

THE CASE

1. Why do you want a charter?

- *What is your motivation for applying to be a charter school?*
- *What will you be able to do with a charter that you cannot do without a charter?*
- *Describe how parents, community members, and other interested parties were involved in developing the petition and will be involved with the school.*
- *What is your understanding of the Fulton County Board of Education's obligation under law to "control and manage" the charter schools it authorizes?*
- *Can you describe the larger community in which the charter school will be located to include demographic and subgroup data as well as information about the other schools in the area?*
- *How will this charter school serve the identified community more existing than existing public schools in the area?*

Our Mission

The mission of Fulton Academy of Science and Technology (FAST) is to provide an education based on design thinking and problem-solving with an emphasis on science, technology, engineering and mathematics (STEM) to K-8 children in the diverse Fulton County community. FAST's goal is to prepare children in a way that provides them a foundation to be creative innovators and problem solvers so they are prepared for success and leadership in our rapidly changing world. With the diverse demographics of our existing community serving as the background theme for academics, children will develop the foundations for learning and thinking that prepares them for success in post-secondary education and careers.

Defining Characteristics

1. Parent Designed and Governed

The FAST concept was developed by parents of current students in North Fulton. Parents in today's workplace recognize a call to action in the way children are educated. While school systems may demand higher competency as evidenced by test scores, the workplace demands creativity as well as subject matter competency. A poll of fifteen hundred CEOs from sixty nations identified creativity as the top leadership competency of the future.¹ In *How Google Works* Google co-founder Larry Page laments that "people haven't been educated in moonshot thinking. They tend to assume things are impossible, rather than starting from real-world physics and figuring out what's actually possible."² FAST will provide students competency in core subjects and the opportunity for creativity and 'moonshot thinking' by integrating Design Thinking into all subject areas.³

The parents proposing the charter concept for FAST come to this effort not only with a passion for educating children but with a business-oriented entrepreneurial mindset that will set FAST apart as an innovator. The FAST Governing Board will be represented by parents, local business leaders and local elected officials. FAST will be a school built and designed 'for the community, by the community'.

2. Innovation Orientation within STEM Content

FAST will become STEM certified at the elementary level within three years and at the middle school level within five years of operation⁴. STEM certification is rapidly becoming a base layer, as opposed

¹ Carr,A. (2010) The most important leadership quality for CEOs? Creativity www.fastcompany.com/1648943/most-important-leadership-quality-ceos-creativity

² Schmidt, E and Rosenberg, J, (2010) *How Google Works*, page xiv

³ www.dschoool.stanford.edu/k-12-lab/, reflected in year 1 budget for teacher training

⁴ Please see Appendix 9, path to STEM certification. Additional cost for teacher training is reflected in budget 5 year, line 87 and line 70.

to a differentiator, in education as more schools work toward certification. The call to action the parents working to start FAST is the need for our children to be able to think critically, to develop deep and meaningful understanding of the world around them and how to create innovative solutions to problems.

Over the past two decades children have developed a model to replication concept of education.

Whether it is a math problem or a Lego kit in a box, children are shown a model and expected to replicate it exactly as a rote process. In school children are given content information, tested to show they can replicate it accurately, but many lack the ability to think critically and cannot show meaningful understanding of the material in spite of high test scores. Without this understanding children cannot do something creative and innovative with the content. Focusing on STEM content only gets our children to the starting line. Creativity and innovation will get them into the race to win.

Since 1990 the scores among students taking the Torrance Tests of Creative Thinking have declined significantly, particularly in the K-3rd age range.⁵ Children who lose the ability to be creative also lose the ability to be innovative, which is the key to success in the 21st century global economy.

Children today have lost the tolerance to fail and to iterate. In today's world of instantaneous results, children expect instantaneous correct answers. In the *Price of Privilege* Dr. Levine describes how many children are unable to cope with even slight failure.⁶ To overcome this FAST will focus on a growth mind-set to develop the habits of perseverance, intellectual curiosity, and creativity in our students.⁷

⁵ The Creativity Crisis: Declining Scores on the Torrance Tests of Creative Thinking Creativity Research Journal Volume 23, Issue 4, 2011

⁶ Levine,M (2006) *The Price of Privilege*

⁷ Dweck,C (2007) *Mindset: The New Psychology of Success*
July 20, 2015

The way FAST will accomplish this goal is three fold. 1) FAST will incorporate Design Thinking into all facets of the school from each class a student attends to teacher development to administrative effectiveness⁸, 2) FAST will add one hour each day to the school schedule, four days per week for a class in innovation for all grades⁹, 3) FAST will have a capstone project for 8th graders lasting one year that will give each student the opportunity to demonstrate their innovation ability. These three components are discussed in detail in Section 4.

Our differentiated math, science and literacy curriculum will support the goals in increasing critical thinking, deep understanding in content areas, creativity and innovation.

3. **K-8 Model**

A K-8 model is better for children and for the continuous improvement of the school. Research supports the theory that student achievement falters significantly due to the switch to middle school as compared to students who attend a K-8 school.¹⁰ The K-8 model also supports the FCS concept of continuous achievement. Furthermore, the expanded grade levels ensure a longer horizon of dedication from each parent elected on the governing board. This enables the governing board to be truly diverse and effective.

4. **Innovative after school enrichment opportunities**

The after school enrichment opportunities at FAST will allow students to personalize their learning in a time efficient and cost effective way. FAST will offer clubs in music, coding, robotics, creative writing

⁸ Teacher training for design thinking will be the responsibility of the Principal. Budget for this training is reflected in line 87 of the 5 year budget projection.

⁹ Budget for a teacher to work with teachers to direct curriculum for the Innovation class is reflected in budget line 39 and is one of the two technology teachers.

¹⁰ Rockoff, J and Lockwood, B, Stuck in the Middle, Accessed at www.educationnext.org/stuck-in-the-middle July 20, 2015

and art on Wednesday, which will be an early release day for students not attending clubs. Clubs will have an additional fee to attend as they are optional.

Student Population and Attendance Zone

FAST will be located in the North Fulton learning community area of Roswell/Alpharetta, Georgia. It is expected that 95% of our students will draw from the North Fulton County community with the majority hailing from Alpharetta and Roswell. North Fulton schools generally outperform state averages and the area features another charter school and several highly regarded private schools. The area is represented statistically by six distinct cities with the following demographics:

City	2013 Population
Alpharetta	62,298
Johns Creek	82,788
Milton	30,180
Mountain Park	576
Roswell	94,034
Sandy Springs	99,770

Fulton Academy of Science and Technology

City	Median Household Income
Alpharetta	\$91,991.00
Johns Creek	\$109,576.00
Milton	\$155,248.00
Mountain Park	\$68,672.00
Roswell	\$79,385.00
Sandy Springs	\$65,353.00

City	Bachelors Degree or Higher
Alpharetta	77%
Johns Creek	65%
Milton	61%
Mountain Park	57%
Roswell	59%
Sandy Springs	59%

	Attendance Zone
White	69%
Black	13%
Asian	11%
Hispanic	10%

Among these representative populations many of the zoned schools are very high performing. However, the demand for a choice in education is well understood as 15% of families in Fulton County choose to send their children to private schools. Currently there are very few choice school options in North Fulton. The parents working to start FAST understand the community desire for an innovation oriented school with a STEM curriculum.

The FAST Community

July 20, 2015

Fulton Academy of Science and Technology

The FAST concept for a charter school began in the winter of 2014 with the hope of opening in fall of 2015. The short timeline made the search for a suitable location untenable; however, it did provide insight to the desire for the school within the community. The proposed school has a website, FASTK8.org, which allowed potential families to express interest in the school. In less than three weeks the parents of roughly 400 students indicated a desire to attend.

Our community has shown significant interest in FAST. Representatives have spoken with local mayors, city council members, and state senators and representatives, local businesses, plus regional colleges and universities to help foster a culture of learning in our community.

Relationship with Fulton County Schools

FAST expects to have a close relationship with Fulton County. It is hoped that relationship will be more than a “control and manage” relationship but instead a mutually beneficial learning relationship. While FAST desires autonomy in decision making, no school should be a silo of learning and innovation. FAST will seek to understand innovations made in other schools and will welcome schools in to study the effectiveness of the FAST approach. FAST will follow all Fulton County rules related to financial monitoring, enrollment data input and communication. FAST will put effort into being a part of, as opposed to apart from, the Fulton County School system. Local FCS Board community meetings will be attended both by the Principal and FAST Governing Board members to remain apprised of future county planning.

ACADEMIC OBJECTIVES, PLANS, AND WAIVERS

2. What are your school’s performance objectives for the proposed charter term?

- *As background for your answer to this question, please see the CCRPI and Beating the Odds goals (Attachments A and B) and review the PowerPoint found on the Charter Schools Division's website. These goals will be included in your charter contract.*
- *In your answer to this question, you will list the specific areas you will target to achieve your CCRPI and Beating the Odds goals.*
- *For example, you may choose to target Math or ELA to raise your overall CCRPI score – because your current Math or ELA scores are dragging your CCRPI score down.*
- *As a way to be competitive on Beating the Odds, you may also choose to focus on closing the gap in your school between educationally advantaged and educationally disadvantaged students – or you may choose to ensure gifted students are well-served, since average-performing gifted students will lower your Beating the Odds ranking compared to schools and districts with high-performing gifted students.*
- *Indicate the expected rate of student performance growth in each year of the proposed charter term.*
- *You are encouraged to include all or some of the components of the current draft of the Georgia Department of Education's College and Career Readiness Performance Index (CCRPI).*
- *You are urged to include cohort measures that show the progress over time of a single cohort of students.*
- *You are also urged to include national norm-referenced test results among your performance measures.*
- *Be specific, measurable, attainable, relevant, and time-based (SMART).*

Academic Performance Goals

<p>Instructions: Below you will find the academic goals and objectives that will become part of your charter contract. There are four (4) goal areas: State Targets, National Targets, Next Level Readiness Targets, and School Specific Targets. Each Goal must have at least two (2) objectives and no more than five (5). The bolded objectives are mandatory. The other items are samples which you may choose in total or adapt to your needs.</p> <p>Please complete the gray boxes for each corresponding goal/objective. Once you have completed a box, please make the cell green to indicate completion. If a goal/objective does not apply to your school or you do not wish to provide additional objectives, please do not complete the gray box and leave the cell gray.</p>	
<p>Goal 1 - Performance in State Level Content Mastery The charter school will perform above the level that would place it on the Priority Schools list, the Focus Schools list, or the Alert Schools list. The charter school will also meet all targets (currently CCRPI and State Performance Targets), as defined by Georgia state requirements and the state's waiver of No Child Left Behind, subject to any amendment, waiver or reauthorization thereof. Students will demonstrate proficiency and improvement over prior years' performance.</p>	
Objective 1 – Mandatory	Yes
During each year of the charter term, the charter school will meet or exceed all State Performance Targets and all other statewide-accountability requirements as established by the Department each year for all content areas of the Measures of Academic Progress (MAP), Georgia Milestones Assessment, the End of Course Test (EOCT) and the graduation rate.	
Objective 2 - Mandatory	2%
In each year of the charter term, the charter school will have performance percentages in each of the Indicators of Content Mastery on the CCRPI that are higher by at least 2% than similar FCS schools (as defined by FCS) or the State performance percentages, whichever is greater. This objective will become extinct when the charter school's performance percentage in an indicator is 98% or greater.	
Objective 3 - Mandatory	3%
In each year of the charter term, the charter school percentage of students meeting typical/high growth in each of the Indicators of Content Area Assessment on the CCRPI will be higher by at least 3% than similar FCS schools (as defined by FCS) or the State percentages, whichever is greater. This objective will become extinct when the charter school's count of students meeting typical/high growth in a content area is 98% of the total number of students with a Student Growth Percentile.	
Objective 4 - Optional	3%
During each year of the charter term, the percentage of students scoring in the exceeds category on the Georgia Milestones in all grade levels and subject areas will exceed the baseline	
*For new schools, baseline will be established in Year 1. For renewals, baseline will be established by the previous academic year.	
Objective 5 - Optional	
During each year of the charter term, the percentage of charter school students scoring in the meets or exceeds category on the End of Course Test (EOCT) will be greater than the State or similar typical FCS school as defined by FCS, whichever is higher, by at least % in all subjects in all grade levels.	%

Objective 6 - Optional		
During each year of the charter term, the percentage of charter school students scoring in the exceeds category in all subject areas on the EOCT will exceed the baseline average* by __%.		%
Objective 7 - Optional		
The charter school will exceed state or similar typical FCS school mean as defined by FCS, whichever is higher, by __%, or exceed __%.		%/%
Objective 8 - Optional		
Goal 2 - Performance on nationally normed assessments		
The charter school will demonstrate proficiency and improvement on national norm-referenced assessments		
Objective 1 - Optional		
The percentage of students who meet or exceed their RIT growth targets on MAP testing, as developed by NWEA will increase by 3% each year* of the charter term.		3%
Objective 2 - Optional		
The percentage of students with __ years or more of growth as determined by the Grade Equivalent value on the MAP will increase by __% each year.		#/%
Objective 3 - Optional		
Goal 3 - Readiness for next school level		
The Charter school will demonstrate student readiness to matriculate to the next school level.		
Objective 1 - Optional		
% of graduates will score at least 1600 out of 2400 on the combined SAT.		%
Objective 2 - Optional		
% of graduates will complete a pathway within their program of study.		%
Objective 3 - Optional		
96% of students will score Meets or Exceeds on the state mandated Writing Assessment.		96%
Objective 4 - Optional		
___ % of English Language Learners with positive movement from one Performance Band to a higher Performance Band as measured by the ACCESS for ELLs		%
Objective 5 - Optional		
___ % of Students With Disabilities served in general education environments greater than 80% of the school day		%
Objective 6 - Optional		
Goal 4 - School specific academic Goal		
Fulton Academy of Science and Technology will develop students' problem solving skills by integrating STEM curriculum through the utilization of inquiry-based and student-centered learning approaches.		
School Specific Objective 1		
Objective 1	Become STEM certified at the elementary level within 3 years.	
Measures	1. Number of teachers with science and/or math endorsement will increase by 25% per year	

	<p>2. Evidence of science and math integration will increase 20% each year</p> <p>3. Path to STEM certification outlined specifically in Appendix 7</p>
Attainability	The school design is based on becoming STEM certified and increasing levels of innovation integration. The governing board and administration will be aligned to this goal on day one as opposed to conversion of an existing school to become STEM certified.
Relevance	STEM certification is relevant to FAST as it is intended to be a STEM content focused school. Increasing STEM certified schools is a goal aligned with GPS.
Timeline	STEM certification will take a minimum of three years with annual goals as outlined in Appendix 7. Teachers will be selected for endorsement training with preference for higher grades first.
Budget Allocation	STEM certification budget allocation is reflected in lines 70 and 87 of the 5 year budget projection. Primary budget resources are teacher development with secondary funding sources found on lines 60 and 61 with increasing levels of technology funding.
Responsibility	Principal will determine order of teacher endorsement funding and will be responsible for micro-level monthly planning toward STEM certification based on the overall 3 year plan outlined in Appendix 7.
School Specific Objective 2	
Objective 2	Become STEM certified at the middle school level in 5 years.
Measures	<p>1. Number of teachers with science and/or math endorsement will increase by 25% per year until 100% hold endorsements.</p> <p>2. Evidence of science and math integration will increase 20% each year until near full integration as will be demonstrated in block teaching of math and science and PBL in Innovation Class.</p> <p>3. Path to STEM certification follows additional thresholds beyond elementary school certification</p> <p>4. By year 5 all 8th grade students will be taking high school level math courses.</p> <p>5. 8th Grade Innovation Capstone is a school specific STEM exhibition</p> <p>6. Technology acquisition increases to be 1:1 computing for middle school by year 3</p> <p>7. Math and Science standardized test scores will increase 1-10% in all STEM areas</p> <p>8. Minimum of 75% of students will exceed state standardized tests</p>

Attainability	STEM certification in 5 years is an attainable goal. The school design is based on becoming STEM certified and increasing levels of innovation integration. The governing board and administration will be aligned to this goal on day one as opposed to conversion of an existing school to become STEM certified.
Relevance	STEM certification is relevant to FAST as it is intended to be a STEM content focused school. Increasing STEM certified schools is a goal aligned with GPS.
Timeline	STEM certification will take a minimum of four years with annual goals outlined in measures above. Teachers will be selected for endorsement training with preference for higher grades first.
Budget Allocation	STEM certification budget allocation is reflected in lines 70 and 87 of the 5 year budget projection. Primary budget resources are teacher development with secondary funding sources found on lines 60 and 61 with increasing levels of technology funding. Line 63 reflects the budget for STEM labs, both wet and technology labs.
Responsibility	Principal will determine order of teacher endorsement funding and will be responsible for micro-level monthly planning toward STEM certification. Governing board will be responsible for continued budget allocation and oversight for technology acquisition, lab development and grant identification and application for additional STEM resources.
School Specific Objective 3	
Objective 3	Increase standardized test math scores by implementation of Singapore Math
Measures	<ol style="list-style-type: none"> 1. Number of students meeting or exceeding Georgia performance standards in math will increase by 5% per year to an extermination of 98% before charter term is completed. 2. RIT net math scores on MAP testing will be monitored three times per year to ensure adequate progress for each student. Students not showing adequate progress will be provided additional tutoring time in focused subject areas as MAP testing shows areas of concept weakness. Adequate progress will be defined as meeting or exceeding mean growth as outlined in the NWEA 2015 Mathematics Student Growth Norms.¹¹ 3. Monitor the number of hours students use KhanAcademy online resources which are aligned with Singapore Math. 4. By year 5 all 8th grade students will be taking high school level math courses.
Attainability	Singapore Math is a mastery approach to mathematics which research has shown to have a positive effect on standardized test scores.

