

Prospectus

for

GLOBAL SCIENCES CHARTER SCHOOL

Submitted by:
Economic Development Group, Inc.

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I. EXECUTIVE SUMMARY

Western New York high schools, especially those located in urban districts, have limited programs in support of career and technical education and especially on behalf of the emerging sciences, technology and environmental industries. Unfortunately, urban youth are also plagued by low math and science test scores, high delinquency rates, poor graduation rates and low parental involvement, and many students end their schooling unqualified to pursue sustainable, living wage employment.

The proposed school-to-work Global Sciences Charter School (GSCS), (previously proposed name Green Sciences & Technology Charter School), will provide middle and high school age youth, primarily from City of Niagara Falls and the surrounding communities, with a new and unique educational opportunity. It has been conceived and is being developed by the Economic Development Group, Inc. (EDG), a 501(c)3 organization whose mission is to develop and implement strategic and thoughtful community partnerships with the goal of strengthening sector-specific industries for more secure and better jobs. Led by Kevin Donovan and Janice Barrett, the EDG has focused its efforts over the past three years on the establishment of school-to-work Charter Schools and most recently founded the Health Sciences Charter High School (HSCS) that opened its doors with 120 9th Grade students in August 2010 in the Town of Tonawanda. This culturally diverse 21st Century learning environment was created in a unique partnership with the area's major healthcare leaders (Kaleida Health, Erie County Medical Center, Catholic Health System, Roswell Park Cancer Institute, BlueCross BlueShield of WNY, Independent Health, Erie Community College, and Communications Workers of America).

A similar approach has been taken by the EDG with regards to the development of the GSCS. Joining the EDG as founders of the proposed GSCS are individuals and companies representing business, not-for-profit, education, manufacturing, labor, and public and private sector leadership. Collectively, they believe that a community composed of learners fosters a spirit of collaboration that is a necessary part of a successful educational experience. They also believe that students thrive in an environment where expectations are clear and consistent at all levels, and where students are known-not only by their peers, but also by the entire school community. Funding from the local foundation community has been committed to the EDG to support the development of this school.

GSCS will be an innovative public school of choice, aligned with the New York State core curriculum content standards, serving high school students, and eventually middle schools students, in Niagara County and surrounding areas. A distinctive and dynamic science and technology program will promote active learning and embrace multiple learning needs and styles in a challenging environment. The proposed interactive learning community encourages every student to grow academically, socially, and emotionally into responsible individuals who are ready to make a successful transition into either higher education or gainful employment.

The mission of the GSCS is to create a safe and healthy learning environment that engages and prepares Western New York youth, especially within the City of Niagara Falls, for the future by providing a broad spectrum of educational and career options and contemporary skills in order to become productive students and responsible citizens.

Characterizing the school's program will be the cooperative presence and unified support of caring families, businesses and individuals from the public and private sectors, as well as educational and civic groups with whom the students will interact. The instruction will guide students through the development of creative, critical thinking and learning skills and enable them to apply these skills through cooperative, interactive instruction in the core curricular areas and emerging science and technology industries.

GSCS is committed to creating and operating a diverse learning community to educate the whole child. We are dedicated to creating a living curriculum that evolves out of industry-specific needs, student's interests and talents and prepares them for higher education and gainful employment. GSCS is unwavering in our desire to work collectively with the Board of Trustees, staff, teachers, school districts and the environmental, manufacturing, and

science-related business community to create a school that nurtures individuality, mutual respect, cooperation and social involvement, develops the critical thinker in each student, and fosters a lifelong love of learning.

GSCS will address multiple community needs and have numerous beneficiaries. Traditionally underserved high school aged youth will be provided with unprecedented educational and career path opportunities; Their parents and guardians will have alternative educational options and the opportunity to play an integral role in their child's education; Employers within the City of Niagara Falls and surrounding communities will additionally benefit from a more qualified work force with diversified skill sets; Residents of Niagara Falls and surrounding areas will enjoy the benefits of a more environmentally and technology savvy community; as well as, the opportunities to participate in a number of hands-on activities and programs that will increase their knowledge of their surrounding environment.

It is anticipated that the school will serve a total of 720 students, Grades 7-12, over the next five years when at full capacity. The primary focus and development of the school's core design elements will be predicated on the knowledge and essential skills needed for students to achieve the content mastery upon which further learning is built. The school's strong academic program will strive to reduce achievement gaps by the following specific elements: Rigorous curricula, instruction and appropriate assessment; Governance, leadership and staffing; Parent and community involvement; Instructional technology and multimedia involvement in the learning process; Internships with local businesses; and, Introduction to higher education beginning in Grade 9.

GSCS believes and is committed to having a whole-school design which will involve a comprehensive and continuing effort to realize and implement the aforementioned essential elements in an integrated manner. It will be the educator's responsibility to construct a program that engages and motivates students to invest their talents, energy, and enthusiasm in completing their schoolwork in an exemplary manner. This in turn will help faculty regard every child as a unique, valued and vital member of the school community. Individual attention in the form of one-on-one tutoring, intensive counseling, character development, and individualized goals will be the key to motivating our students.

It will also be guided by a strong academic program that at a minimum will include: Creativity; Leadership; Critical thinking; Problem solving, and Effective learning. Collectively, these principles will serve to reduce achievement gaps by eliminating an important cause which is the lack in mastery of basic knowledge and skills required for further academic achievement. Additionally, GSCS will develop and instill a school culture that values: accountability, compassion, integrity, tolerance and leadership. This culture will also reaffirm our commitment to a drug free, gang-free, peer pressure-free, bully-free, truancy-free, fight-free and crime-free school.

