Standards for the 21st Century Learner*. Chicago: American Library Association, 2007. Available from: <http://ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/standards.cfm>.

Cotton, Kathleen. Classroom Questioning: Close-Up No. 11. Portland, OR: Northwest Regional Educational Laboratory, 1991.

Klenz, Sandra. Critical and Creative Thinking. Saskatchewan: Saskatchewan Education, 1987.

Lang, Albert. *Learning Environments Must Break Through the Silos that Separate Learning from the Real World*. Orlando: 2009. Available at ://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=598&Itemid=64.

November, Alan. *Teaching Zack to Think*. 1998. Available from <://novemberlearning.com/resources/archive-of-articles/teaching-zack-to-think/>.

November, Alan. Web Literacy for Educators. Thousand Oaks: Corwin Press, 2008.

Norton, John and Sheryl Nussbaum-Beach. *Growing 21st Century Teachers for 21st Century Classrooms. Working Toward Excellence*. Montgomery: Alabama Best Practices Center, 2007.

Partnership for 21st Century Skills. *21st Century Skills Professional Development*. 2007.

Partnership for 21st Century Skills. *Framework for 21st Century Learning*. 2004. Available from ://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=42&Itemid=69.

Wallis, Claudia, and Steptoe, Sonja. *How to Bring Our Schools out of the 20th Century*. Time. 2006. Available at <://www.time.com/time/magazine/article/0,9171,1568480,00.html>.

B. Best Practices Research Resources (cont.)

2. Defining Constructivism and its Core Components

Alkove, Linda D., and McCarty, Betty Jo. *Plain Talk: Recognizing Positivism and Constructivism in Practice*. Action in Teacher Education. Panama City: Florida State University, 1992.

Brooks, Jacqueline Grennon, and Brooks, Martin G. In Search of Understanding: The Case for Constructivist Classrooms. Alexandria, Virginia: Association of Supervision and Curriculum Development, 1999.

Dewey, John. Democracy and Education. Whitefish: Kessinger Publishing, 1992.

Dewey, John. Experience and Education. Kappa Delta Pi, 1938/Touchstone, 1997.

Eisner, Elliot W. *The Kind of Schools We Need*. Phi Delta Kappan. Stanford: Stanford University, 2002.

Marlowe, Bruce A., and Page, Marilyn L. Creating and Sustaining the Constructivist Classroom. Thousand Oaks: Corwin Press, 2005.

Short, Kathy G., et al. Learning Together Through Inquiry: From Columbus to Integrated Curriculum. Portland: Stenhouse Publishers, 1996.

Strachota, Bob. On Their Side: Helping Children Take Charge of Their Learning. Turners Falls: Northeast Foundation for Children: 1996.

Warrick, William R. *Constructivism: Pre-historical to Post Modern*. Fairfax, Virginia: George Mason University.

3. Summarizing Assessment Approaches

Black, P., and Wiliam, D. *Assessment and Classroom Learning*. Assessment in Education. 1998.

Black, P. and Wiliam D. (1998b). *Inside the Black Box: Raising Standards through Classroom Assessment*. Phi Delta Kappan, 80 (2): 139-148. Available from [://www.pdkintl.org/kappan/kbla9810.htm](http://www.pdkintl.org/kappan/kbla9810.htm).

Boston, Carol. *The Concept of Formative Assessment*. Practical Assessment, Research and Evaluation. Retrieved February 22, 2009, from [://PAREonline.net/getvn.asp?v=8&n=9](http://PAREonline.net/getvn.asp?v=8&n=9).

Brooks, Jacqueline Grennon, and Brooks, Martin G. In Search of Understanding: The Case for Constructivist Classrooms. Alexandria, Virginia: Association of Supervision and Curriculum Development, 1999.

B. Best Practices Research Resources (cont.)

3. Summarizing Assessment Approaches (cont.)

Coalition of Essential Schools. *Overview of Alternative Assessment Approaches*. Available from http://www.essentialschools.org/pub/ces_docs/resources/cp/assess/assess.html.

Graves, Donald H. and Sunstein, Bonnie S. Portfolio Portraits. Durham: University of New Hampshire, 1992.

McMillan, James H. (2004). Classroom Assessment: Principles and Practices for Effective Instruction. Upper Saddle River: Pearson Education, 2004.

Ramaprasad, A. *On the Definition of Feedback*. Behavioral Science. 1983.

Reick, William A., and Wadsworth, Donna. *Assessment Accommodations: Helping Students with Exceptional Learning Needs*. Available from ://www.redorbit.com/news/education/311101/assessment_accommodations_helping_students_with_exceptional_learning_needs/index.html.

Sadler, D.R. *Formative Assessment and the Design of Instructional Systems*. Instructional Science. 1989.

Teaching LD-Information and Resources for Teaching Students with Learning Disabilities. Current Practice Alerts – High Stakes Assessments. Available from ://www.teachingld.org/ld_resources_alerts/default.htm.