¹¹ www.nwea.org/content/uploads/2015/06/2015-MAP-Normative-Data-JUN15.pdf
July 20, 2015

Relevance	Increasing Math scores is relevant to FAST as it is intended to be a STEM focused school. Focusing on each student's net RTI growth at three points during the year will help FAST accomplish the Beating the Odds goals.
Timeline	Baseline evaluation of math will begin shortly after school is opened with baseline MAP testing. Performance minimum objectives will be monitored in the fall and spring to ensure minimum target increase in RTI score is met by every student. Students not meeting RTI growth targets will be provided additional tutoring. The FAST goal is focused on individual student growth regardless of baseline testing. Students at every level will have relevant growth goals to show continuous achievement as aligned with the FCS continuous achievement model.
Budget Allocation	Budget allocation for this goal can be seen in line 70 and line 58. Line 70 shows the planned spend to implement Singapore Math using an external training company for teacher development in this method. Additionally line 58 shows text purchases that partly include Math in Focus© curriculum acquisition. Khan Academy is a free online resource and requires no budget allocation.
Responsibility	Principal and vice principal will be responsible to coordinate training. Vice principal will be responsible to review MAP testing on a quarterly basis and ensure additional tutoring is available for students not meeting growth targets. Vice principal responsible for communicating growth targets to parents and communicating MAP test results.
School Specific Objective 4	
Objective 4	Obtain accreditation from AdvancED by year 3
Measures	<ol style="list-style-type: none"> 1. Submit AdvancED Accreditation Application in Year 1 2. Internal review process during Year 2 - Collect student performance data, Conduct Self Assessment, Conduct stakeholder survey, Write an Executive Summary, and Create a quality improvement plan 3. Demonstrate compliance with AdvancED, government and partnership requirements during Year 2 4. Work with AdvancED to conduct and host an External Review during spring Year 2
Attainability	AdvancED Accreditation is an attainable goal.
Relevance	FCS is accredited with AdvancED. As FAST will be an FCS school accreditation with AdvancED is appropriate.
Timeline	Three years is the stated timeline for accreditation according to the AdvancED website.
Budget Allocation	Budget allowance is included in line 70 of the 5 year budget.
Responsibility	Governing Board will be responsible for oversight of accreditation process with Principal responsible for steps outlined in measures.
School Specific Objective 5	
Objective 5	Increase parent volunteer hours to reach 10 hours per parent by year 4.

Tasks and Measures	<ol style="list-style-type: none">1. Parents will be required to log in at school and volunteer hours can be tracked.2. Parents will be given the opportunity to watch the Fulton County Mandatory Reporting video on school ipads to increase the number who complete the video to be able to volunteer.3. Class volunteers will set up sign-ups for multiple volunteer opportunities for parents on a continual basis.4. Principal will highlight volunteers in each newsletter and volunteers who meet hour goals will be given carpool passes to go to the front of the line.
Attainability	A goal of nearly 10,000 hours of volunteer time per year is challenging, but obtainable with continued emphasis on the need for parent involvement in the school for their children.
Relevance	Parent involvement is highly correlated with student achievement.
Timeline	Four years, increasing by 10% from baseline to goal.
Budget Allocation	This goal does not directly impact the budget.
Responsibility	Principal will report volunteer hours to Governing Board on a monthly basis.

3. How will the charter school governing board, management, instructional leadership, faculty and staff know that students are on track to meet these academic goals?

- *What assessments will the school administer to obtain performance data for each student?*
- *Describe how the school will obtain baseline achievement data.*
- *Describe how the school will benchmark student growth.*
- *Explain how the charter school will work with the local school system to participate in all state-mandated assessments.*

In accordance with Singapore Math® and FOSS®, data collection is the forefront of analyzing student performance to assure that all students at FAST meet or exceed academic goals. Analysis of academic growth will be met through two different avenues; quantitative assessments and qualitative assessments. The comprehensive systemic plan will include dissemination and analysis of aggregate data throughout the school year in order to maximize and drive student performance levels for every student from grades kindergarten through eighth grade.

Quantitative assessments would encompass all tests with quantifiable metrics, such as; Measures of Academic Progress (MAP) Test, Georgia Milestones Assessment System, Student Learning Objective (SLO), Assessing Comprehension and Communication in English State to State for English Language Learners (ACCESS for ELLs) and Georgia Alternative Assessments (GAA). The above written tests would provide measurable data to compare to cohort schools and students. The goal of the quantitative assessments will ensure transparency of measureable outcomes in comparison of FAST students to other North Fulton schools. These tests will be instituted during benchmark periods as determined by the teacher, school, or county.

Qualitative assessments would encompass all tests that are both subjective and objective. Qualitative tests would include; portfolios for student growth, journals, teacher observations and traditional assessment tools, and anecdotal records documenting student performance. Teachers rely on traditional assessment, also called classroom assessment, as a method of monitoring student progress. Some assessment techniques may be; classroom discussion, homework, journal questions/answers and one-minute papers. These assessment techniques are designed to gauge the effectiveness of teaching and the quality of learning that is taking place on a daily basis, thus allowing the teacher to assess perception. Although not quantifiable, the information obtained for both teacher and student could be invaluable. Teachers and students can recognize areas for academic and personal growth throughout the semester. All students learn and assimilate information differently; therefore, their strengths and weaknesses will be different. Astute teachers will recognize a students' ability to excel versus the need for improvement. Teachers will nurture the areas that the student needs to grow in personally, such as reading, writing, problem solving, or confidence. Qualitative tests will be performed and monitored throughout the school year.

FAST will ensure that state and federal mandated policies are adhered to with regard to test administration for general and specialized student populations. This ensures that every student is tested according to the least restrictive environment and setting based on his or her individual educational plan or Individualized Educational Plan (IEP). FAST will be fully integrated into Fulton County Schools and will use the same procedures, and practices as any Fulton County School and will receive the same resources, training, materials, and support of a typical Fulton County School.

Measures of Academic Progress (MAP) Test

MAP testing is an adaptive, measureable test that provides information as to where each child is in its own path of learning. The nationally normed MAP testing, developed by the Northwest Educational Association (NWEA) empowers educators to make informed decisions in order to promote student's academic growth. The dynamic aspect of the test allows students to excel in areas where they are knowledgeable while

focusing on areas that require further education. The test adapts to a student's response as the test is being administered. When taking a MAP test, the difficulty of each question is based on how well a student answers all of the previous questions. As the student answers correctly, questions become more difficult. If the student answers incorrectly, the questions are adaptive and become easier. The final score is an estimate of the student's achievement level. Parents and teachers can use RIT (Rasch UnIT), which is a measurement scale developed to interpret the test scores. The RIT score relates directly to the curriculum scale in each subject area. As an equal-interval scale, the data can be added together to calculate accurate class or school averages.

Georgia Milestones Assessment System

Georgia Milestones Assessment System is a summative test that provides quantitative data that evaluates student learning at the end of an instructional unit and is compared to benchmark data. Teachers or students can use information from this test formatively as guidance in subsequent courses. The Georgia Milestones assesses student knowledge as outlined in the state adopted content for language arts, mathematics, science and social studies in grades third through high school. A majority of the test will focus on non-tested subjects. Administered near the end of the school year, the test also provides the public with information as a benchmark of the educational opportunity in Georgia. As a state mandated assessment, FAST participates in Georgia Student Assessment Program pursuant to the SBOE Rule 160-3-1-07 Testing Programs.

ACCESS for ELLs

Fulton Academy of Science and Technology

The school will be fully integrated into FCS ESOL and will use the same processes, procedures, and practices as any FCS school and will receive, therefore, the same resources, training, materials and support as a typical Fulton County school.

Georgia Alternate Assessment

The school will be fully integrated into FCS SPED and will use the same processes, procedures, and practices as any FCS school and will receive, therefore, the same resources, training, materials and support as a typical Fulton County school.

Assessment Plan

Assessment	Grades	Area	Term	Assessment Type	Description
MAP	2,3,4,5	Math, Reading, ELA, Science	Fall, Winter, Spring	Norm-Referenced	Norm-referenced tests (NRTs) compare a person's score against the scores of a group of people who have already taken the same exam, called the "norming group."
MAP Primary Grades	K,1	Math, Reading	Fall, Winter, Spring	Norm-Referenced	Norm-referenced tests (NRTs) compare a person's score against the scores of a group of people who have already taken the same exam, called the "norming group."
Georgia Milestones	3,4,5	Math, Reading, ELA, Science, Social Studies	Spring	Criterion-Referenced	An assessment where an individual's performance is compared to a specific learning objective or performance standard and not to the performance of other students.

Benchmark Test for GA Milestones	3,4,5	Math, Reading, ELA	Winter, Spring	Criterion-Referenced	An assessment where an individual's performance is compared to a specific learning objective or performance standard and not to the performance of other students.
Benchmark Assessment for GA Milestones Writing Section	3,4,5	ELA	Fall	Writing	The Georgia Milestones Assessment Writing Section is a test of narrative, informational, and persuasive writing. Students will be given either an informational, persuasive, or narrative writing topic.
Benchmark Assessment for GA Milestones Writing Section	3,4,5	ELA	Spring	Writing	The Georgia Milestones Assessment Writing Section is a test of narrative, informational and persuasive writing. Students will be given either an informational, persuasive, or narrative writing topic.

Portfolios for Student Growth (PSG)

Portfolios for Student Growth (PSG) are a student-centered, process-led approach to portfolio development. Through the portfolio process, FAST students maintain portfolios of their education, resulting in the development of self-awareness, goal setting, and decision-making skills. Students are taught self-analysis by focusing on time management, progress assessment, and integration of diverse personal experiences. The FAST student learns ownership of his/her path of education. With the guidance and feedback of the teacher, students help plot out future learning objectives while analyzing past lessons. Overall, PSG empowers students and becomes a hub for self-reflection. The goal of the portfolio is for student work to

grow with them through grades. This will help the teacher at the next grade level gauge progress and assess current level of ability.

Journals

Journals promote self-confidence in writing. Students are given the opportunity to explore their own thoughts and express them through assessment free writing. This process will spark student imagination and self-confidence. In the normal course of academic instructions, students are limited to writing within the bounds of certain academic rules. Through journals, students are free to express themselves without the pressure of academic evaluation. Teachers also benefit as they gain insight into academic areas where students may need additional guidance. In addition, teachers are also privy into the emotional side of the journal writer. This is an important and valued observation and is not to be taken lightly by FAST teachers and staff. The emotional well being of each student is a priority of FAST administration, staff, and teachers.

Anecdotal Records Documenting Student Performance

Grade-level performance records can be placed throughout the FAST school and classroom. As indicated by FOSS® and Singapore Math®, the school will place much emphasis on data and data collection. This information can be made available to students, parents, and administration. For instance, private records can be mailed to individual parents to review. This opportunity will afford parents the opportunity to meet with teachers if student records reveal that help is needed. Specific data that may be grade or school relevant may be placed in a certain area for all students to observe. For instance, in order to reinforce the school belief that data plays a key role in student achievement, assessment data can be posted on data walls as a constant reminder of the important role data plays in instruction and student achievement. This data-driven culture will grow over the first year as the staff gains proficiency with its use and comprehends its power to influence instruction. Applying and promoting data for all students to observe can increase ownership and pride that the students have for their school. For instance, as MAP and/or Georgia Milestone

Assessment are compared to other cohort schools and grades, students at FAST can become informed and visualize their own ranking. Such an ability of the students should help encourage a feeling of pride and school collaboration.

All assessment data from quantitative and qualitative tests will be shared with the state, county, school board, staff, and parents. FAST fully realizes its obligation to meet all Georgia State standards and assessments and to demonstrate student achievement results that meet or exceed Georgia State performance standards. FAST will comply with all applicable Georgia State requirements.

In addition to quantifying grade-by-grade improvements, FAST will measure the success of cohorts over time. Each class will have more students meeting or exceeding expectations each year as they advance through each grade level. As students' progress through the grades offered at FAST, their progress toward meeting or exceeding expectations on the state mandated criterion referenced test will improve each year in Reading, ELA, and Math. The students' RIT growth in Reading and Math on a national norm referenced test (such as MAP) will improve from third grade to eighth grade whereas the percentage of students performing below target on the state writing assessment will decrease from fifth to eighth grade.

The percentage of students exceeding standard of Georgia Milestones Assessment in each cohort group will increase by ten percent (10%) each year. The percentage of students not meeting expectations on each subject of Georgia Milestones Assessment in each cohort will decrease by twenty percent (20%) each year. Use of percentages rather than real numbers will be used due to the number of students in the cohort group shrinking each year due to normal attrition. Thus the use of real numbers would lead to artificially high decreases in those not meeting standard and/or artificially low increases in the number of students exceeding standard. These goals will be the same for each elementary school grade level (established in third grade) and middle school grade level (established in sixth grade) in each of the subjects tested on the Georgia Milestones Assessment in the baseline grade. The reason for resetting the cohorts in sixth grade is to prevent an eight-year depletion of the cohort groups and to account for the fact that the number of students

per grade increases in the middle school. The goal through data collection as indicated above will allow inclusion of as many students in the school as possible.

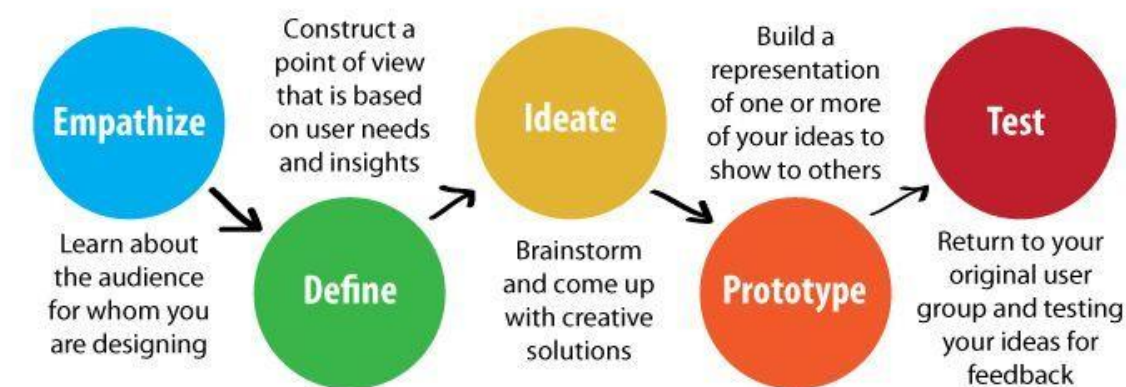
4. What specific actions will the school’s management, instructional leadership, faculty, and staff take to ensure student performance objectives are met during the proposed charter term?