Integrated in the learning process will be diverse instruction that will include 21st Century learning and technology. Classrooms will be furnished with multimedia-oriented computers and other visual and audio devices. Exposure and the ability to utilize these support systems will ensure and establish a technology-oriented education in preparation for each student's future endeavors.

Distinctive features of the proposed GSCS include: Year-round instruction, including a summer session; state-of-the-art laboratory instruction; industry-specific curriculum; AP and dual college credit courses; mentoring; service learning; internships; individual career guidance; and, hands-on instruction from leading industry and educational professionals. The collaborative partnerships designed in support of the GSCS will provide faculty and students with the most recent industry developments, specific industry-related career development activities and training, and industry-related information and advice in the development of curriculum. The ongoing development and incorporation of industry-specific and relevant materials into areas such as English, social sciences, mathematics, and sciences, along with environmental principles and concepts, will prove to keep the school current in advanced studies in mathematics, sciences, and technology.

II. STUDENT POPULATION

A. Student Enrollment

Grades	Projected Enrollment Table				
	2012-2013	2013-2014	2014-2015	2015-2016	2017-2018
K					
1 st					
2 nd					
3 rd					
4 th					
5 th					
6 th					
7 th			120	120	120
8 th		120	120	120	120
9 th	120	120	120	120	120
10 th		120	120	120	120
11 th			120	120	120
12 th				120	120
Ungraded					
Totals	120	360	600	720	720

B. Target Populations

It is anticipated that approximately two-thirds of the GSCS student population will reside in and around the City of Niagara Falls and the remaining percentage will reside in surrounding communities such as Wheatfield, Lewiston, North Tonawanda, etc. The City of Niagara Falls faces multiple economic and educational issues. Census data reflects almost 40% of children under the age of six are living below the poverty level, more than double State and national figures. The unemployment rate is more than 13%, with a Median Household Income of \$31,615. One-fifth of residents live below the poverty-level, and less than 18% have obtained a college degree.

The Niagara Falls City School District is designated by the NYS Education Department as a high-need, urban district that serves over 7,000 students, 68% eligible for free/reduced lunches, 1% LEP, 14% students with disabilities, 55% are white, 45% minority (2008-09 Report Card). There is a notable difference in test scores between students from economically disadvantaged and non-disadvantaged backgrounds.

According to a September 2010 report from the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, the United States should double the number of underrepresented minority students, including African-Americans, Hispanics, and Native Americans, who receive degrees in science, technology, engineering, or mathematics. Only slightly more than 9% of employees in science and engineering careers in 2006 were members of underrepresented minority groups, but most of the growth in those academic fields and careers came from an influx of foreigners. Graduates of the GSCS will be well positioned for both higher education and employment in the emerging global sciences economy as this industry is actively soliciting minority candidates.

The initial outreach and marketing of GSCS to the community and parents will highlight the non-traditional nature of the school and why such a new approach is critical to providing their children with a viable economic future. Upon receipt of Charter status, the Board of Trustees will adopt an outreach strategy that targets numerous communities throughout Western New York, especially the City of Niagara Falls.

An integral component of this outreach strategy will be the incorporation of input from the Niagara Falls School District. Preliminary, informal discussions with the School District have demonstrated an interest in continued dialog, based upon a spirit of transparency and collaboration. The founding group also anticipates pursuing a partnership with Niagara University (NU), Niagara County Community College, and United Way of Niagara. Each of these entities has established relationships with a plethora of effective community based organizations that truly understand the needs of the target population. For example, partnerships will be explored with Niagara University's Department of Education, ReNU and NU Learn and Serve Niagara Programs, and United Way agencies such as the Boys and Girls Clubs, block clubs, etc. Utilizing these existing partnerships will enable the GSCS to identify and reach a broad cross-section of families and students, especially those who are traditionally less informed regarding educational choice.

Targeted outreach to specific populations such as students with disabilities and English language learners, and families living in poverty will be conducted and based on the needs of such populations and the services available to them at GSCS. The founding group is in the process of forming an Advisory Team consisting of local special education teachers, guidance counselors, and social workers to assist in the design of an educational infrastructure that provides the support services essential to individual student success. This Team will implement a system that ensures a seamless flow of information between teachers, parents, and the home District. Team members will meet regularly with the Commissioner's Advisory Panel on Special Education to obtain the most recent best practices, funding and training opportunities, work with the State Special Education Regional and Special Education Quality Assurance Offices in Rochester as well as Technical Assistance Centers based on individual student needs. The founding group will empower this expert Team with the resources and training necessary to design special education plans for students and families in a flexible and pro-active manner that meets the high standards set forth in the overall mission of the school.

This component of the overall education plan, as well as the extended day and year-round instruction reflect the school's commitment to the needs of each student. It is anticipated that the rigorous schedule, along with a strong focus on Math and Science and the high standards set forth in the Charter, will dictate the need for remediation and academic support services for most students. Such supports will be integrated throughout the daily schedule, classroom instruction, teacher training, student mentoring and guidance. It will be a core component of the supportive culture of the school. The GSCS will strive to work with the District to develop action plans that ensure a high retention rate for all GSCS students.

Community outreach and student recruitment will include a professional branding campaign in which a logo, culturally sensitive informational brochures and marketing materials in multiple languages, and presentations are developed. Information will be distributed at community events, area charter, public, and parochial schools and will be available to all GSCS business partners. Members of the proposed Board of Trustees will work with established community partners to host informational sessions regarding the educational philosophy of GSCS, the curriculum, schedule, etc.