- *Describe the focus of the curriculum. Is it aligned with the GPS?*
- *Describe the educational innovations that will be implemented.*
- *Provide a clear explanation of how the innovations will increase student achievement.*
- *Describe why the innovations are appropriate for this unique school.*
- *What, if any, extracurricular or other auxiliary educational activities will be offered at the school? Does the school envision collaboration with FCS in these areas?*
- *Describe the anticipated teacher-to-student ratios and the rationale for maintaining these ratios.*

The focus of FAST’s curriculum is for children to become creative problem-solvers with deep understanding about the world around them and their role in making it better. Our goal is to continually move students through the design thinking process as developed for K-12 by the d.school at Stanford University and IDEO.^{12 13}

¹² www.ds.school.stanford.edu/k-12-lab/

¹³ www.ideo.com/work/toolkit-for-educators



Teachers will use the design thinking model to create class lessons to make learning meaningful to students. The goal is to create deep understanding on subject matters and to find ways to access each child's potential by presenting material in an interactive manner as opposed to a didactic manner where active construction of meaning and understanding occurs for each student. Thinking routines as outlined in *Making Thinking Visible*¹⁴ will be used to engage students interactively, giving them opportunity to express abstract thinking concretely in drawings that can be used as a launching point for the design process. Student centered learning, where learning is not simply acquisition based, but is applied and adapted to new situations will be the hallmark of each class room from Kindergarten through 8th grade.

FAST classrooms will be leveled with a bias towards smaller class size for the on-level students to allow teachers to respond more individually to students who need additional attention and additional opportunities for learning that is deeply connected to their own world. For many students the opportunity to close the achievement gap exists when learners make the connection between their own experiences and the content being taught. Smaller class size will allow the teachers to find that connection and expand it for struggling students. Innovation class will be held at the end of each day and will be mixed between levels within grades in K-5 and will be mixed between grades in 6th -8th grade.

¹⁴ Ritchhart, R, Church, M, Morrison, K (2011) *Making Thinking Visible* page 51 matrix

The overall student to teacher ratio will be 21:1, except in Kindergarten where a para-pro will be added to each class making the ratio 11:1.

Mathematics

Math in Focus: The Singapore Approach® will be used in daily math instruction. FAST's problem-solving focus will require a subject mastery approach in mathematics. According to the National Mathematics Advisory Panel, "The research shows a clear link between what students are expected to learn and mathematics achievement: At a given grade level, greater achievement is associated with covering fewer topics in greater depth."¹⁵ Math in Focus® is aligned with that goal in giving children a deep understanding of the 'why' in problem solving as opposed to simply the 'how'. The curriculum is common core aligned, research based, problem solving focused and in-line with design thinking. The method emphasizes a concrete to pictorial to abstract approach that is effective with children who struggle in math and helps proficient learners accelerate into abstract thinking. Bar modeling is used to help students gain numerical fluency by teaching students a consistent way to model a problem which will lay the foundation for algebraic equations where there is a variable and an unknown.¹⁶ The ability to model a problem will help students cross functionally in science and engineering problems. Bar modeling is mathematical prototyping that students can use to discuss and test which is aligned with design thinking. Math in Focus'® differentiated learning mechanisms allows for continuous achievement for all students as the curriculum is available through 12th grade.

The teachers FAST expects to hire if granted a charter are not expected to have experience teaching the Singapore Math method. FAST has contacted a training company to obtain an estimate of the cost for

¹⁵ National Mathematics Advisory Panel. (2008). Foundations for success: The final report of the National Mathematics Advisory Panel. Washington, DC: U.S. Department of Education. Available at: <http://www2.ed.gov/about/bdscomm/list/mathpanel/report/finalreport.pdf>

¹⁶ http://www.hmhco.com/~media/sites/home/education/global/pdf/white-papers/mathematics/elementary/math-in-focus/MIF_Model_Drawing_LR.pdf

appropriate training and this cost is reflected in the budget for year 1 and represents approximately one-quarter of that budget. FAST will also seek to help parents understand the method by holding curriculum learning nights.

Project M3: Mentoring Mathematical Minds® will be used in the gifted program for these children to further learn problem solving skills by communicating ideas and problem solving methods with their peers through words, pictures, graphs and models. As students learn to communicate mathematically they will become more comfortable in explaining and revising their thinking in light of commentary from their peers and will become more proficient in organizing and clarifying their problem solving process.

Science and Engineering

Science and Engineering education will work to align the ideals of constructivism and accountability which are considered to be at odds in modern education research. In *Redefining Smart* Mr. Markham shows there is a difference between being intelligent and having intelligent behavior.¹⁷ Intelligence is frequently considered to be genetically set, an unchangeable circumstance given to the privileged few. The idea of intelligence versus intelligent behavior deeply undermines students' ability to persist in the face of failure, perhaps even more so among those that were gifted with greater intellectual ability at birth. Using constructivist theories in science and engineering class students will be deeply engaged in learning that is personally meaningful causing the content of the learning to persist long past the test. Students will learn intelligent behavior by incorporating design thinking into project work. Project work will be at the core of Science and Engineering curriculum at FAST.

The curriculum FAST will use to support our students as they learn both content and intelligent behavior will be the Full Option Science System® (FOSS®) designed for K-8 and Engineering is Elementary® designed for grades 1-5. In line with the standards set forth by the Georgia Department of Education the

¹⁷ Markham, T (2016) *Redefining SMART: Awakening Students' Power to Reimagine Their World*, page 34 for definition of intelligent behavior

curriculum addresses both the content and the characteristics of science and will be used inter-changeably or in conjunction with one another. EIE® will be used primarily in our lower grades as students gain facility with the design thinking process in a guided learning environment with hands-on activities.

FOSS® is an investigation based approach to Science education that is hands-on, follows an engineering design methodology to each investigation and requires the integrated use of skills obtained in mathematics and computational thinking. Similar to our mathematics curriculum, FOSS® is also aligned to a mastery approach of learning. Fewer topics will be taught but with much greater depth of understanding.

FAST will seek ways to collaborate with external resources, including businesses, the community, and local colleges to gain access to real-world problem solving approaches used academically and professionally. Science and engineering project work will also integrate with writing projects in ELA as students develop opinion and argumentative writing pieces to support their scientific discoveries.

Fourth through eighth grade students will use an engineering design base rubric for evaluation. Notice the last column in the rubric entitled ‘breakthrough’. The standard rubric used by the Science Leadership Academy formed the basis of the FAST standard rubric.¹⁸ The FAST standard rubric adds the component of breakthrough as an expectation for our students. A student can get a 90 by showing mastery of the content but the only way to score 100 is to show creativity and innovation with breakthrough thinking. In *How Google Works* it is pointed out that people can be as limited by a set of goals as they are motivated by them.¹⁹ If one of the stated goals of FAST is to create innovative thinking than the standard by which we evaluate our students must reflect that goal. In order to get a ‘10’ in breakthrough a student will need to exceed the base rubric expectations and will need to demonstrate a novel solution, unusual insight or application, and ‘out of the box’ thinking.

¹⁸ www.scienceleadership.org/pages/Curriculum

¹⁹ Schmidt, E and Rosenberg, J (2014) *How Google Works* pages 6-7

The bottom column entitled ‘Not Yet’ reflects the FAST approach to a growth mindset.²⁰ Our students who are struggling need encouragement to continue working, that they aren’t there ‘yet,’ because the phrase ‘does not meet expectations’ feels more like a judgment of capability as opposed to a continuing work ethic.

FAST Standard Rubric

	Design	Knowledge	Application	Presentation	Process	Breakthrough
Possible Points	20	20	20	20	10	10
Exceeds Expectations						
Meets Expectations						
Approaches Expectations						
Not Yet						
Totals						

Literacy

The intention for FAST to be math and science focused does not mean that literacy is a secondary goal; it means that STEM concepts are integrated into the literacy equation for our students. Literacy encompasses three components for students; Reading Workshop, English Language Arts (ELA) and Writing. These subjects will be taught as a block, particularly in the early grades when students are progressing from learning to read, to reading to learn, so that students have more opportunities to link the concepts together.

One of the key characteristics that sets high progress classrooms apart from typical classrooms is the teachers in these classrooms. Teachers in high progress classrooms do not depend on single programs or

²⁰ www.ted.com/speakers.carol_dweck

approaches to bring about higher achievement. Rather, these teachers have many tools in their toolboxes and know how to use them flexibly and strategically.²¹

A second key characteristic is that teachers in high progress classrooms engage their students in much more text reading and writing than typical teachers, and they limit their students' work in low-level materials, such as test prep and workbooks. In addition, they are more likely to give students opportunities to choose the texts they read and the topics they write about.²²

A series of studies on the characteristics of high progress first grade classrooms²³ found that these classrooms consistently featured;

- “Extensive and diverse” reading and writing with kids fully engaged in reading and writing text during most of the time devoted to reading and writing instruction
- A focus on teaching for self-regulation and decision-making to help students operate as independently as possible
- Students who were totally engrossed in the work of reading and writing to learn
- Many books to read at students’ instructional and independent reading levels, both fiction and nonfiction, and of interest to readers
- Much small group and individualized instruction
- More instruction and support for struggling readers
- Extremely positive environments featuring engaging instruction characterized as positive, low-risk, encouraging, accepting, conveying goals, self-selection, with ownership of reading and writing topics

Reading

²¹ Allington, R. L., & Johnston, P. 2002; Pressley et al., 2001; Duffy, 2004; Guthrie & Humenick, 2004

²² Allington, 2009, p. 116-117

²³ Pressley et al. 1996, 1998, 2001

FAST's teachers, in keeping with the research, will utilize the workshop model in reading instruction for grades K-5. With this model, teachers employ a structure that allows for small, flexible grouping and the targeting of instruction on the specific skills and concepts that need to be reinforced. Small groups may include students focusing on mastering a portion of the lesson or providing time for more intensive teaching.

Reading Workshop - For reading workshop, teachers use assessment data from DIBELS as well as RAZKIDS to determine each student's instructional level. Teachers then develop guided reading groups to teach students at their own level. Since those at the same reading level may still vary in their mastery of specific reading skills—such as understanding embedded phrases or complex letter-sound relationships—teachers will also organize "strategy groups" to target students needing extra instruction and practice with specific skills. In shared reading, teachers read a book aloud to model expression and comprehension strategies and to build children's vocabulary. Students then reread these books during independent practice to build fluency. In independent reading, children read a book at their own level and respond to the text in writing tasks. Teachers are able to carefully monitor the progress of every student and target identified individual students or groups for extra support.

Based on the above principles, FAST will work to provide a balanced literacy program with high quality literature and informational text to instill a love of reading along with instruction in phonics, grammar, and effective writing. Teachers will use the following curriculum to challenge and support students at every instructional level using a variety of evidence-based instructional strategies;

- **Lucy Calkins' Units of Study® (K-5)** developed at Columbia University, this research based program is designed to challenge and support students at every instructional level using a variety of evidence-based instructional strategies.
- **Storytown®** is a research based reading curriculum for grades K-3. It helps develop phonemic awareness, a robust vocabulary, and offers an easy path to differentiated instruction.

- **Reading A-Z® and RazKids®** are widely used (K-2), research based reading curriculum that provide teachers with leveled reading resources. Students have online opportunities to learn more at home to improve fluency and reading comprehension.
- **Dibels Developmental Reading Assessment®** (K-8) will be used to monitor students' reading fluency and comprehension.

English Language Arts and Writing

ELA and Writing instruction will also be accomplished using the workshop method which combines mini-lessons focused on standards-aligned goals, for example, using evidence to support an argument followed by guided practice and extended time for independent writing. During this time, teachers circulate through the room, providing feedback and correction as well as conferring with individual students. Teachers will help students analyze and revise their writing. At each grade level, students develop a deeper mastery of argumentative, informational, and narrative writing.

Writing across the Curriculum® is another concept we will utilize to teach and improve writing skills of our students, most prominently in grades 3-8. This concept is designed to improve student's critical thinking skills by requiring them to write in all of their classes. There are numerous ways to implement this concept across subject areas; journal writing, think-pair-share, quick writes, self-assessments, real world writing, note taking, and research projects are just a few.

Based on the above principles, FAST will work to provide a balanced ELA/Writing program. Teachers will use the following curriculum to challenge and support students at every instructional level using a variety of evidence-based instructional strategies;

- **Lucy Calkins' Units of Study in Opinion, Information and Narrative Writing® (K-5)** is a research based program that includes three basic structures; the mini-lesson, independent writing time with conferring and small group work, and share sessions at the end of writing time.
- **Write Source®** is a writing curriculum implemented in Grades K - 8 that enables students to master the writing process, key writing forms, the 6 + 1 Trait Writing Model, grammar, usage, and mechanics.
- **Core Knowledge Sayings and Phrases®** are integrated throughout the English Language Arts curriculum in Kindergarten through Grade 8. Mastering these idioms and foreign phrases supports reading and listening comprehension. Every lesson incorporates character values to help students learn the saying or phase as well as understand appropriate social behavior.
- FAST may consider **Shurley English®** for the research proven English Language Arts, Writing and Grammar portions of the curriculum as well as **Empowering Writers®** or **Write Step®** for a writing curriculum after a full review of the prescribed course work and to discover if one is a better fit to align with the writer's workshop teaching method.

During middle school grades, 6-8, reading, writing and English language arts become more intertwined when it comes to teaching and learning. The middle school curriculum includes vocabulary and concept development. Reading skills develop as students continue to learn using grade level appropriate reading material. Students describe and connect essential ideas, arguments, and perspectives by using their knowledge of text structure, organization, and purpose. They apply this knowledge to achieve fluent oral and silent reading skills.

Fulton Academy of Science and Technology

In order to facilitate teaching/learning reading, ELA and Writing at the middle school level, the following concepts will be an integral piece of the curriculum (see Appendix 9 for additional details);

- Close Reading and Writing to Learn
- Working with Evidence
- Understanding Perspectives
- Research, Decision Making and Forming Positions

For each of these concepts, critical text will be introduced (novels, books, articles, position papers, informational text, literary text, narratives, etc.) for the students to read. Along with these texts, writing tasks will be assigned to include, but are not limited to; literary analysis, literary argument, research simulation, student position paper, argument essay, character confessional, advertisement analysis, etc.

Additionally in grades 6-8 we will utilize one of our teaching blocks to educate our students on the concept of plagiarism. This unit will include the 5 key rules to avoid plagiarism, activities to enforce these principles, as well as exercises to assist students in identifying plagiarized texts.

Wordly Wise 3000® will also be utilized in grades 6-8 to provide explicit vocabulary instruction. The words chosen for Wordly Wise 3000 were selected to expand grade level vocabulary and improve reading comprehension by ensuring students master words they will encounter in content-area reading, grade-level literature, and high-stakes tests, including the PSAT, SAT, and ACT.

Social Studies

The aim of social studies is to promote civic competence among our children as they, and the world, evolve over time. According to the National Council for the Social Studies, “The primary purpose of social studies

is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.”²⁴

For FAST in particular Social Studies provides a starting point for design thinking. Empathy creates purpose which makes learning meaningful and relevant to students.

Students must learn to think as engineers and as scientists, but also, they need to think as global citizens. Children need to develop a worldview with an understanding of what ideals their forefathers fought to obtain and uphold in order to become citizens who are committed to the values of democracy. The natural diversity of the FAST classrooms are a framework for students to better understand other cultures relative to their own and to better understand the problems of the world as they learn the STEM skills the world will need to solve those problems. One of the great challenges humanity has faced as technological advances have been made throughout history is the juxtaposition of the ability of technology vs. the good of technology; the ‘can we do’ vs. the ‘should we do.’ FAST believes this framework of civic competence is critical as we develop the next generation of scientists and engineers who will seek to use their ability for the betterment of man.

FAST will employ a variety of curriculum tools for social studies. The Harcourt Mifflin My World® curriculum will be used along with selections from the Socialstudies.org web site, which offers a free teachers’ library of planned lessons. . In addition students will use current events as a starting point for social studies topics. Race-related unrest around the country, for example should be studied concurrently in discussions about the Civil Rights movement. Current events give context and purpose for students to dig deeper and find meaning in the past. The New York Times hosts a Learning Network to connect educators and to develop crowdsourced reading and research lists as curriculum tools for many current event topics.

24. <http://www.socialstudies.org/standards/introduction>

Health

Curriculum goals in health education increase in importance as we become a more technologically advanced society. Health education addresses topics that affect the whole child, from proper eating habits, the benefits of exercise, to how to prevent bullying and drug use. These topics will affect the quality of life for our children today, tomorrow and for the rest of their lives. These are the years when positive habits can be instilled and cemented. Health is a topic that is key to our children's happiness and well being. FAST will use Healthteacher.org for curriculum, but also, classes will develop positive messages to be posted at school about healthy habits and how to stop bullying. Our parent support organization will bring community speakers, such as police officers, doctors and dentists, to talk with children about safety, avoiding drug use, and healthy living.

Fine Arts

Leonardo da Vinci was an enlightened artist and a brilliant engineer. Samuel Morse, of telegraph and Morse code fame, spent much of his life as a painter. Einstein played the violin for seven decades and used it when he became stuck in his thinking process. According to a National Science Foundation workshop on the Creative Arts there are multiple points of likely connection between the arts and language, math, and science education.²⁵

Music is believed to enhance math and language skills, particularly in young children. The music curriculum FAST will use is the Quavers Beyond Marvelous Music Curriculum®. It contains STEM integrated components such as how sound works and how instruments produce sounds.

For the students of FAST art education gives them valuable experience in drawing, providing visual spatial relationship skills, and the opportunity to experience trial and error in a different and more comfortable

25. http://www.nsf.gov/sbe/slc/ACL_Report_Final.pdf

way. It may sound counter-intuitive, but children need to learn how to fail, how to re-think the process and try again. Art education provides more of those opportunities in a low-stress environment. Finally, it is part of FAST's mission to develop children to be creative problem solvers and innovators – the creativity fostered in the arts will extend into creativity in math, science and engineering.

Innovation Class

Innovation class is a concept that will set FAST apart among FCS traditional and charter schools. The purpose of the class is three fold.

1. Students will gain practice in abstract to pictorial to concrete thinking and creating.
2. Students will learn to work as a team with students outside of their typical class schedule, and for 6th-8th graders, they will learn to work with students from different grades.
3. Students will learn to recover from failure and to iterate.

As the Governing Board researched ways to help children learn to be innovative it was discovered that the time allowance for these ideas simply would not fit into a typical school day. An hour per day, four days per week has been added to the school schedule to accommodate this class.²⁶ An Innovation Curriculum Specialist administrative role has been added to the budget to help teachers plan for class activities.

Some of the innovation class activities will rotate through classes as a cart, for example there will be robotics sets, Lego Mindstorm for lower grades and VEX sets for upper grades.²⁷ A given class will have the exclusive use of a given cart for a number of weeks and then pass it along to another class. Many companies have loan kits for children to understand how their products work. The Dyson Engineering Box is one example. In the upper grades, students will use publications such as Make Magazine to find ideas for things to make as a team. Initially Make items will be limited to the materials available on a Make cart

²⁶ A sample daily schedule can be seen in Exhibit 3 of the Appendix

²⁷ Budget for Innovation Class is reflected in the line item for instructional equipment and in teachers as one person will be hired full time to direct and coordinate the class for all grades. Class will be taught in home room.

and what children can bring from home with permission. Over time it will be a goal to install a full fabrication lab within the school. Students will be asked to consider and design their own class environments. Each class could re-think the spatial layout of their own classroom and re-consider what could be changed to make it a better environment for learning using design thinking in each step. Every class will have a 'Wonder Board' where can children post questions such as, "why isn't Pluto a planet?" Innovation class time can be used to discuss the answers each child has to a different Wonder Board question.

Truly, there are an infinite number of possible plans for each class to spend time creating. The class will evolve over time, as it should in a school steeped in design thinking. Based on the data around declining creativity among our children and the need for creativity in the 21st Century workplace, the Governing Board of FAST feels this class is a critical component to the curriculum.

Eighth Grade Thesis Project

As a school being created in the framework of design thinking and innovation, the Governing Board had to ask itself, 'What is the final purpose? When students leave FAST to continue in high school could there be something they could take with them that represents all the work they did over nine years?' The answer to those questions is an eight grade thesis. If FAST has done what it has set out to do by the time our students complete 7th grade they will have been exposed to many global issues in Science and Social Studies. They will have internalized design thinking so that it is an automatic response to problem solving, and they will have developed confidence in their own ability to mentally and physically create solutions to problems and make them better with each iteration in Innovation class. By the time our students reach 8th grade they should be hungry to discover their own purpose – a problem that is personal to them for which they want to find solutions. FAST will give them the tools and the opportunity to do just that.

Within the first week of 8th grade each student will begin to write a problem statement. The problem can be global, national or local, such as developing a better traffic flow pattern for a congested intersection, or

how to make efficient and effective potable water from waste water in rural areas around the world. The problem only has to be something that matters to the student. From there the students will follow a design thinking process to find possible solutions to this problem. They will be assigned a 6th and a 7th grade student to help them in research and solution prototyping. This will give the 8th grade student experience in managing people, tasks, and work flow and it will give the 6th and 7th grade students experience in being managed which will affect how they manage their own research team when they reach 8th grade. Each 8th grade researcher will be assigned a small parent team to report to as a sounding board every six weeks. If a local problem is being considered FAST will work to bring relevant subject matter experts into the fold for that particular research topic. One hour class time per week during Innovation class will be provided for team work. The end result has no limitations on product. It could be a game, a paper or a physical product. Students will receive a composite grade on the project from their teacher, their parent board and their 6th and 7th grade research assistants using the FAST standard rubric.

After School Enrichment

One of the key thoughts while the parent group developed the plan for FAST was to find ways that the school can do more for students and families. The ideas of a more focused offering for after school enrichment. As this is an optional program, students will pay a reasonable fee to cover the cost of the curriculum and the teachers for programs outside of competition clubs.

FAST will offer two language options to students with a combination of online and in-person teaching. FAST will purchase an online curriculum such as K12 for the online portion and hire a teacher to spend about a quarter of the class time with each level. For a given class period the students will continue where they specifically stopped in the on-line portion of the class. The hired teacher will rotate through four levels of learners to understand progress, answer questions and add language communication skills. It is believed this combination of online and in-person instruction will be effective in terms of learning and cost.

Fulton Academy of Science and Technology

As a school seeking STEM certification FAST will be required to show evidence of participation in STEM competitions. FAST will offer students the opportunity to compete in Lego Robotics, VEX Robotics for upper grades, Science Olympiad and the Noetic Learning Math Contest.

The objective of the FAST fine arts enrichment plan is to engage students in an active and scholarly exploration in visual and performing arts for one hour a day for one or two days per week. A band club will be offered for students in 3rd-5th grades where students can learn basic performance techniques for his or her chosen instrument. A glee club will be offered for students in a K-5 and 6-8. Finally a keyboarding club will be offered once a week. These fine arts offerings will allow families to personalize their child's education in a time and cost effective way.

For a more complete view of the enrichment opportunities FAST proposes please see Appendix 4.

Design Thinking Throughout the FAST Community

Design thinking will permeate the framework of FAST from our students up through our Governing Board. Wednesday early release days will be used for teacher continuing education. During the first year of operation the mechanics of design thinking will be the focus of this teacher development time. In subsequent years the design thinking process will be used as a continuous achievement device for overall school progression. The Principal of FAST will report to the FAST Governing Board monthly on the subject matter and results of teacher continuing education.

To be truly student-centered FAST recognizes that students have different peaks and valleys throughout a given school day where each is more adept to learn a certain subject at a certain time. The Science Leadership Academy in Philadelphia recognizes this truth and changes the school schedule frequently to give each student an opportunity to hit their peak time for the subject in which they most struggle each day. While this will be administratively challenging, it is the correct choice for the FAST student-centered environment.

FAST also recognizes that there must be integration between the home environment and school. To that end FAST will offer parents workshops in design thinking as developed by the d.school at Stanford University.²⁸

5. What are the school's plans for educating special populations?

FAST will comply with the *Individuals with Disabilities Education Act (IDEA)*, Section 504 of the *Rehabilitation Act*, the *Americans with Disabilities Act* and the *Early Intervention Program (EIP)*. FAST will work with and follow the guidelines of the Fulton County school system to develop a system that meets the needs of the students. Licensed/certified staff, or consultants, in a manner consistent with state and federal law, will provide services. A case manager will be responsible for the coordination and all related services of a student's IEP. FAST maintains names and positions of staff members who have access to student records. Employees will sign a confidentiality agreement and each student's records will contain a checkout record showing who and when the files were reviewed. Parents will be informed of their rights and be given a copy of the procedural safeguards each time there is any correspondence or any meeting held, in addition to adhering to the safeguards as described in IDEA.

Early Identification, Evaluation and Placement

Students with existing IEPs enrolled in FAST will be assigned an IEP case manager. An IEP committee including the parents/guardians, special education teacher, regular education teacher and principal will be formed. The classroom teacher, special education teacher and parent/guardian will meet to discuss modifications and accommodations deemed appropriate for the individual success of the student. Collection and review of all current IEP goals and objectives will be monitored. FAST supports inclusion

²⁸ Access the crash course in design thinking at www.dschool.stanford.edu/dgift/

and all efforts will be made to serve exceptional students in the general education setting to maximum extent appropriate in accordance with the Least Restrictive Environment (LRE) guidelines mandated by federal law.

The classroom teacher will identify students that exhibit a need for support. Parents will be contacted and permission will be obtained to adopt strategies to foster improvement. The classroom teacher and parents will discuss implementing accommodations and modifications deemed appropriate for the individual success of the student. Parents must be contacted twice by the classroom teacher about performance concerns. If a student still does not show progress with classroom support during a six week period, a Student Support Team (SST) will be formed.

The Student Support Team SST per IDEA guidelines will be identified to review a student's area of weakness as well as areas of strength. An SST referral will indicate the area of weakness and include the modifications and or accommodations implemented by the classroom teacher. Parental concerns and modifications and accommodations will be documented. An assessment/Evaluation Plan will be developed and the parent/guardians will be contacted within a 15-day period. The SST meeting will indicate the suspected area(s) of disability and the team will develop an assessment plan to gather relevant, functional, developmental and academic information about the child. The parent/guardian has 15 days from receiving the Assessment/Evaluation plan to sign consent.

Referral to Special Education

To ensure compliance, students who are identified as qualifying for services under IDEA or Section 504 will be referred by a parent or supervising teacher to the case manager. Upon referral, the case manager is responsible for ensuring the regulatory timelines and procedures are followed. After receiving a referral request, the principal, student's teachers, a special education teacher and parent/guardians will meet to discuss the individual student's needs. Evaluation of current performance, portfolio assessments, standardized tests, observations and teacher recommendations will be reviewed. The evaluation and

placement process will be scheduled and implemented in accordance with state and federal rules and regulations. In accordance with state rule 160 4 7 .05 the parents/guardians of the student will receive a copy of the “Procedural Safeguards” in the following process:

- a. The student’s initial referral for evaluation.
- b. Each invitation to an IEP meeting
- c. Re-evaluation of the student
- d. Upon receipt of request for mediation or for an impartial due process hearing.
- e. Upon proposed change in the eligibility or the educational placement of the student.

Evaluation procedures and eligibility determinations will be established and implemented in accordance with State rule 160 4 7 .05.

Parents are encouraged to participate in the identification and referral process. Parent input will be valuable part of the team approach. If the student’s assessment/evaluation meets the criteria established under the IDEA Categories of Eligibility Section and is in need of special education services, the IEP committee, including the parents/ guardians, will develop an Individualized Education Program to address the areas of deficit in accordance with the required procedures. An IEP and Placement Consent for Special Education will be presented to the parents. Once signed, the IEP will be reviewed and revised annually. Continual progress on goals and objectives will be monitored throughout the school year.

Students identified with severe disabilities that require more intensive services may be served at the appropriate location according to the IEP in the Fulton County system. Discipline issues regarding special education students are handled in accordance with state rules and federal regulations.

Students with IEPs

FAST provides special education services along the same guidelines and standards that are in place with Fulton County School system including identification, evaluation, placement, reporting and due process procedures. FAST ensures that all evaluation procedures and eligibility determinations are established and implemented in accordance to the state rule 160 4 7 .07. This program contains annual goals in each area of need as well as the objectives the students should take to reach each goal. The IEP will state when and where services will be provided. Progress will be updated continually and the IEP will be reviewed annually. All resources including materials and equipment for special education students are provided by FAST. School social work services are provided as needed in accordance to with the Fulton County school system's guidelines. Teachers are required to participate in workshops, in-service programs and or training provided by the Special Education department to the same extent required of other teachers in the Fulton County system.

6. *Describe how the charter school will meet the needs of students identified as gifted and talented.*

FAST will follow all FCS policies, procedures, practices and rules regarding Talented and Gifted students. TAG identified students will attend a gifted class for one day per week with specialized added curriculum as identified in the response to question four.

. During days TAG identified students are in TAG students who are not TAG identified will be offered remedial tutoring as needed and special project work relevant to study units will be given for those who do not require tutoring. FAST wants to ensure all students, including those who have not been identified as gifted, are progressing every day of the week without pause.

7. Which of the specific actions in the academic plan require a waiver of state law, rule, or guidelines?

- *Although you will be granted a broad flexibility waiver if you are granted a charter, please demonstrate why a charter is necessary for this school by providing examples of*

significant components of your academic plan for which you need a waiver. Please also identify the specific waivers that are required to allow the implementation of those components.

Action: FAST seeks to waive the regulations with regard to the class size policy in order for the FAST administration to make local decisions to best meet the needs of the students. Given the emphasis on science and math education at FAST, class size may need to be altered to facilitate increased student participation and achievement.

Specific Waiver: O.C.G.A. Section 20-2-182(i) and SBE Rule 160-5-1-.08 Appendix A

Expected Outcomes:

Although FAST intends to keep classes within 23 students, there will be instances where larger class sizes may be more appropriate, for example, during integrated math and science instruction in the upper grades; or remediation where a smaller class size would make more sense and thereby improve student performance. In such cases, student collaboration and learning would be improved through the granting of this waiver.

Action: Given its unique instructional components such as Math In Focus: Singapore Math®, Project M3®, Full Option Science System®, and Engineering is Elementary®, and the variety of ELA, reading and writing curriculum that is planned, FAST wishes to have flexibility in the selection of textbooks and the electronic copy requirement to improve student performance/achievement. FAST intends to utilize instructional resources that are aligned with the Common Core standards but differentiated in the Fulton County School System. Granting of this waiver will improve student achievement in all areas in general, but especially math, science, reading and writing.

Specific Waiver: O.C.G.A. Section 20-2-1010 and Electronic Format of Textbooks:

O.C.G.A. Section 20-2-1015, and SBE Rule 160-4-4-.10(k)

Expected Outcomes: Differentiated instructional methods are the key component to this Charter application. FAST expects the flexibility in curriculum selection to result in higher student achievement as outlined in the Student Achievement section. The qualifications for teachers to be hired is available in Appendix 8.

Action: FAST intends to employ highly qualified teachers who have demonstrated required qualifications.

Specific Waiver: O.C.G.A. Section 20-2-200, Professional Standards Commission Rule 505-2-.09 1(a), and Fulton County Schools Policy GBBD for Professional Certification.

Expected Outcomes: This waiver provides the flexibility for FAST to hire teachers, regardless of current certification status, to help the school fulfill its mission.

Action: FAST requests the flexibility in order to construct a daily and yearly schedule that best meets the needs of both teachers and students. Situations may arise when it is appropriate to assign teachers to assist students during the lunch period with their classes and extracurricular activities, and to provide remedial tutoring. This option will afford the school flexibility to effectively manage financial resources and expenses associated with substitute teachers and paraprofessionals/instructional assistants.