GSCS's student recruitment strategy is currently being developed and is described in greater detail in the chart below:

Task	Activity	Action Items
Develop enrollment application	<ul style="list-style-type: none"> ○ Research other charter school applications 	<ul style="list-style-type: none"> ○ Develop GSCS Application ○ Transcribe application into Spanish
Develop brand/ marketing materials	<ul style="list-style-type: none"> ○ Identify company to create logo, tagline, website, business cards, letterhead, envelopes, brochure etc. 	<ul style="list-style-type: none"> ○ Select logo and tagline ○ Launch website ○ Print letterhead, envelopes,

		application, and business cards
Develop numerous focus areas for recruitment	<ul style="list-style-type: none"> ○ Identify local organizations that provide services to at-risk youth ○ Identify local organizations that provide services to limited English proficient families ○ Identify local organizations that provide services to youth with disabilities 	<ul style="list-style-type: none"> ○ Design informational presentations based on needs of specific population ○ Provide staff of community organizations with brochures, applications, and follow-up information
Conduct community outreach	<ul style="list-style-type: none"> ○ Public Service Announcements to Print Media 	<ul style="list-style-type: none"> ○ Develop and submit Press Releases and articles to local print media ○ Distribute Flyers, Fact Sheets, FAQ and Applications to Charter Schools, Catholic schools, Churches etc. ○ Create website link to GSCS partners (application on website) ○ Schedule presentations at Charter Schools, Community Based Organizations, Churches
Conduct community outreach (cont)	<ul style="list-style-type: none"> ○ Public Service Announcements to Electronic Media 	<ul style="list-style-type: none"> ○ Develop and submit PSA to local TV (WNED, WUTV, WNYO, WGRZ, WIVB and WKBW) ○ Develop and submit PSAs to local radio (WBEN, WNED, WBFO, WBUF, WJYE, WBLK, WNAR, WEDG, WYRK)
Recruit students	<ul style="list-style-type: none"> ○ Direct Mail ○ Work with guidance counselors at existing charter schools that end in 8th grade ○ Target outreach to Catholic Grammar Schools ○ Target outreach to Community Based Hispanic Organizations ○ Submit articles to Partner Newsletters ○ Information Sessions at Local Churches ○ Distribute information during summer youth recreation league events 	<ul style="list-style-type: none"> ○ Mail initial application to parents / students from outreach events attended ○ Send follow up letter(s) ○ Provide 30-50 applications to area schools for 8th grade students ○ Send applications to Spanish-speaking organizations ○ Work with partners to identify relationships with local church community whereby presentations can take place
Recruit students	<ul style="list-style-type: none"> ○ Open House with interested parents / students 	<ul style="list-style-type: none"> ○ Schedule meeting for parents / students
Complete Enrollment Process	<ul style="list-style-type: none"> ○ Receive applications up to April 1, 2012 ○ Notify parents / students ○ Create / maintain waiting list, if necessary 	<ul style="list-style-type: none"> ○ Conduct lottery ○ Letter and phone call

III. SCHOOL DESIGN

Global Sciences Charter School (GSCS) goals will mirror the findings of the NYS Board of Regents report entitled "P-16 Education. A Plan for Action," that advocates for career education and new innovative partnerships with employers and higher education as a pillar of educational reform. The GSCS is well positioned to foster relationships between educators and employers. The design of the GSCS is committed to: Improving high school attendance and graduation rates by setting performance targets; Promoting practices that remove barriers to graduation; Increasing investment in programs that have shown to remove barriers to graduation; Raising the learning standards so that all student graduates are ready for employment; continued education and service to the community; Aligning standards assessments, curriculum and instruction across P-16; Emphasizing transitions between high school, the workforce and higher education; Reducing barriers to teaching and learning in high need schools by creating a vision and leadership framework for an integrated education, health/mental health collaboration; and, Promoting strategies found to be promising in resolving high incident health and mental health problems among high school students.

a. Increase student achievement and decrease student achievement gaps in reading/language arts and mathematics

The focus of GSCS will manifest itself in the form of an engaging, hands-on, rigorous, standards-based curriculum that extends beyond typical high school requirements. This educational focus will be supported through a philosophy that, given the proper support, ALL students can become productive members of society and that students of varying abilities thrive most when they are engaged and challenged with a curriculum that is relevant. The GSCS believes that students need to be physically and emotionally healthy, resilient, creative thinkers, independent life-long learners, and active citizens; a belief that is reflected in a challenging curriculum and an educational design that includes a strong service learning component and a number of support services.

The GSCS will establish high academic standards for all students based on challenging, yet realistic expectations, and will provide students the support they require in order to meet and exceed individual goals at the outset of their GSCS career. The GSCS Board and administration will account for the variety of skill sets students enter the school with and will establish a plan to overcome the achievement gaps that are sure to be present with most Grade 7 students. The proposed GSCS's core curriculum will be aligned with the recently approved New York State Common Core Learning Standards. Therefore, increasing student achievement gaps in reading/language arts, math, and science will be an underlying expectation of the staff and students, and will drive the design of the educational plan, including classroom instruction, internships, and service learning.

Additional coursework, including electives, will be developed with input from local institutions of higher education and industry-specific professionals. The unique 12-month model will provide students with the opportunity to obtain both a NYS Regents/Advanced Regents diploma and credits towards an Associate's Degree. The model will combine classroom instruction and training with on-the-job training, personalized career skills training from working professionals, quality internship opportunities, and ongoing mentoring and guidance.