Specific Waiver: O.C.G.A. Section 20-2-218

Expected Outcomes: Having this option enables FAST to promote increased student-teacher interaction to forge strong relationships in a venue outside the normal classroom toward increasing student performance and enhancing the closeness of the school community.

Action: Instructional programs that will be utilized at FAST require continuing in-service education in order for proper implementation so that the projected level of student achievement can be obtained. All teachers that will be implementing one of the school's science or math curricula will be required to pursue , at the cost of FAST, continuing education courses offered by the institute that developed that particular curriculum. However, FAST wishes to waive the State's requirement that this training be provided by local

areas of administration and other appropriate organizations. FAST requests the flexibility in case that the following possible situations arise: (a) FAST will require its teachers to attend the training, seminars, and conferences before and during the implementation of its differentiated curriculum as presented in the Instructional Methods portion. (b) FAST will hire skilled professional development consultants to provide services on-site that will provide the teachers and other hired professionals guidance and improvement on their teaching skills. These consultants may not meet the certification requirements of the State, but will possess knowledge and skills needed in order to further the staff's skills in educating the students and providing them with the best education possible in alignment with the school's differentiated curriculum and thereby improve student performance.

Specific Waiver: O.C.G.A. Section 20-2-201(c)

Expected Outcomes: Through the granting of this waiver student performance/achievement will be improved in specific areas such as math, science, and reading.

ORGANIZATIONAL OBJECTIVES, PLANS, AND WAIVERS

8. What are the school's Organizational Goals, Objectives, Measures and Targets?

Objective 1	Performance Measure	Year One Baseline	Year One Target	Year Two Target	Year Three Target	Year Four Target	Year Five Target	Extinction Level
Increase number of teacher Math and Science endorsements for STEM certification	Percentage of teachers with gifted endorsement will be increase to 75% for STEM cetification	10%	25%	50%	75%	75%	75%	75%
Interin Indicators of Progress		Budget/Resources Needed		Responsible Party				
Number of teachers enrolled		\$1500x7 = \$10,500/year		Principal				
Objective 2	Performance Measure	Year One Baseline	Year One Target	Year Two Target	Year Three Target	Year Four Target	Year Five Target	Extinction Level
Increase number of teacher Gifted endorsements	Percentage of teachers with gifted endorsement will be increase to 50%	10%	15%	30%	50%	50%	50%	50%
Interin Indicators of Progress		Budget/Resources Needed		Responsible Party				
Number of teachers enrolled		\$1500 x5=\$7,500/year		Principal				
Objective 2	Performance Measure	Year One Baseline	Year Two Target	Year Two Target	Year Three Target	Year Four Target	Year Five Target	Extinction Level
Improve Parent and employee favorability	Annual Surveys used by AdvancedEd for their Stakeholder Feedback Diagnostic. Rating based on a 0-5 point scale with 5 being the highest	4 for parents 3.4 for staff	4.15 for parents 3.5 for staff	4.2 for parents 3.6 for staff	4.25 for parents 3.6 for staff	4.30 for parents 3.65 for staff	4.40 for parents 3.75 for staff	4.50 for parents 3.75 for staff
Interin Indicators of Progress		Budget/Resources Needed		Responsible Party				
n/a		none		Principal				

9. What specific actions will the school take to achieve its organizational performance objectives?

FAST's first and second objectives relate to increasing teacher endorsements in Math, Science and Gifted Services. For STEM certification it will be required for FAST to have 75% of teachers hold an endorsement in Math and Science within three years. It is anticipated that FAST will begin with 50% of teachers with a math or science endorsement based on interviews to date and the volume of highly qualified applicants. The Fourth-Fifth grade teachers will be the first to be targeted for this endorsement with a roll down to the

lower grades. The goal is to have all of these teachers obtain a gifted endorsement with a roll down to as many lower grades as is economically feasible.

Both teacher and parental satisfaction are key performance parameters for FAST. In the creation of this charter both parents and teacher input was used to design the curriculum and performance goals for the future school. FAST intends to continue using the input of these two key stakeholders as the school evolves overtime. The goal is to create a community of continuous learning among all of our stakeholders.

FAST will begin the accreditation process with Advenc-ED within the first year of operation. This goal is accounted in the budget shown in the Exhibit 8.

10. What specific action in the organizational plan require a waiver of state law, rule, or guidelines?

Action: FAST requests the opportunity to be funded and to open for the 2016-2017 school year.

Result: The community of parents and teachers who worked so thoroughly and diligently to develop this charter application did so with the desire to provide continuity of education to their children, their families and to our community. FAST is working with a Collins International to help find a suitable facility with minimal build-out requirements as well as favorable lease agreement to open for the 2016-2017 school year.

Action: FAST will create its own governing body to govern the school. This Board will be comprised of elected parents and community leaders who support the unique mission of the school, and are invested in the success of the school.

Specific Waiver: O.C.G.A Section 20-2-85 and 20-2-86

Expected Outcomes: Granting this waiver permits FAST to be more efficient in achieving its goal of becoming a parent and community driven school that continues to evolve with the needs of the local learning district.

Action: FAST wishes to waive the state teacher salary schedules and increase requirements.

Specific Waiver: O.C.G.A. Section 20-2-212, 20-2-212.1, 20-2-212.2, 20-2-212.3, 20-2-212.4, and SBE Rules 160-52-.04 and 160-5-2-.05

Expected Outcomes: Waiving state salary schedules will allow FAST to align teacher salary with teacher credentials and allows the school to hire and train teachers in a way that compliments the STEM and continuous learning environment.

Action: FAST will employ school administrators who have the leadership that aligns with the goal of becoming a continuous learning environment.

Specific Waiver: O.C.G.A Section 20-2-942 (1.1)

Expected Outcomes: FAST expected to hire certified leadership, however FAST would like the flexibility to also consider administration that possess general management and leadership skills more closely aligned with our goal of becoming a continuous learning environment.

Parental Support and Community Partnerships, Interaction, and Outreach

Parent/Guardian Support (Parental Support)

Parental support and involvement is a key component of FAST. From the grassroots effort started by parents with the help and support of Fulton County Schools, FAST was created and founded by the community in which it serves, Parents, guardians, business and community leaders will serve as the members of the Governing Board.

Parents and guardians are encouraged to be involved in FAST in several ways, among those are:

- Involvement in classrooms, volunteering to share knowledge and real world applications of STEM practices in their respective fields, helping to organize and chaperone field trips, and function as student mentors/tutors
- Outside of the classroom, volunteers are encouraged to develop, manage, and run after school activities such as Robotics, Chess, Innovation and Engineering in Action labs, etc.
- Other volunteer activities will include involvement in Parent Volunteer Organization (PVO), development of after school care program, fundraisers, grant writing, and event planning.
- Service on the school's Governance Board and subcommittees

Community Partnerships

FAST has commenced the process of establishing a partnership with General Motors – Information Technology, Georgia Innovation Center (GM-IT, GIC) in the enrichment of STEM practices as well as coding in such languages as Java and Python. General Motors has a rich history of innovation, engineering and software development. FAST will have volunteers from GM-IT, GIC visit the school and work with students and faculty in the areas of code development and engineering principles. FAST is also planning an annual/semi-annual educational development trip to GM engineer and innovation development centers that tie in with STEM classes taught at FAST.

The Atlanta Wind Symphony (AWS), nonprofit performing arts ensemble based in Roswell, GA, has pledged a partnership of community involvement with FAST. Known for its musical excellence, service to the community and contribution to music education, the AWS consists of adult musicians ranging in experience from some of Atlanta's finest professional musicians and composers to hobbyists. Under this partnership, students at the school would benefit from live performances with mentoring and interactive Q & A opportunities. This experience exposes students to a wide variety of musical styles from many cultures.

Also, the AWS would provide volunteers to assist with enriching the school's musical ensembles and music education program. In partnering with AWS, FAST and AWS will collaborate to provide performances at local community events. This opportunity will foster citizenship principles among the students while also increasing awareness of FAST in the local community.

FAST has made solid progress on cementing a partnership with North Fulton Hospital (NFH). NFH serves the communities of Roswell, Alpharetta, Milton, and John's Creek and is located less than five miles from the campus of FAST. NFH will send volunteers to visit the school to further enhance STEM and Health programs being taught at FAST. FAST, in partnering with NFH, will also work with NFH to structure appropriate community outreach programs in the aforementioned cities.

FAST is making strides towards a partnership with the Georgia Institute of Technology, which is top ranked worldwide in Engineering, Business, and Architecture. FAST will invite GA Tech volunteers to come to the school to further reinforce and demonstrate leading edge techniques in the fields of engineering, biology, chemistry, biomedical engineering, etc. The partnership will also develop STEM focused field trips to GA Tech campuses to further explore experiments and research developments being conducted at their facilities.

While FAST does not have MOUs established, relationships have already begun or exist with the outside community,

Community Interaction

Schools are more effective and caring places when they are an integral part of the community. This contributes to enhanced academic performance, fewer discipline problems, higher staff morale, and improved use of resources. For communities, collaboration with schools can strengthen students, their families, their schools, and the community in which they live. In order for FAST to maintain a positive and safe environment, enhancing community and family involvement is key.

Schools can be invaluable resources to their communities. Students can volunteer to aid community organizations with their projects and learn priceless lessons in the process. The following are some examples of ways FAST has commenced planning to engage the community.

1) Adopt A Spot Program: The students would “adopt a spot” in the community. In doing so they will adopt a spot in the local community to keep clean and beautify. Children would learn to cultivate & maintain an area, tying into the Science Curriculum. The local businesses, such as Home Depot, Pike’s Nursery, and Lowe’s would be invited to participate in the program by providing materials needed and educating our students in the importance of keeping up the community.

2) Community Run: Community runs are a great way to raise money for a local charity while emphasizing the importance of physical fitness, health, and nutrition. Partnering with medical industries and local health clubs builds excitement and awareness for all involved. Health Fair Week is a great tie-in to this event.

3) American Red Cross: Involvement in the American Red Cross can teach children vital social skills such as teamwork and leadership. Students can learn about the life saving mission of the Red Cross and how to perform basic first aid skills. Students can help distribute safety information throughout the community and school, lead fundraisers, and volunteer at local Red Cross Events. Exemplifying the importance of companionship and caring for others is invaluable in the world we live in.

“One of the most important, cross-cutting social policy perspectives to emerge in recent years is an awareness that no single institution can create all the conditions that young people need to flourish.”²⁹It is

²⁹ [http://smhp.psych.ucla.edu/qf/Commout tt/schl.newsletter%20article.pdf](http://smhp.psych.ucla.edu/qf/Commout%20tt/schl.newsletter%20article.pdf)

the collaboration of school, family, and community that WILL help our young flourish. The spirit of community outreach and volunteerism will benefit the students and community for many years to come.

Community Outreach

FAST board members and parents are spending considerable effort and time introducing the school to the North Fulton community and other entities in the local Atlanta metropolitan area. The focus is currently on community leaders, from whom the board has sought advice. FAST is concentrating its efforts on the cities of Roswell, Alpharetta, and Milton as well as local universities and businesses focused in the areas of STEM and cultural arts. Outreach continues on multiple fronts.

GOVERNANCE

A key characteristic of charter schools is that an autonomous governing board makes decisions on behalf of the school. It is imperative that all governing boards demonstrate substantial autonomy, decision-making authority and capacity.

11. Describe how an autonomous governing board will make decisions for the school.

**Please note that the following relates to the board that will immediately replace the founding board, as well as future boards:*

- *Identify each member of the governing board; describe the composition of the governing board (number of members, skill sets to be represented, how members are/will be representative of the school and the community, etc.; describe how and when board members will be selected, and the terms that governing board members will serve.*
- *Describe the governing board's function, duties and role in the areas of budget, resource allocation, personnel decisions (primarily school leader selection, evaluation, and termination), establishing and monitoring the achievement of school improvement goals, curriculum and school operations.*

- *Please use the Governance matrix (found on the Charter School Division's website) to illustrate the level of autonomy your Governing Board will have. Please note: This matrix will become part of your charter contract.*
- *Use this section to provide a narrative of your matrix, including anything in the matrix that requires further explanation or clarification.*
- *Describe your plan for ensuring that you maintain a diverse board with broad skillsets.*
- *Describe how and why governing board members may be removed.*
 - a. *Georgia law now requires Charter Schools to provide initial training for newly approved charter school Governing Boards as well as annual governance training thereafter. Governance training should help build the capacity needed to make decisions in the above-mentioned areas. Trainers must be selected from a SBOE-approved list that ensures that the training covers certain SBOE requirements. Beyond those requirements, as a best practice, Charter Schools should also ensure that it selects a training program that covers areas of identified needs.*
 - b. *Describe your plan and timeline for securing a provider for your initial governance training as well as annual training thereafter. Include in this plan, areas of focus that are specific to your board and school.*
- *Disclose any potential conflicts of interest and describe how the governing board will ensure that current and future board members avoid conflicts of interest.*

FAST utilizes a governing board instead of the traditional school council outlined in O.C.G.A. § 20-2-85.

The governing board is comprised seven to eleven parent elected positions reporting to and working with the Fulton County School Board and Superintendent. The governing board sets the overall direction of the

school and has authority to delegate decision-making responsibility to employees of the school. The full governing board holds monthly meetings and one board training program annually. By the end of the planning year, the Board will develop an effective and efficient committee structure based on the key operations and needs of the school. Committees, which will include, but are not limited to: governance, finance and operations, and education; make recommendations to the full governing board. The Board also has the authority to form ad hoc committees or task teams to study specific issues or oversee projects. In order to gauge its effectiveness, the Governing Board will utilize parent/administration surveys as well as data from student achievement and performance. The board also plans to use the services of a vendor like Board on Track³⁰ to ensure effectiveness and continued evolution. Governing Board members may resign or be removed pursuant to the bylaws.

Mission

- Support, uphold, promote, and periodically review the mission of the School

Conduct

- Act in an ethical, legal, collaborative, and transparent manner in all school affairs
- Prepare for, attend, and participate in regularly scheduled board meetings as required by law
- Participate in a yearly board training program
- Review and vote on committee and principal recommendations
- Actively participate in strategic planning for the school
- Act as a resource to the principal for guidance, support, and advice
- Chair and/or serve on a board committee
- Attend/sponsor fundraising events and school events when appropriate

³⁰ <http://www.boardontrack.com/top-10-characteristics-of-highly-effective-charter-school-governing-boards>

Fulton Academy of Science and Technology

- Inform the board of any potential conflicts of interest and abide by the decision of the board related to the situation

Education

- Ensure that the school operates in an educationally sound manner that results in the school meeting its achievement goals
- Oversee and verify that the school's accountability reports are accurate
- Review and assist with development of principal's annual goals
- Analyze effectiveness of the school's curriculum against student performance goals
- Monitor the school's performance on assessments used to measure student academic progress
- Monitor compliance with legal requirements connected with special education
- Monitor student discipline

Advocacy

- Cultivate positive community relations
- Advocate on the part of the school to establish partnerships with community organizations, institutions of higher learning, nonprofit foundations and corporate entities that support education through noncommercial relationships
- Provide support for fundraising, marketing, and other services as the need arises

Governance

- Ensure adherence to terms and conditions of school charter
- Ensure compliance with applicable Georgia state and federal laws and regulations
- Ensure consistent application of the by-laws and periodically review them
- Establish, maintain, and periodically review policies of the school

- Develop on-going training/development plan for Governance Board
- Conduct and report on annual board self-evaluation and develop plan to implement recommendations
- Review and make recommendations on complaints and alleged violations of laws
- Review and make recommendations on conflict of interest issues

Finance and Operations

- Develop and oversee a financial model for the school to function in a fiscally responsible and solvent manner, with attention to appropriate financial controls
- Review and present quarterly financial reports and annual budget
- Oversee the school audit
- Oversee facility planning, management, upkeep, and risk assessment
- Approve and monitor the school's data system that captures student performance measures, student and family information, and staff information (including fingerprint clearance and credentials)
- Develop and monitor admission policy and practices
- Ensure that the school has adequate resources
- Approve fundraising plan, which includes setting goals and targets, identifying and cultivating funding sources, and conceptualizing fundraising events

Notice of board meetings will be provided to the school community by e-mail or written notices. A calendar of all scheduled board meetings will be conspicuously posted at the school and on the school's website as soon as it becomes available. Additionally, the school will provide notice to the school community by email and by conspicuously posting notice in the school of board meetings not on its annual schedule.

Founding Group Composition

FAST was created and founded by parents of the north Fulton learning community with shared values and the belief in the power of charter schools to reach new heights in teaching and learning as well as to provide additional choices to the learning communities of Fulton County.

FAST is committed to the recruitment and development of new parent elected board members who believe in the mission of the school. Such individuals possess skills, knowledge, and expertise that will help the Board carry out its responsibilities. FAST seeks a diverse board that represents the community from the pool of parents as well as local business leaders and elected officials.

The basic qualifications of each board member are:

- Demonstrate a wholehearted commitment to the school and the improvement of public education;
- Share a belief that all children, regardless of gender, race, family background, sexual orientation or socio-economic circumstances, can achieve academic and personal excellence;
- Be able to execute governance responsibilities with integrity and conviction;
- Be willing and available for constructive engagement;
- Serve as a resource to other board members and to the school's leadership and staff;
- Be willing to volunteer for individual assignments on behalf of and by the board, including service on committees and fund raising endeavors; and
- Be at least 18 years of age.

Conflicts of Interest

In accordance with FAST bylaws, the Governing Board will maintain a current Conflict of Interests policy (See Appendix 5 and Appendix 6). Each Board Member, or potential Board Member, will be

provided a copy of this Conflict of Interests policy. All Board Members will complete a Conflict of Interests disclosure form annually. By signing this form they agree to fully disclose any conflict of interests or a potential conflict of interest. If an unforeseen conflict arises, the interested Board Member or members will immediately and fully disclose to the Chair, such conflict. If and when a conflict arises, the interested member will abstain from any discussion, unless questioned, or any vote on the matter. Furthermore, the interested member may be asked to leave the room while a vote is taken. Any potential member will also complete a conflict of interests disclosure form prior to consideration for a position on the board.

FAST Employment Procedures and Policies

The FAST Governing Board will be involved in the comprehensive and formal process of recruiting, interviewing, and hiring the school Principal. The plans call for the Principal to be formally hired on July 1, 2016. The Principal will recommend all other individuals to the governing board for employment and assignment. Board Members have no day-to-day operational authority over individual employees, including the Principal.

The FAST Governing Board will use the state mandated LKES system to evaluate the principal. The Governing Board will have training on the program. The Board will also provide the Principal, upon hiring, with a job description that clearly articulates the roles and functions of the position and the necessary skill sets required to perform those functions. At the outset of each school year, the Board will communicate performance based goals for the coming school year. A formal leadership evaluation instrument and process will be established and provided to the Principal at the time of employment. This instrument gives details of performance expectations. The Board will perform quarterly evaluations throughout the year utilizing data collected from a variety of sources including, but not limited to the following: staff/parental surveys, observations, board reports, interviews, testing data, etc. Based on the formative evaluations, the board will identify developmental needs and provide the Principal with professional development opportunities that may include both formal training and informal mentoring

relationships with business/educational leaders within the community and State. Summative evaluations will be performed at the end of the school year prior to delivery of the evaluation in August.

Applicants will be asked to complete an application form and their professional references. As a part of the application process, applicants will be asked to respond to the following questions:

1. Have you ever been found guilty of a felony?
2. Have you ever been the subject of an ethics investigation by the Professional Standards Commission?
3. Have you been terminated from employment or asked to resign in order to prevent termination?

All employees will be asked to provide a Georgia Crime Information Center and National Crime Information Center background check prior to beginning employment with FAST.

FAST will not discriminate on the basis of race, creed, religion, or gender.

FAST Grievance Policy

The Governing Board will establish a Grievance Policy to address grievances and/or complaints.

Provisions will be included in this policy to outline rules and procedures for grievances or complaints brought against the school, school personnel or board members by students, teachers, staff, parents, or other citizens of the community. The policy will protect the right of due process for all individuals.

Concerns should be taken to the person who is believed to have erred or, in matters of policy, to the Principal. If a satisfactory response is not received, an appeal may be made to the Principal or, in matters of policy, in writing to the Governing Board. A decision of the Director may be appealed in writing to the Governing Board. The Governing Board shall develop a “Whistle Blower Policy” to provide for

communications to encourage an open and risk free environment by which questionable activities of employees can be reported to the administration and/or Board.

Student Code of Conduct

FAST plans to follow the Fulton County Schools – Student Code of Conduct and Behavior. ³¹

The code is in place to ensure “a safe, nurturing and well-disciplined environment for all of our students and employees to promote student self-discipline and academic achievement.” As stated in the Code: “Progressive discipline processes [are] designed to create the expectation that the degree of discipline imposed will be in proportion to the severity of the behavior leading to the discipline and will take into account the previous discipline history of the student and other relevant factors, while ensuring that each student receives the due process mandated by federal and state law.”

FAST retains the right to impose modifications to the discipline cycle based on the individual discipline history and other relevant factors. In the event a student is accused of committing serious or chronic misbehavior, the consequences may result in a school transfer and/or long-term suspension or expulsion. School transfers and/or long-term suspensions or expulsions require the completion of the discipline hearing process. “The purpose of the discipline hearing is for the Student Discipline Hearing Officer [and Discipline Committee] to receive evidence/testimony regarding the alleged violation and determine what, if any, consequence should be imposed when a violation has been proven.” For FAST, the Hearing Officer and committee members “considers the student’s academic and discipline history to determine the appropriate discipline to be imposed and/or appropriate school placement.”

Following the protocols outlined by Fulton County schools, FAST hearings imposed will be in proportion to the severity of the behavior leading to the discipline and will take into account the previous discipline history of the student and other relevant factors, and are closed and confidential.

³¹ <http://www.fultonschools.org/en/news/archives/Documents/FCS-English14-15.pdf>

Does the charter school intend to contract, or has the school contracted, with an education service provider (ESP) to provide management services?

FAST does not plan to contract with Educational Service Providers

How will the governing board assess its own development and effectiveness? What is the school's timetable and plan for achieving accreditation from the Southern Association for Colleges and Schools (SACS) AdvancEd, the Georgia Accreditation Commission (GAC), or some other recognized accrediting commissions?

FAST plans to apply for accreditation through AdvancEd. FAST plans to work with AdvancEd and achieve accreditation by year three. In order to gauge its effectiveness, the Governing Board will utilize parent/administration surveys as well as data from student achievement and performance. The board also plans to use the services of a vendor like Board on Track to ensure effectiveness and continued evolution.

Conflict Resolution between FAST and Fulton County Board of Education Board

In the event that Fulton Academy of Science and Technology Charter School and the Fulton County Board of Education have disputes regarding the terms of the charter, any local business agreement, or any applicable law, rule, or regulation, the parties agree to the following process for resolution. The parties' chosen representatives will meet informally, at least once, to attempt to resolve the issue without resorting to formal procedures. If this proves unsuccessful, the dispute will be put in written form and shared with the other party; and, a request will be made to the Georgia Department of Education to meet with the parties in an attempt to reconcile the differences. Nothing in this dispute resolution procedure shall limit the parties' rights to seek redress under all applicable laws, rules, or regulations.

FAST Facilities - Please refer to Appendix – Section 1

FAST By-Laws for Governing Board - Please refer to Exhibit 2.

FAST Parent – School Covenant – Please refer to Appendix 2.

FAST Code of Ethics - Please refer to Appendix 3.

FAST After School Program and Enrichment – Please refer to Appendix 4.

FAST Conflicts of Interest Policy – Please refer to Appendix 5.

FAST Conflict of Interests Disclosure Form – Please refer to Appendix 6.

FAST Pre-Enrollment Application – Please refer to Exhibit 4.

CONTRACTS WITH EDUCATIONAL SERVICE PROVIDERS OR OTHER CHARTER PARTNERS

12. Does the charter school intend to contract, or has the school contracted, with an education service provider (ESP) or other charter partner, to provide management or consulting services? If so, please complete this section and include a signed, operationalized agreement submitted as an exhibit.

- a. Describe how the arrangement will be in the best educational and financial interests of the charter school.*
- b. Describe other education service providers or charter partners that were considered and the reasons this ESP or partner was selected above all others.*
- c. Describe the history of the ESP or partner selected, including academic results, closures, non-renewals and separations.*
- d. Describe how the contract was negotiated.*

- e. *Briefly describe the range of services the education service provider or partner will provide for the school.*
- f. *Describe how the governing board will monitor and assess the performance of the management organization*

This does not apply to FAST.

FINANCIAL OBJECTIVES, PLANS, AND WAIVERS

13. What are the school's Financial Goals, Objectives, Measures and Targets?

Fulton Academy of Science and Technology

Objective 1	Performance Measure	Year One Baseline	Year One Target	Year Two Target	Year Three Target	Year Four Target	Year Five Target	Extinction Level
Maintain positive annual operating cash flow	Expenses will be at least 1% less than monthly income	Cash flow positive as of March in Year One	0.5% year One target	1% minimum	1% minimum	1% minimum	1% minimum	1% minimum
Interin Indicators of Progress		Budget/Resources Needed		Responsible Party				
Monthly Financial Statements		none		Business Manager, Governing Board				
Objective 2	Performance Measure	Year One Baseline	Year One Target	Year Two Target	Year Three Target	Year Four Target	Year Five Target	Extinction Level
Increase internal funding sources	Percentage of internal student and parent sourced funding from enrichment, ASP, Summer Camp and PVO	13%	13%	13%	13%	13%	13%	13%
Interin Indicators of Progress		Budget/Resources Needed		Responsible Party				
Number of students enrolled and income from PVO activities		none		Principal, Governing Board				
Objective 3	Performance Measure	Year One Baseline	Year Two Target	Year Two Target	Year Three Target	Year Four Target	Year Five Target	Extinction Level
Increase grant funding	Funding goal of 3% of total budget	3%	3%	3%	3%	3%	3%	3%
Interin Indicators of Progress		Budget/Resources Needed		Responsible Party				
Annual Financials		none		Governing Board				

Objective 1	Performance Measures	Year 1 Baseline	Year 1 Target	Year 2 Target	Year 3 Target	Year 4 Target	Year 5 Target	Extinction
Maintain positive annual operating cash flow	Expenses will be at least 1% less than monthly income	Cash flow positive as of March in Year 1	0.5%	1%	1%	1%	1%	1%
Interim Indicators of Progress		Budget/ Resources		Responsible Party				
Number of teachers enrolled		\$1500x7=\$10,500/yr		Principal				
Objective 2	Performance Measures	Year 1 Baseline	Year 1 Target	Year 2 Target	Year 3 Target	Year 4 Target	Year 5 Target	Extinction
Increase in grant and community funding	Funding goal of 3% of total budget	0%	1.5%	3%	3%	3%	3%	3%
Interim Indicators of Progress		Budget/Resources		Responsible Party				
Number of teachers enrolled		\$1500x5=\$7500/yr		Principal				

14. What specific actions will the school take to achieve its financial performance objectives?

FAST's first financial goal is to properly manage operating cash flow for a monthly reserve of 1% each year after year one. After year one this is not expected to be a challenge.

As with any start-up venture the greatest challenge is in getting sufficient funding for facilities and equipment before income is expected. FAST intends to do two things to manage this funding gap. FAST will seek to hold a summer camp for students prior to the first fall of year one. When talking with the parent community there was great interest in holding a summer camp with STEM related options. It is expected this planned summer camp will help offset the start-up costs. Also of considerable interest to the parent community is the planned paid enrichment options, an enhanced After School Program, and the FAST Parent Volunteer Organization (PVO). These opportunities and the PVO will help FAST drive additional income to provide additional monies for start-up, build out and for technology acquisition over the first years.

FAST will also seek external grant funding to help support the enrichment plans and for technology acquisition. The parent community of FAST has been working for the past month to identify and begin the application process for grants. The enrichment plan to include coding is of interest to several technology companies and the grant opportunities they offer. FAST will be very aggressive in grant application.

15. What specific actions in the financial plan require a waiver of state law, rule, or guidelines?

Action: FAST, as a charter school, will be in the process of building and expanding facility needs such as a STEM lab and technology infrastructure. . It will be important that the school will be allowed to waive the expenditure requirements of Quality Based Education Funds. FAST wishes to rollover any excess money from such funds to be used the following year to improve upon or to expand facilities, technology and educational resources rather than return such funds to the State treasury.

Specific Waiver: O.C.G.A Section 20-2-167

Expected Outcomes: FAST will require reinvestment in the school, particularly during the first 3 years of the charter term as FAST acquires and expands facilities to offer a middle school, increases the number of Science, Math and Gifted endorsements the teaching staff acquires, increases the number of teachers, builds a lab facility for the upper elementary and middle school, and develops a media center. These funds could also be used toward scholarship money for the FAST free and reduced cost lunch children for after school enrichment activities and for the summer camp program.

Action: FAST wishes to waive the requirement of adopting a health insurance plan established by the State Board of Education. FAST would like the opportunity to research other opportunities for health insurance

through private insurance companies that best represent the cost to benefit package that most appeals to the staff.

Specific Waiver: O.C.G.A. Section 20-2-881,2-20-911, and Fulton County Schools Policy EGA

Expected Outcomes: The benefit of having this flexibility will be to allow the staff to have a greater input in the benefit package offered to ensure what is chosen makes the most sense for our staff.

STUDENT ADMISSIONS

16. How will students be admitted to the charter school?

- *What is the school's attendance zone?*
- *Please check any of the following enrollment priorities pursuant to O.C.G.A. § 20-2-2066(a)(1) that apply put them in the rank order in which you will use them. If the school will not utilize any enrollment priorities, please leave this section blank.*
 - A sibling of a student enrolled in the start-up charter school
 - A sibling of a student enrolled in another local school designated in the charter
 - A student whose parent or guardian is a member of the governing board of the charter school or is a full-time teacher, professional, or other employee at the charter school
 - Students matriculating from a local school designated in the charter
- *Describe the rules and procedures that will govern admission and registration. Please note that "enrollment priorities", "admission" and "registration" are different concepts. To avoid confusion the Department recommends the following:*

- *“enrollment priorities” describe those students granted priority pursuant to O.C.G.A. § 20-2-2066(a)(1);*
 - *"admission" describes pre-lottery processes and forms; and*
 - *"Registration" describes post-lottery processes and forms after the student has been offered a seat at the school through enrollment priorities or the lottery process.*
- *How will the charter school reach students representative of the racial and socioeconomic diversity in the school system?*
 - *How does the school plan to recruit students and maintain/increase enrollment?*

FAST will admit students with an initial registration in the early Spring of 2016. To be eligible a student must reside in Fulton County, outside of the Atlanta city limits, and must meet the minimum age and grade requirements to attend. FAST does not discriminate on the basis of race, ethnicity, national origin, gender, religion or disability. FAST does not charge tuition. Reasonable fees are required for after school enrichment activities, however, families on reduced or free lunch to have access to scholarship money to be used for these enrichment activities for little to no cost.

Recruiting and Marketing Plan

Projected Enrollment over Charter Term

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
K	90	90	90	90	90
1	96	96	96	96	96
2	96	96	96	96	96
3	96	96	96	96	96
4	96	96	96	96	96
5	96	96	96	96	96
6	96	108	108	108	108
7	96	108	108	108	108
8		108	108	108	108
Total	762	894	894	894	894

The above is projected enrollment, however, final enrollment will be dependent upon the location selection.

FAST will offer school tours in the Fall and Winter during year 2 of the Charter and hold a public lottery for remaining spots. To be eligible for admissions the following will be required:

1. Proof of residence in Fulton County;
2. Proof of minimum age of five years as of the date established by law or by regulation for students entering kindergarten for first grade;
3. A completed application form

FAST will provide names, address and zoned school information in the school system, eSchoolPlus, no later than March 1. Failure to do so may result in the termination of the charter. It is understood that the school may continue to accept students after this date, and that it will continue to update the system on the number of students registered and all other student information as requested.