Students will begin identifying a career focus and areas of interest beginning in Grades 7 and 8, specifically in a Career and Financial Management course, where they will be exposed to career opportunities and definitions of what makes a successful employee. In Grades 9 and 10, students will complete foundation courses in math, science, social studies and ELA to prepare them for the rigors of Grades 11 and 12 concentration study. These courses will allow students to meet NYS learning standards, explore a variety of math and science disciplines, determine individual interests, aptitudes and abilities, and subsequently select a concentration for study. This foundational course work will also prepare them for the rigors of college level work. Through this integrated learning model, students will become better prepared to pursue advanced studies or work within their chosen concentration. A strong emphasis will be in Math, Science, and Technology along with general studies encouraging a well-rounded strong academic student. All students will take custom science courses that will be designed specifically for GSCS to reinforce general science skills and expose students to hands-on application of science in the engineering, green

sciences, and environmental sectors. The summer session will also offer programs focusing on leadership, team building, service learning, and individual assistance and remediation for student success.

Internships at industry-specific sites will provide students with hands-on experience and tangible industry knowledge. Students will be mandated to complete service learning requirements during their time at GSCS. Service learning will be integrated across the curriculum and may range from single assignments with reflection components to longer projects culminating in group or individual projects/presentations. Minimally, 150 hours of service learning will be required for graduation.

The GSCS will employ several components that will result in an innovative, effective educational program that increases student achievement. These are: 1) Professional Learning Communities; 2) Program with College Credits; 3) Contextual Learning; and, 4) Integrated Service Learning. When combined within the confines of a single school, the synergistic relationships of each of these components will make GSCS one of the most unique Grades 7-12 Schools both in the area and New York State. This innovative design will result in a program that will successfully prepare students for careers in a number of global sciences industries and to be active in their community. Following is a more detailed explanation of each component and how they interrelate:

Professional Learning Communities (PLC): The foundation of the educational design is the PLC philosophy. Instruction and support are individualized to connect to each student's particular level of development, including English language learners and special education students. GSCS believes that all students have different learning styles, abilities, and background experiences and will therefore progress at different rates. GSCS will have high expectations for ALL students and provide varying pathways for students to meet those expectations based on individual needs. Support mechanisms will not be invitational; they will be required components of a student's learning plan and built directly into the program design. All adults in the school will model life-long learning by continually working as a team to identify and implement those practices that have the greatest impact on student achievement and eliminate methods and practices that have no effect.

Advanced Regent's Diploma / College Credit Program: It is anticipated that all students will have the opportunity to earn credits towards an Associate's Degree through a combination of AP and on and off-site dual credit courses with local institutions of higher education. Students will begin college level work as their schedule permits and will have opportunities to earn college credit for AP courses such as Grade 12 English.

Contextual Learning: According to constructivist learning theory, learning occurs when students process new information or knowledge in such a way that it makes sense to them within their frame of reference. Whenever appropriate, GSCS will modify traditional methods and disciplines to teach material using a contextual learning approach. In GSCS classrooms, students will utilize hands-on experiences to learn about and participate in the workplace. By designing real-life situations, artificial distinctions between actual application and academic studies will be eliminated. Students will be exposed to project-based instruction and will engage in sustained, cooperative investigation. Project-based instruction appeals to the core of the school's mission as it makes academic research more relevant to the students. They understand "what is going on." Moreover, the project-based instruction facilitates contextual learning in real-life framework. The method emphasizes students' own artifact construction to represent what is being learned. GSCS will facilitate opportunities for students to perform active investigations that enable them to learn concepts, apply information, and represent their knowledge in a variety of ways. Collaboration among students, teachers, and community will be shared and distributed among the "learning community" members. In addition to project-based instruction, emphasis on career exposures and internships will support the contextual approach. Students will be exposed to experiences that reinforce skills learned in content areas, providing relevance to classroom learning.

Integrated Service Learning: GSCS's leadership feels strongly that preparing students for the world of work, without developing a sense of community and service is a job half-done. Thus, GSCS will require all students to

participate in service learning with curricular implications, compiling a minimum of 150 hours by the time they complete Grade 12. GSCS has numerous, self-identified partners, such as local engineering, environmental manufacturing, architecture, energy, labor organizations along with public and private businesses that will work closely with the staff to ensure that all students have multiple opportunities to choose from to meet their service learning requirements. These partnerships exemplify what sets GSCS apart from others as the experiences will be structured to reinforce classroom learning and develop an awareness of community needs. We and our partners believe that these experiences will instill a sense of responsibility and loyalty to Western New York - a loyalty that will serve to enhance employee retention in the workplace.

The design of the GSCS educational program was developed with the understanding that incoming students will likely require significant support to be successful. The core component of that design is an extended school day and school year that results in students attending courses culminating in a NYS Regents exam, receiving nearly twice the seat time that is required by the Part 100 regulations. Teachers will leverage the additional seat time by utilizing it to focus on topics and skills identified as areas of weakness through common formative assessment data. GSCS recognizes that additional seat time alone will not result in success for all students. With this in mind, GSCS will have multiple levels of support to ensure student success. An intervention support period has been added to the end of the school day where teachers are able to require students to attend for extra support. This time will be utilized both to ensure that students complete missing assignments and also obtain additional instruction in specific areas of need. Teachers will utilize both formal and informal assessment data to identify students who need to attend these sessions. As the school year progresses, students may be scheduled into these support sessions for an extended period of time (e.g. 2 x per week for the next 10 weeks). Teachers and administration will meet after mid-term assessments to discuss students who may need additional support and identify specific intervention plans for these students.

b. Increase high school graduation rates and focus on serving at-risk high school student populations (including re-enrolled drop-outs and those below grade level)

When considering "at-risk" youth, the philosophy of GSCS is based on the assumption that all youth are "at-risk" if not provided with a relevant engaging curriculum. This belief is supported by a 2006 study entitled, "*The Silent Epidemic, Perspectives of High School Dropouts*," which states that the primary reasons for students leaving school were: classes were not interesting; not enough was expected of them, they were bored and unchallenged; and, it was necessary to obtain employment or there were other family obligations. The students also were then asked how schools could improve to help keep them in school. The number one response was, "Improve teaching and curricula to make school relevant and engaging and enhance the connection between school and work." (Bridgeland, J.M., 2006).

There are many other factors that determine if a student is "at-risk". These include poverty, single-parent homes, learning disabilities, inadequate housing, endemic neighborhood crime, health and hunger. It is anticipated that the majority of the GSCS student population will come from the City of Niagara Falls. Therefore, it is expected that the majority of these students will face multiple risk factors.

Looking at the challenges students face and the obstacles referenced above, some might think that GSCS would have lower expectations of its student body; to the contrary, GSCS believes that its students are capable of great things. The challenges they face quite possibly make them *better* prepared for life challenges that lie ahead. Thus, the GSCS will offer a challenging curriculum that pursues a course of study which encompasses traditional, contemporary, and progressive educational methods. The school will emphasize literacy, technology, and scientific and technical proficiencies, with an emphasis on global and environmental sciences. GSCS students will embody the sound ethical standards detailed in a Code of Conduct, in addition to expected traits of commitment, patience, perseverance, and resiliency.

The foundation for success is the relevant, hands-on curriculum that will be specifically designed to engage students at all levels. Custom courses will be developed to definitively link classroom learning with real-world application in a multidisciplinary fashion. The school-designed curriculum will enable every student to develop a deeper insight of knowledge and achieve competencies in the humanities, languages, mathematics, sciences, arts, work-based learning, and social skills paths including a realm of choices for global sciences and related careers. The curriculum will be presented in a culturally sensitive manner that embraces the anticipated student diversity, incorporating different languages and traditions into programming when appropriate. Additionally, the GSCS will incorporate a rigorous AP course load that will provide students with expanded learning opportunities and a clear picture of where their learning may lead.

Relevance of the curriculum will be made further evident through a variety of career exposure activities to enrich and support the programs and provide students with a clear linkage between classroom learning and the work environment. Students will have the opportunity to engage in internships tailored to meet their individual interests. These internships will allow them to gain critical insight into job experiences and engage in applied critical thinking and problem solving activities to support lessons learned in the classroom. Students will be eligible to participate in an internship beginning in Grade 11, depending on their schedule, academic standing, and coursework completed to date. In Year I, the Board of Trustees and GSCS Principal will begin working with community partners to establish a structure that outlines the fields of study internships will be offered in, the hours required for completion, and the method to be used in evaluating a student's performance.

The school schedule and educational program have been designed using the PLC model. Key components of the schedule to support at risk students within a PLC environment are an extended school year, extended daily seat time in core educational areas, a flexible support period at the end of each day, and an advisory system. Students will attend school year-round. Summer programs will consist of a combination of Regents core requirements, dual credit, and/or AP courses, leadership and career seminars, and, where needed, time for additional support in core academic areas. Students will attend normal high school classes for at least 191 days (10 or more days per school year than most districts). Students will also have over one hour of instruction daily in their core academic subjects. The extended calendar and daily extra seat time will give teachers the flexibility to both support and assist students in meeting the GSCS requirements. For those students who need further support, the schedule provides for a full period at the end of the school day that is not directly scheduled, but rather flexible to meet the changing needs of students. Teachers and students will use this period for enrichment and/or remediation and to make-up missing assignments. Some students may earn early dismissal to work independently on enrichment projects, while other students will take advantage of this extra period to independently seek out teachers to receive directed instruction in areas that they have not yet mastered.

To further minimize the risk of student failure, each full-time teacher will mentor a cohort of students, monitor their progress in each subject, and have consistent contact with their parents or guardians ("parents"). Mentors will ensure students are taking advantage of the flex period at the end of the school day and all support services are in place to ensure student success. Mentors will also work within the PLC with students who are struggling to meet the high expectations of the school. Each student, including students with significant deficiencies, will benefit from the school's extensive individualized instruction. The PLC philosophy is "whatever it takes!" When a student is identified as "at-risk" for not completing their education because of poor performance, poor attendance, behavioral difficulties, and economic or environmental disadvantage, the mentor will work closely with a school Administrator, Guidance Counselor and other support staff to recommend additional supports, strategies and interventions. Action taken may include items such as, but not limited to, one-on-one tutoring, counseling, apprenticeship programs, Saturday school, and family outreach. The school's Guidance Counselor will be available to students and their families to recommend appropriate services.

c. Focus on academic achievement of middle school student populations and preparation for transition to high school

In its second year of operation, the GSCS will enroll Grades 8-10, and add Grade 7 and 11, and 12 in the next two years. Outreach and information sessions for Grades 7-8 will begin in Year one, as well as the development and implementation of an aggressive remedial program based on the identified needs of the first class of Grade 9 students. Grade 7 students will be provided multiple support services for any remedial work necessary to ensure they will be prepared for the rigorous 8-12 coursework.

d. Utilize a variety of high-quality assessments to measure understanding and critical application of concepts

Effective use of assessments within a PLC environment is one of the core components to the educational program design at GSCS. Assessments will primarily be used to provide vital information to teachers, administrators and support staff on progress towards goals. For multiple reasons, the NYS Regents Exams have been selected as the primary summative measure within the GSCS structure. Students are already required to take the NYS Regents assessments, so making use of them will not require additional instructional time or resources. In addition, success on these assessments translates directly to a successful graduation rate and preparedness for success in college. These assessments have been selected, not because they will measure what was taught, but rather because they measure what the standards require students to know and be able to do - which should be the same but is not always the case in schools.