If the number of applicants exceeds the school's enrollment cap, admissions preference are given according to the following enrollment priorities pursuant to O.C.G.A 20-2-2066(a)(a):

- A sibling of a student already enrolled at FAST
- A student whose parent or guardian is a member of the governing board of FAST or is a full-time teacher, professional or other employee at FAST

After those students are placed, a random lottery is held to fill the remaining spots.

1. The pool of applicants is sorted according to admissions preferences provided for by the statute and by grade level, starting with kindergarten;
2. Within each grade level, applications are sorted to these categories, arranged in order of admissions preference; a) returning resident student; b) child of board member or full-time staff member; c) sibling of returning resident student; d) new resident applicant;
3. The Admissions Committee reserves spaces for returning students and those students granted enrollment priority. Any remaining spaces are allocated by holding a drawing of names by category in admissions preference order starting with category d).
4. After all grade levels have been completed, names that remain are placed by preference category, in a drawing order, on the school's waiting list.

Names are drawn one by one; as each student is drawn, that student and applicant siblings are immediately placed in their respective grade levels. When the lottery process is completed, sibling applicants are placed on the waiting list. Should attrition reduce the number of enrolled students after completion of the admissions process, FAST fills openings from the waiting list, or if no names remain on the list, after a suitable period of full public notice, a secondary admissions process is held to fill available spaces.

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Throughout the year updates about the schools' news and events will be submitted for publication in community newsletters. Representatives from the school board and staff will attend local community organization meetings and be available for questions. During the winter, the school will also enlist the help of their parent and guardian community to post flyers about enrollment, spread the word through the communities in which they live, and utilize social media channels to notify others of the opportunity to enroll in FAST.

A student may withdraw without penalty from FAST at any time and enroll in a local school in the school system in which such student resides as may be provided for by the policies of the local board. A student who is suspended or expelled from FAST as a result of a disciplinary action taken by FAST shall be entitled to enroll in a local school within the local school system in which the student resides.

Appendix – Section 1

Facilities Description:

FAST plans to locate in the North Fulton County learning community. Specifically, FAST is looking within the cities of Roswell and Alpharetta. FAST has procured the services of Colliers International located in Midtown Atlanta to help with obtaining a facility location and a lease favorable to the long term health of FAST. Colliers International is specialized in helping charter schools around the nation locate facilities and designing their lease structure to ensure the charter school's long term existence. FAST is also working with the GA DOE to meet its facilities guidelines process.

Appendix – 2

Parent – School Covenant

The Parent-School Covenant is founded on the belief that parents and Fulton Academy of Science and Technology (FAST) must establish and maintain a partnership in all aspects of school life, but most importantly, in the education of the students. The covenant is an effort designed to strengthen the relationship between parents and FAST as well as between parents and their children.

Parents/guardians play an integral role in each child's total education. FAST deems it most beneficial for the school and parents to enter into a "covenant," a pact by which we articulate the reasonable expectations we have of each other, clearly define the partnership between FAST and the parents of its students. The covenant outlines the key commitments between parents/guardians and FAST that are critical to each student's success. FAST is committed to the development of social and academic excellence in our students. True excellence can best be attained only when the parents/guardians, school, and student are committed and dedicated to that end. The level of effort and commitment of both these elements working together will determine each student's level of success.

Acceptance of this covenant represents a promise between parents/guardians and FAST staff to meet the expectation contained herein. For this design to be successful, it must extend beyond the classroom to recognize and incorporate the home and family as vital parts of the process. Parents are strongly encouraged to sign the FAST Parent-School Covenant

FAST will:

- Schedule regular conferences with the parents and faculty and, when warranted, conduct other special conferences and meetings. Parents can also expect assessments of their children, thoughtfully and carefully presented in writing and in person

- Inform parents/guardians immediately if there is a serious disciplinary infraction involving their children
- Give timely notification if a child is encountering academic difficulties. Parents will be kept informed of follow-up plans, actions, and strategies
- Provide assistance for students having academic difficulties. When appropriate, FAST will arrange testing, tutorials, and provide recommendations when assistance is beyond the school's scope and resources
- Address parental concerns about academics, extracurricular activities, and student-teacher relationships addressed in a compassionate and expedient manner
- Ensure staff members of FAST provide high quality education for all students
- Ensure staff members model integrity, academic curiosity, responsibility, critical thinking, and creativity
- Develop and sustain partnerships with parents that support each student's well-being and increasing autonomy
- Enforce standards of student behavior in a fair, firm, compassionate, and educationally sound manner

Parents will:

- Support and endorse the philosophy, mission, and guiding principles of our school
- Review, understand, and support the mission of FAST
- Commit to serving 10 hours of volunteer support per school year per family
- Maintain consistent contact with their child's teachers and advisors.
- Demonstrate support and encouragement by participation in school activities and attendance at school events
- Support student's attendance for every day of the year

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- Provide a home environment that supports the development of positive learning attitudes, habits, and values that are consistent with those of FAST
- Respect the school's responsibility to do what is best for the entire community, while recognizing the needs of their individual student
- Treat all FAST staff/faculty with respect

Principles of good conduct for school employees:

- Establish positive, professional relationships with students, characterized by mutual respect, warmth, and good will
- Participate in the establishment and maintenance of an atmosphere of collegial support and adherence to professional standards

****In addition to the formal reporting of grades and comments and early warning notices as needed, the school welcomes informal communications between teachers and parents. It is the goal of the staff and/or faculty to respond to all calls and emails within 24 hours. The staff members are all available and open to communication from parents and families at any time**

Student name: _____

Grade: _____

Parent/Guardian Signature: _____

Printed name: _____

Date: _____

FAST Signature: _____

Printed name: _____

Appendix – Section 3

Proposed Code of Ethics

The Governing Board recognizes that sound, ethical standards of conduct serve to increase the effectiveness of school board members and their staff as educational leaders in their community.

Actions based on an ethical code of conduct promote public confidence and the attainment of school goals.

The Board also recognizes its obligation under the General Municipal Law to adopt a code of ethics consistent with the provisions of the General Municipal Law, setting forth the standards of conduct required of all school board members and employees.

Therefore, every officer and employee of the school, whether paid or unpaid, including Governing Board, shall adhere to the following code of conduct:

1. Gifts: A board member or employee shall not directly or indirectly solicit any gifts; nor shall an officer or employee accept or receive any single gift having a value of \$75 or more, or gifts from the same source having a cumulative value of \$75 or more over a twelve-month period, whether in the form of money, services, loan, travel, entertainment, hospitality, thing or promise, or any other form, if it could reasonably be inferred that the gift was intended to influence him or her in the performance of his or her official duties or was intended as a reward for any official action on his or her part. However, the Board welcomes and encourages the writing of letters or notes expressing gratitude or appreciation to staff members. Gifts from children that are principally sentimental in nature and of insignificant financial value may be accepted in the spirit in which they are given.

2. Confidential information: A board member or employee shall not disclose confidential information acquired by him or her in the course of his or her official duties or use such information to further his or her own personal interest. In addition, he/she shall not disclose information regarding any matters discussed in an executive session of the Board, whether such information is deemed confidential or not.

3. *Representation before the Board:* A board member or employee shall not receive or enter into any agreement, express or implied, for compensation for services to be rendered in relation to any matter before the school board.

4. *Representation before the Board for a contingent fee:* A board member or employee shall not receive or enter into any agreement, express or implied, for compensation for services to be rendered in relation to any matter before the school board, whereby the compensation is to be dependent or contingent upon any action by the school with respect to such matter, provided that this paragraph shall not prohibit the fixing at any time of fees based upon the reasonable value of the services rendered.

5. *Disclosure of interest in matters before the Board:* A member of the Governing Board or any employee of the school, whether paid or unpaid, who participates in the discussion or gives official opinion to the Board on any matter before the Board shall publicly disclose on the official record the nature and extent of any direct or indirect financial or other private interest he or she has in such matter. The term “interest” means a pecuniary or material benefit accruing to an board member or employee.

6. *Investments in conflict with official duties:* A board member or employee shall not invest or hold any investment directly in any financial, business, commercial or other private transaction that creates a conflict with his or her official duties.

7. *Private employment:* A board member or employee shall not engage in, solicit, negotiate for or promise to accept private employment when that employment or service creates a conflict with or impairs the proper discharge of his or her official duties.

8. *Future employment:* A board member or employee shall not, after the termination of service or employment with the Board, appear before the Board or any panel or committee of the Board, in relation to any case, proceeding, or application in which he or she personally participated during the period of his or her service or employment or that was under his or her active consideration. This shall not bar or prevent the timely filing by a present or former officer or employee of any claim, account, demand or suit against the district on his or

her own behalf or on behalf of any member of his or her family arising out of any personal injury or property damage or for any lawful benefit authorized or permitted by law.

Distribution of Code of Ethics

The board member sitting on the Governance subcommittee shall cause a copy of this Code of Ethics to be distributed annually to every officer and employee of the school. Each officer and employee elected or appointed thereafter shall be furnished a copy before entering upon the duties of his or her office or employment.

Penalties

In addition to any penalty contained in any other provision of law, any person who shall knowingly and intentionally violate any of the provisions of the Board's code of ethics may be fined, suspended or removed from office or employment, as the case may be, in the manner provided by law.

Appendix – Section 4

After School Programs and Enrichment

Computational Thinking:

Objective:

The objective is to promote computational thinking in our students. The school will achieve this by offering software coding and language classes one hour a day and four days a week.

A case for Computational Thinking:

We live in a world dominated by software. Telephone calls can be made over software controlled networks. Movies are delivered over software. We do not use paper maps anymore. We use map application on our phones. We can buy and sell anything online. We can control our home security and utilities via our phones. Software is the new language of the world.

Computational thinking combines mathematics, logic and algorithms, and teaches you a new way to think about the world. Computational thinking teaches you how to tackle large problems by breaking them down into a sequence of smaller, more manageable problems. It allows you to tackle complex problems in efficient ways that operate at huge scale. The applications of this approach stretch beyond just coding. Fields as diverse as mechanical engineering, fluid mechanics, physics, biology, archeology and music are applying the computational approach.

An essential part of coding is teaching how hardware works. Learning hardware concepts gives them the understanding of how software is converted to actions and output. Hardware completes the whole picture.

Curriculum:

Students will have a choice of learning coding, electronics or robotics as an after school activity for one hour per day and four days a week for the entire school year. The below courses need not be done in any particular order but some of them do have prerequisites.

The important fact here is that this curriculum progress will not be based on age or grade. It will be based on the student's learning ability. It will be an individualized curriculum per student. We are only using kits which have well laid out courseware and lesson plans targeting elementary school kids. Most of them are available online for free. Teachers do not need prior detailed knowledge of the kits. They just need to follow the lesson plan. Most of the courses below are also good STEM learning resources.

Course S001: This course is the elementary school curriculum provided by Code.Org. it has three courses 20 lessons each. Each of the 20-lesson courses blend online, self-guided and self-paced tutorials with “unplugged” activities that require no computer at all. By the end of each course, students can create interactive games, stories, and art that they can share with anyone. Teachers can monitor the progress online via Teacher Dashboard. This course is designed for ages 4-6+.

Course S002: This course teaches the students Scratch programming provided by MIT. Scratch is a programming language that makes it easy to create interactive art, stories, simulations, and games – and share those creations online. Scratch is designed especially for ages 8 to 16.

Course S003: This course will teach Computer Science and programming in a way that's fun for kids as defined by the curriculum provided by CodeKingdoms.com. Kids use real JavaScript code to design their own game worlds and then challenge friends to complete them. This curriculum isn't all about coding - computational thinking is equally important. Code Kingdoms allows kids to learn computational thinking alongside a real coding language while promoting cross-curricular skills like problem-solving, team work and time management. Students will be introduced to terminology like Algorithm, design, input, output, debug,

and other computational terms to the children in a gaming environment. This is designed for Ages 5 and above.

Course S004: This course will teach HTML/CSS, JavaScript, jQuery, Python, Ruby and PHP as per the online curriculum given by CodeAcademy.Org. This is truly a student driven curriculum where the lessons only progress based on each student's capability. This site also provides teacher dashboards.

Course E001: This course is an introduction to computer hardware. They will build a computer using the kit provided by Kano. Building a computer will give them an understanding of hardware/chip, how it turns code to output, operating systems, file and its storage, local vs cloud, concept of internet, website, google/search, how search works, server and data center. Students can visit a datacenter, run a school blog/coding website as projects to be done during any of these courses.

Course E002: This course is an introduction to electronics. Students will use a MaKey MaKey kit and conductive materials like fruits and vegetables to build projects. Model projects can found at the MaKey MaKey website. Students can come with their own creative projects. This will help the students connect the software projects and games which they built in Courses I, II or III with an external hardware. A good example is touching a fruit would make the speech software describe the fruit.

Course E003: This course is a continuation of Course E002. Students will use LittleBits kit to build everyday electronics like doorbell texter, clapper machine, pet treat dispenser, morning alarm coffee starter and others. Lessons are available online. This is designed for ages 9 and above.

Course E004: This course encompasses building a computer using Raspberry Pi, converting it into server and make small projects in HTML, CSS and JavaScript. The free lesson plans are provided online by Raspberry Pi. This is an advanced course recommended only for students in accelerated path.

Course R001: This is an introduction course to Robotics and will be using the Lego WeDo robotics kit. The kit comes with clear instructions and introduces to students to working motors and sensors. They will build and program their models and explore a series of cross-curricular, theme-based activities.

Course R002: This is an introduction to EV3 Lego robotics kit. This is a standard kit which is used for robotics competitions. Many courseware from prestigious universities like MIT and Stanford are available online for free for this kit. Students will be able to build robots that walk, talk, think and do anything you can imagine.

Fine Arts

Objective:

The objective is to provide active and creative scholarly exploration that engages students, their family, and the community in the learning experience. The school will achieve this by offering visual and performing arts enrichment for one hour a day for either one or two days a week.

A case for Fine Arts:

Sufficient data exists to overwhelmingly support the belief that study and participation in the fine arts is a key component in improving learning throughout all academic areas. Study in the arts is integral to our society. Art and music is a part of every student's unique cultural heritage and background.

Some of the 21st century skills that students develop through participation in visual and performing arts programs include creativity, collaboration, communication, and critical thinking. Through the creative process, students strengthen their skills in synthesizing and evaluating information, and apply these skills to changing their assumptions and actions.

Though development of these skills is not unique to the arts, the purpose of studying the arts is fundamentally different from the purpose of studying other disciplines. It is only through the arts that mankind's universal

need for expression can be explored. The ability to express oneself in more than words helps students to transcend the barriers of gender, language, race, and economic status.

Overall, most students who experience quality fine arts instruction at a young age present themselves as balanced and well-rounded individuals.

Curriculum:

Band Club

The goal and purpose of Band club is to provide students with an opportunity to perform as part of a wind instrument ensemble. Even at a beginning level, students will be exposed to a variety of quality ensemble literature and learn advanced collaboration skills. Band club is open to both beginning and intermediate students in grades 3-5. It meets Monday and Thursday during club time in the music room. Instruments that students can choose from are flute, clarinet, saxophone, trumpet, trombone or percussion. Each student can expect to learn basic performing techniques for his or her chosen instrument. Requirements for the club include an instrument, a folding music stand, and Standard of Excellence level 1 lesson book. These items can be found at any local music store that carries band and student. The band club will have two after-school performances throughout the year near the end of each semester.

Glee Club

Students in glee club participate in two singing ensemble performances per school year. Repertoire includes light pop selections and fun Broadway hits. The club is open to all students in grades K through 5.

Keyboarding

Our lively 45-minute weekly classes include ear training, singing, note reading, rhythm building, movement improvisation and Dalcroze Eurythmics, listening skills, music theory, keyboard technique, beginning keyboard improvisation and solo and ensemble activities. Children make rapid progress and are thrilled to be able to play even after their first lesson! Informal recitals build confidence and enjoyment of performing. We provide keyboards for in-class instruction.