In addition to the NYS Regents Assessments, GSCS staff will administer the PSAT and SAT exams as these types of evaluations are important for measuring student progress in developing essential skills and eventually demonstrating adequate preparation for college. This information will be shared with students, parents, the Board of Trustees and other stakeholders, and it will be published in the GSCS annual report. The data collected from these assessments will also be used to drive program improvements to ensure GSCS students are fully prepared for their post-secondary coursework. The results of these assessments will be reviewed on a yearly basis to identify student strengths and weaknesses. An output of these reviews will be used to identify instructional program areas that can be improved / modified to better support student success on these assessments, which play a major role in college acceptance and scholarship awards.

Although the primary methods that will be used to assess the student achievement goals are the NYS Regents examinations and college entrance exams, they are only one component of the planned GSCS assessment. Depending solely on end of the year summative assessments, such as the NYS Regents Assessments, to determine if the school is succeeding is a disservice to students. In order to know that GSCS is on target to achieve the established goals, and avoid a "rear-view mirror" approach to instruction, a system will be put into place to frequently monitor student achievement and use the data from this process to inform further instruction and identify those students in need of additional supports. The foundation of this monitoring will be teacher generated, common formative assessments. Common formative assessments are assessments generated by the teachers teaching specific courses together. If only one teacher is teaching a course then they will generate the assessment on their own. Such assessments are generated based on the unit of instruction and will be created at the time the unit plan is generated. The assessments cannot be created before, as they may need to include topics from previous units that the data suggests require additional support and monitoring. With that in mind, GSCS will be able to provide samples of common formative assessments that other schools are using but not the actual assessments that will be generated by GSCS teachers. Research indicates that the most powerful way to increase achievement is to use data from frequent common formative assessments within a PLC to inform instruction and drive continuous improvement efforts. All staff teaching the same subject will give common assessments and meet to review data from these assessments to drive instruction. This process will be critical in meeting the high expectations of the school.

The NYS Regents assessments, SAT's and other "High Stakes" assessments will be used to set goals and monitor programs but are summative in nature and less useful for "real-time" program monitoring. For this reason, an

emphasis will be placed on teachers using frequent common formative assessments to continually monitor what students know and are able to do. It is the frequent teacher generated common formative assessments that will be the cornerstone of the continuous improvement process at GSCS.

The assessment program will begin with a pre-entrance assessment in Mathematics and English Language Arts. These assessment results will be used in a variety of ways. Initially the results will be used, in conjunction with scores on the Grade 7 and Grade 8 NYS Assessments and other available information (e.g. report cards), to identify students who need immediate support. Early support mechanisms will include a summer program that will focus on foundation skills required for success in Math and ELA. The scores on the pre-entrance assessment will also be used by teams of teachers to identify students in need of support during the flexible period at the end of the school day. Results of the pre-entrance assessment will be used to identify overall cohort strengths and weaknesses so that teachers can adjust their initial instruction accordingly.

The common formative assessments will be generated by teams of teachers and will typically be modeled after the NYS Regents assessments, where applicable. Individual assessment items will be selected from past NYS Regents assessments, from materials provided by the applicable textbook publisher and created by teachers. Teachers will receive professional development and support in the generation of common formative assessments and best practices in creating both selected response and extended response items.

Common formative assessments will be given at least twice a quarter in courses that culminate in or lead to a NYS Regents exam. Teachers will also use informal assessment strategies on a daily basis. Systems will be put in place to ensure that teachers are effectively using both formal and informal assessment data to provide timely feedback on student progress towards mastery and to drive their instruction. Teachers will use this information to assess the efficacy of instruction and adjust pacing, depth and approaches. The feedback will also be used to identify students in need of remediation, additional support or special services. Performance-based learning activities will also offer opportunities for significant and immediate feedback.

GSCS recognizes that performance-based assessments are a key component of a balanced assessment program, especially in classes such as fine arts or physical education. GSCS is committed to ensuring that, where performance based assessments are used, they are developed with rubrics that are written in student friendly language and provide a clear indication of the student's current proficiency level and next steps. The results of performance based assessments can be immediately communicated to students and can also be reviewed by teams to identify both programmatic strengths and weaknesses and to target individual student needs.

Teachers will not have a monopoly on using assessment data. Students will be taught to use the ongoing frequent feedback to adjust their own learning strategies and seek additional support. A clear picture of the standards and expectations for each unit will be provided to students, along with tools for them to monitor their progress in those areas. Students will be taught how to take ownership of their learning and seek out support services in their specific areas of need. It should be noted that, although students will be provided with tools and resources to drive their own success, we will not leave it up to them to seek out help. Systems will be in place to provide mandatory support for students who do not proactively seek support.

e. Increase implementation of local instructional improvement systems to assess and inform instructional practice, decision-making, and effectiveness

Using frequently collected assessment data to inform instruction, within a Professional Learning Community environment, is a core component of the educational program design at the GSCS. GSCS will utilize an on-line system for collection of student achievement data on common formative assessments. The system will provide teachers with a variety of reports that will allow them to analyze assessment results. Teachers will use these reports during team meetings to identify specific skills / standards where students may be struggling and they will then develop plans for addressing such areas. Teachers will also identify specific students who may require additional out

of class support. Data from this system will also be utilized by teams to identify overall program improvements. Students will be provided reports through the system that will support them in taking responsibility for their own learning. Administrators will also have access to the assessment data through this on-line system and will make use of it to monitor and support teams in their progress toward achieving their goals.

Teachers in all courses will be expected to involve students in the assessment and monitoring process. They will clearly define expectations and provide tools and strategies for students to monitor their own progress towards meeting those expectations. At any point in time, students should be able to articulate the instructional focus, their progress, and what steps they can take if they are not meeting their goals. Students will use their own data to identify areas where additional support is needed. Teachers will use informal assessment data on a daily basis to monitor and drive instruction in their classroom. Teachers will use homework assignments and mini-assessments like quizzes to frequently monitor student achievement and guide instruction. Formal assessment data will be gathered and reviewed by teachers with their teams to identify individual student needs, program strengths and weaknesses. Teams will focus on common unit assessments and collaborate to establish and monitor SMART goals (Student centered, Measurable, Achievable, Results focused, Timely). Teachers and teams will ensure that all students who are not meeting expectations are provided with additional supports to ensure success.

It will be the GSCS Principal's responsibility to establish a school culture of accountability based on a foundation composed of multiple stakeholders. The Principal will work closely with faculty to establish plans for embedding this culture. During the initial weeks of school, students will be introduced to the support period at the end of the school day and taught how to monitor their own progress and seek out support as soon as possible. Teachers will be provided professional development in "Assessment FOR Learning" strategies, modeled after the works of Dr. Richard Stiggins. The foundation of this accountability system is **student self-accountability**. Students will be taught to hold themselves accountable for their individual performance. Students will be provided the tools to monitor their own performance and the resources available when they are not meeting the expectations. Students will receive information daily in the form of both formal and informal assessments, and they will be expected to take ownership in the learning process by actively monitoring their own progress. Students will be held accountable; and if they are not meeting set expectations, they will be required to seek additional support. While it is anticipated that students will assume this responsibility, this may not always happen. With this in mind, all students will be carefully monitored. When it is clear they are not taking responsibility for their own learning, support will no longer be by invitation; it will become mandatory. The consequence for students not taking ownership of their own learning will be that they will not earn early release privileges and will be required to attend intervention classes during the intervention period at the end of the school day.

The second tier of this system involves **individual teacher accountability**. Teachers will be held accountable for ALL students' learning. Teachers are responsible for providing engaging lessons and varied instructional strategies using research based practices. Teachers will provide multiple opportunities for mastery and will be actively involved in identifying students in need of additional support. Teachers will be critical to developing student accountability and providing opportunities for students to seek out additional support. They will also be accountable for determining when students are not fulfilling their responsibility and ensuring that support becomes mandatory. Teachers will identify students in need of additional support, and will also be expected to be involved in providing that support. As a member of a PLC team, teachers will be held accountable when assessment data is reviewed and student progress reports / report cards are generated. The team will review the results and determine why students are not meeting expectations and what changes can be made to better meet student needs. This dialogue encourages collaboration and interaction between/among team members while holding individual teachers accountable for results. The consequences for teachers being successful in ensuring student success will be directly tied to their compensation, the details of which will be published on a teacher performance rubric that will be approved by the Board of Trustees annually. Student achievement will be a significant component of the annual teacher evaluation and review process.

The third tier is the **Professional Learning Community (PLC) teams**. Teams will meet weekly to plan, review assessment data, set interim achievement goals and develop action plans to meet those goals. Teams will support members in identifying best practices to address student needs and develop creative plans to support those students with the greatest needs. Teams will work together to provide administration with quarterly summaries on student achievement, interim goals and action plans. A critical component of these quarterly summaries will be a discussion of students who are at risk of failure and not being serviced well with current programs. Teams may request program changes and additional resources. The Principal will hold teams accountable for meeting their interim and long-term goals and ensuring that the team is holding all members accountable in a professional manner.

Working effectively within a PLC model will be a component of each staff member's summative evaluation. Where staff initially fails to meet the PLC expectations, additional support will be provided which may take the form of administrator support within team meetings, on-site professional development or off-site professional development; as deemed appropriate by the Principal. Continued failure to meet PLC expectations will result in escalating consequences, which ultimately could result in termination as it is a core component of the schools design. Failure of teams to meet established goals for student achievement will directly impact the teacher performance rubric that ultimately will impact teacher pay. In addition, failure to meet goals may result in other disciplinary action or non-renewal of teachers; especially in cases where the failure is determined to be a result of failure to work effectively within the PLC environment, failure to follow established programs/procedures or direct insubordination.

The fourth tier will be at the level of the **building administration**. The Principal, Business Administrator, and support staff - Vice Principal, Guidance Counselors, the Internship Coordinator and those teachers who have room in their schedule to provide administrative support duties, will be actively engaged with the teams, teachers and students on a daily basis to have a clear picture of what is occurring within the school - what is working and what is not working. Note that teachers who provide administrative support will do so in a non-supervisory fashion and will only do so if they have time in their schedule. This is not anticipated on a regular basis, teachers are not required to free up their schedule to provide such assistance. However, it will be assumed that as a member of the GSCS team, a teacher that has a small amount of time to spare periodically, would be eager and willing to lend a hand when needed with smaller administrative tasks, such as hall monitoring, mail room collating, and copying, etc. On a quarterly basis, the Principal, support staff and team leaders will meet to review the state of the school. This review will include a summary of key assessment data, interim goals and progress toward yearly goals. Team leaders will identify any major program changes that may be needed and areas where additional resources may be required. Major issues arising out of this quarterly review will be brought to the Board of Trustees.

The final tier of internal accountability will be the **Board of Trustees**. The Board of Trustees will hold the Principal accountable for implementing systems to ensure students are successful. A formal performance review will be presented to the Board of Trustees at least twice per year, where the Principal will present data supporting progress toward stated student achievement goals. When progress is not meeting expectations, the Principal will present plans to address the deficiencies. When additional resources are required, the Board of Trustees will work with the Principal and Business Administrator to secure those resources through re-allocation of budgetary funds or through outside sources. In addition to an overall school performance review, the Board of Trustees will directly hold the Principal accountable through a detailed annual performance review that will focus on student achievement and in other key areas such as internships, enrollment and parental satisfaction.

The specific details of the Principal's performance review will be finalized and approved by the Board of Trustees prior to the start of instruction each school year. A primary component of the performance review will be the degree to which academic achievement goals were met. In addition to measuring academic achievement, the Principal will be held accountable for establishing a culture that supports the school's mission / vision and is centered on learning. This evaluation will focus on the degree to which core components of the school design have been implemented. Ultimately the Board of Trustees, school administration, faculty and staff are accountable to the NYS

Department of Education. The Board and Principal will issue timely reports on progress toward goals and support on-site visits, oversight activities and collaborative efforts with the Department of Education.

f. Partner with low-performing, local public schools to share best practices

GSCS anticipates partnering with numerous Niagara Falls School District Departments, as well as other districts and charter schools that serve at-risk populations. Best practices addressing professional development, student data systems and assessments, instructional techniques and issues serving at-risk youth will be developed and shared with partnering schools.

g. Demonstrate the ability to overcome start-up challenges to open a successful school through management and leadership techniques

The Board of Trustees will play a critical role in the development of a management plan that establishes a solid foundation and clear guidelines during the start-up phase of the school. The GSCS will utilize the management and leadership expertise of the Board of Trustees and partner organizations to ensure an efficient and successful start-up phase. For example, partner Human Resources Departments will assist with staff and teacher outreach, recruitment, and training; Marketing Departments will assist outreach and the design, printing and distribution of literature; Business Departments will assist in the implementation of a business office, ordering procedures, and front office protocol. The GSCS Administration will understand during the interview phase the critical nature of the planning period prior to the school's opening and the level of performance they will be held to in order to meet the standards set forth in the charter and throughout the community. GSCS will submit Planning and Implementation and Stimulus Grants as soon as possible to support the purchase of essential materials and supplies and professional services to ensure classrooms are fully equipped and all necessary systems are in place prior to opening. These grants will also ensure GSCS has the financial ability to hire a Principal and Business Administrator early on who will provide advocacy for the school throughout the community and the leadership that builds a solid foundation that reflects the GSCS mission for the new staff, students and families.

h. Demonstrate the support of the school district and the intent to establish an ongoing relationship with such district

Ongoing conversations with the Niagara Falls School District will continue as the full charter application is developed. As previously stated, feedback from preliminary, informal discussions has been positive, and additional meetings with District representatives will be held over the next few weeks.

i. Provide access to viable education alternatives to students in regions where there are a lack of alternatives

GSCS will provide the fundamental elements of increasing access to new opportunities for young adults that will provide them with a pathway out of poverty. In doing so, the school will utilize an organized educational school-to-work model that will offer a sequence of courses which directly relate to higher education and the preparation of students for career opportunities in global sciences, including but not limited to, manufacturing, energy, engineering, architecture, technology and labor industries. This multiple pathways model attempts to eliminate the divide between career training and academics by providing students with the necessary education to continue in either post-secondary institutions or meaningful skilled employment.

Based on feedback from industry leaders from many different backgrounds including environmental, higher education and community organizations, the career focus will be organized and framed into school-wide curricula around the focus of individual careers. The Principal, teachers, staff and board, if deemed appropriate, will work together to plan and implement the inclusion of a career focus into general academic subjects such as math, sciences and language. The goal is to better engage students by showing them the connection between coursework and life outside of the school.

The career element of the school will be furthered by partnerships with businesses and other outside entities which contribute a variety of resources to the educational process. Examples of their involvement will include guest speakers and in-class instruction, field trips, job-shadowing opportunities, student internships, one-on-one mentoring programs, and participation in advisory boards or steering committees involved in the process of school planning and curriculum development.

The GSCS educational plan will reflect an understanding that each student has unique, individual skill sets and aspirations. Guidance Counselors will work with each student and family to develop a plan that best suits the student's interests and abilities. Students will have the opportunity to pursue a variety of programs and opportunities both pre- and post-graduation. Sharing the educational vision of P-16 for students to graduate from high school prepared for college and the workforce, GSCS will support and encourage pursuit of higher education, certificate and training programs, and direct entry into sustainable careers. Coursework and internships will enable students to identify a number of potential career interests that will assist them in making thoughtful and informed choices regarding post-graduation. GSCS seniors and graduates can pursue a number of programs at Niagara County Community College, Niagara University, SUNY Buffalo, and Niagara Orleans BOCES. Internships with local industry partners may result in employment opportunities upon graduation, and/or simultaneous pursuit of additional coursework. Employers may also scholarship students in order to guarantee they continue their employment while increasing their industry skills and knowledge.