Orchestra Club

The goal and purpose of Orchestra club is to provide students with an opportunity to perform as part of a string instrument ensemble. Even at a beginning level, students will be exposed to a variety of quality ensemble literature and learn advanced collaboration skills. Orchestra club is open to both beginning and intermediate students in grades 3-5. Orchestra club meets twice a week. Instruments that students can choose from are violin, viola, or cello. Each student will learn basic performing techniques for his or her chosen instrument. Requirements for the club include an instrument, a folding music stand, and Essential Elements book 1 lesson book. These items can be found at any local music store that carries band and orchestra instruments. Renting is usually the best option when finding the right instrument for each student. The orchestra club will have two after-school performances throughout the year near the end of each semester either at school or at nearby community locales.

Appendix – Section 5

**Fulton Academy of Science and Technology Charter School
CONFLICT OF INTERESTS POLICY**

Each Board Member or officer of FAST shall annually complete a conflict of interests disclosure form and update it as needed. Whenever a Board Member or officer has a financial or personal interest, or an appearance of a conflict, in any matters coming before the FAST Board of Board Members, the board shall ensure that:

- The interest of such officer or Board Member is fully disclosed to the Board of Board Members
- No interested officer or Board Member vote on the matter, or be counted in determining the existence of a quorum at the meeting of the Board of Board Members at which such matter is voted on.
- Any interested officer or Board Member may be present for discussions to answer questions only, but may not advocate for the action to be taken and may be asked to leave the room while a vote is taken.
- Any transaction or vote involving a potential conflict of interest will be approved only when a majority of disinterested Board Members determine it is in the best interest of FAST to do so.
- The minutes of meetings at which such votes are taken shall record such disclosure, Board Member abstention, and rationale for approval.

Appendix – Section 6

Fulton Academy of Science and Technology Charter School
Conflict of Interests Disclosure Form

Date:_____

Name:_____

A conflict of interests, or an appearance of a conflict, can arise whenever a transaction, or an action, of FAST conflicts with the personal interests, financial or otherwise, of that of a Board Member, or an immediate family member of a Board Member, or the Board Member’s employer [collectively “your personal interests”].

Please describe below any relationships, or positions you hold [volunteer or otherwise], or circumstances that you believe could create a conflict of interests, now or in the future, between FAST and your personal interests, financial or otherwise.

_____ I am not aware of any conflict of interests.

I have the following conflicts of interest, or potential conflicts of interest:

1. _____
2. _____
3. _____

I have reviewed FAST’s conflict of interests policy and I understand that it is my obligation to disclose a conflict of interests, or an appearance of a conflict, to the Chair of the Board of Board Members when a conflict, or an appearance of a conflict arises, and that for transactions in which I have a conflict, I will abstain from any discussion, unless questioned, or any vote on the matter involving the conflict. If asked, I will leave the room while a vote is taken.

Signature:_____ Date:_____

Appendix 7 – Path to STEM Certification

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
1. STEM Students	No students identified as STEM	STEM students are identified	STEM students are identified and a selection process is described	STEM students are identified, a selection process has been described and vetted, and there is longitudinal evidence it is working
FAST STEM Certification Plan FAST is math and science focused, students are self selecting to attend. The purpose for attending this school is a STEM education. FAST begins operation at STEM 3.				
2. Non-traditional student participation in STEM	Non-Traditional student participation does not reflect the diversity and gender of the school district.	Plan is developed for outreach, support and focus on non-traditional student populations	Plan in place for outreach, support and focus on non-traditional student populations	Non-traditional student population reflects the diversity and gender of the school district.
FAST STEM Certification Plan FAST expects to be racially and economically diverse with reasonably equal portions of girls and boys. STEM curriculum will be uniformly applied across all classes. FAST begins operation at STEM 3.				

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
3. Characteristics of the STEM curriculum	Students in the STEM program follow a similar curriculum as students not in the STEM program.	A plan is being developed for an explicit and unique curriculum for STEM students or a specific curriculum is currently implemented only in some of the school's grade levels.	There is a plan in place to expand an explicit and unique curriculum from grade level to multiple grade levels and to maintain sustainability.	STEM students are exposed to a unique and explicit curriculum that is different from non-STEM students and there is evidence of its sustainability.
FAST STEM Certification Plan				
	As a STEM focused charter FAST will begin operation as STEM 1	1. Specialized Math, Science and Engineering programs (Singapore, FOSS and EIE) for all grades. Integration of subjects begins in upper grades which means the math lesson will provide scaffolding for the science lesson and strategies taught in math will be used in problem solving in Science. 2. Project based lessons developed with investigation, "arguments from evidence" and presentation of findings step plan. 3. Writing curriculum will include "arguments from evidence" informative and persuasive writing about science subjects.	1. Roll down of STEM integration to lower grades with leveled readers on STEM topics. 2. Older students do STEM finding presentations to lower grades. 3. STEM professionals are brought in to talk with students and show their own work in the real world. 4. Development of school STEM foundation of parents, community and business partners to support sustainability.	1. Review of evidence to show effectiveness of curriculum plan, adjustments to be made. 2. Develop relationships with university partners in STEM fields

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
4. Teacher Certification	None of the STEM teachers are certified	All of the STEM teachers are certified or meet highly qualified status.	All of the STEM teachers are certified or meet HQ status and plan is in place for teachers to earn the math and/or science endorsements or middle school certification in science or math	75% of the STEM teachers have a science or math endorsement or middle school science or math certification.
FAST STEM Certification Plan				
	0-15% of teachers will hold math or science endorsements	By year end of year 1, 25%+ of teachers will have math or science endorsement completed.	By year end 50%+ of teachers will have math or science endorsements.	75%+ of teachers will have math or science endorsement or middle school certification in math or science.

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
5. Teacher Professional Learning	There is not STEM related professional development currently being planned or that has been offered in the last year.	25-74% of STEM teachers have on-going STEM specific (specific to their STEM focus) professional learning and there is evidence of its implementation.	75% of STEM teachers have on-going STEM specific professional learning and there is evidence of its implementation in the classroom.	100% of STEM teachers have on-going STEM specific professional learning and there is evidence of its implementation in the classroom.
FAST STEM Certification Plan				
	FAST will begin operation as STEM 1 : Professional Development will be planned with teachers and administration. First goal will be training for Singapore Math. Second goal will be to hold training for project and problem based learning.	Professional Development will be local, meaning most development will happen with all teachers in school during school hours primarily relating to STEM integration and improving content knowledge and skills. Training goal for this period will be to enhance teachers confidence to run student-centered classes instead of teacher-centric classes.	Teachers will participate in training specific to their areas of need and based on their own professional development plan as agreed upon with administration. Some upper grade teachers will attend local, state and possibly national conferences. Teacher will receive professional development with the goal of enhancing STEM subject integration.	FAST did not stipulate a %of teachers in the plan because the planning is both school-wide for local opportunities and personnel specific need areas for each teacher. It is expected that 100% of teacher will participate in STEM specific training at different touch points throughout the year beginning in year 1.

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
6. Teacher Collaboration	There is no collaboration or it is not structured or planned.	Teachers collaborate quarterly to plan integrated lessons, share/co-create STEM activities, and plan learning outcomes.	Teachers have a set time they collaborate at least monthly together to plan integrated lessons, share/co-create STEM activities, and plan learning outcomes.	Teachers collaborate at least weekly to plan integrated lessons, share/co-create STEM activities, and plan learning outcomes.
FAST STEM Certification Plan FAST will begin operation as STEM 0: Teachers will be getting to know each other and how to work together in the new school.				
Year 1 budget includes the position of curriculum specialist. FAST envisions this person to be the STEM curriculum coordinator to help teachers begin to learn how to co-plan lessons and begin integrating STEM lessons over subjects and between classes.				
For grades K-3 teachers will be learning how to collaborate with special teachers (for example if learning fractions they can coordinate with the PE teacher to run partial miles.) In the upper grades integration and collaboration will be more evident with one subject providing the scaffolding for another via collaboration and integration. The curriculum specialist will be key to this process.				
Teachers will collaborate as a habit across subjects and ideally, across grades. For example each grade could be given a STEM project each year that is similar but increases with complexity each year. Students could see what upper level grades accomplished and know they will be doing the same project the following year so they can see their own development over time. This would be an example of school-wide collaboration.				
Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
7. Math and Science Instruction	Students do not participate in math and science enrichment opportunities. Math and Science instruction is not daily.	STEM students received math and science instruction 1-4 times per week.	STEM students participate in math and science enrichment opportunities. Students receive math and science instruction 2-4 times/week.	STEM students participate in math and science enrichment opportunities. Students receive daily math and science instruction.
FAST STEM Certification Plan FAST will begin operation as STEM1: Students receive math instruction daily in all grades. Upper grades receive math and science instruction daily.				
Students in all grades receive daily math and science instruction. In lower grades daily science instruction may be in the form of a science or engineering book series read aloud to them with opportunities to express ideas.				
Students in all grades receive daily math and science instruction. Upper grades will				
FAST did not stipulate a %of teachers in the plan because the planning is both school-wide for local opportunities and personal specific need areas for each teacher. It is expected that 100% of teacher will participate in STEM specific training at different touch points throughout the year beginning in year 1.				

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
8. Business, Community, and Post-Secondary Partnerships	There are no business, community and post-secondary partnerships.	Plans are being developed to provide students opportunities to meet STEM partners and to participate in STEM learning environments directly connected to in-class learning.	Business, community, and post-secondary partnerships are involved in the STEM instructional program one-four times/school year and are directly connected to in-class learning.	Business, community and post-secondary partnerships are involved in the STEM instructional program 1-4 times/month are directly connected to in-class learning.
FAST STEM Certification Plan				
	FAST will begin operation as STEM 1 as plans have already been developed to identify and partner with local businesses and post-secondary education outlets.	Plans and contacts made for STEM partners in local community to show real work connected to in-class learning. For example, while learning the water cycle a professional from the Roswell Watershed could come to speak or someone from a water treatment plant for upper grades.	Business and community partnerships to real-world impact of various lessons. For example when studying sound a person from the DOT could show a piece of the sound disruption walls along GA 400 to show how they work.	Post-secondary and business professionals provide speakers. Field trips that focus on specific areas of STEM study.

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
9. STEM Competitions	No students are involved in STEM competitions, on-site/online exhibits, and /or state or national STEM forums.	Some of students participate in STEM competitions.	Majority of students participate in STEM competitions.	All STEM students participate in STEM competitions.
FAST STEM Certification Plan				
	FAST will begin operation as STEM1: Several science competitions are planned to be offered as after school clubs if the interest exists. FLL Robotics and Science Olympiad are two that will be available in Year 1. These will be parent and teacher run clubs.	Parent information night will be held to offer information about STEM competition clubs for students. Some will be parent run, like FLL Robotics, and some will have teacher involvement, such as Science Olympiad.	Students will participate in Robotics, Noetic math, Science Olympiad, and school-wide science fairs.	All of the previous with the inclusion of science fairs for lower grades.
10. Performance Assessments	Students are only assessed using state and unit assessments.	In addition to state and unit assessments, teachers use multiple indicators of success in a STEM content area, including knowledge and performance-based assessments.	In addition to state and unit assessments, multiple indicators of success in multiple STEM content areas including knowledge and performance-based assessments.	In addition to state and unit assessments, all teachers and students are immersed in a student-centered learning environment that supports multiple indicators of success in all STEM content areas, including knowledge and performance-based assessments.
FAST STEM Certification Plan				
	FAST will begin operation as STEM 0: Unit assessments, MAP scores and GA Milestone scores for assessment	Increased use of pre-assessments for student led goal setting for unit study. Student and group projects that are short, just in class time, and long term that require research and planning.	Mastery level understanding in math concepts is shown in use in science units of study - real world application of math. Use of Engineering based rubric for assessment of all STEM projects so method of assessment is consistent.	Portfolios that grow with the student over grades to show learning and development. Annual project with similar focus to show true growth over time. Written work that requires integration and interpretation of data and arguments from evidence.

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
11. Math, Science, Technology and Engineering Integration	There is little or no integration of STEM subjects.	25-50% of STEM teachers provide explicit assimilation of concepts from more than one STEM discipline and problems/projects require more than one discipline for solutions.	51-75% of STEM teachers provide explicit assimilation of concepts from more than one STEM discipline and problems/projects require more than one discipline for solutions.	76% or more of STEM teachers provide explicit assimilation concepts from more than one STEM discipline and problems/projects require more than one discipline for solutions.
FAST STEM Certification Plan FAST will begin operation as STEM 1: This area speaks specifically to the goals of our curriculum specialist and class scheduling plan.				
Classes are block scheduled as time for specials will allow so math and science are taught nearly one after another with the math unit lining up to the science unit so one math concept can be seen another way in a science problem.				
Teachers will use math concepts to scaffold the problem-solving unit to be presented in science. Technology tools, for example, a microscope, will be used in a science lesson on the same day the math lesson helps them understand what the 5x and 10x magnification means.				
The goal will be to get to classes that are co-taught between teachers. More training and study will be required to understand the feasibility and possible benefits of this level of integration and if it has had a positive impact on learning and test scores.				
Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
12. STEM Labs	There is no STEM lab in the school.	The STEM lab has only web lab capability or only technology access.	The STEM lab have wet lab capability and technology access but are only used by one teacher.	The STEM lab has wet lab capability and technology access and is used by multiple teachers for collaboration, project work, virtual collaborations, and can be used as exhibition space.
FAST STEM Certification Plan FAST will begin operation as STEM 0: No STEM Lab				
Grant funding potential determined and grants are written for specific lab equipment.				
Funding is used to bring wet lab capability to more than one teacher/classroom.				
Lab development for multiple grade use, wet capability, and budget for continued lab supplies.				

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
13. Student Rigor & Relevance and Instructional Quality	Most learning occurs at the acquisition level. Content knowledge is taught in a silo by discipline and instruction focuses on knowledge awareness and comprehension of information. Classroom instruction is predominantly teacher centered.	Most of the learning occurs at the acquisition and application levels. Classroom instruction is predominantly teacher centered. Student work shows them working on designing solutions to problems centered on a discipline at a time by applying knowledge to new situations.	Most of the learning occurs at the assimilation levels. Classroom instruction is predominantly student centered and students extend and refine their acquired knowledge to routinely analyze and solve problems as well as create unique solutions.	51-100% of learning occurs at the adaptation level. Classroom instruction is predominantly student centered and students have the competence to think in complex ways and also apply the knowledge and skills they have acquired. When confronted with perplexing unknowns students are able to create solutions and take action that further develops their skills and knowledge.
FAST STEM Certification Plan				
	FAST will begin operation in STEM 1: FAST will be developing project based problem-solving units for Science classes.	In year 2 of FAST most learning will be at the application level and teachers will be moving from teacher-centric to student-centric classrooms. Teachers will be receiving professional development to learn these skills. Strategies, such as a flipped classroom, may be employed as a test in a class or two to determine results.	Teachers have gained confidence in student centered teaching and are able to work well to collaborate with the curriculum specialty and other teachers to present problems to solve that involve multiple disciplines showing that learning is occurring at the assimilation level.	Students and teachers have evolved to understand how concepts can apply in seemingly unrelated ways. Case studies and real world problems are presented for students individually and as teams to solve.

Criteria	STEM 0	STEM 1	STEM 2	STEM 3 Ready for STEM Certification
14. Technology Integration	There is little or no technology integration supporting STEM teaching and learning.	A technology plan is in place to integrate a variety of technology tools supporting STEM teaching and learning.	Technology plan is implemented in STEM classrooms that include a variety of technology tools that are integrated at least weekly into STEM teaching and learning.	Technology use is ubiquitous throughout STEM classrooms and includes a variety of technology tools that are integrated seamlessly into STEM teaching and learning: the technology is consistently in the hands of students.
FAST STEM Certification Plan FAST will begin at STEM 1: To date over 100 computer have been donated and a technology acquisition plan has been developed to begin in year 2, sooner if donations in cash or in kind increase.				
		Technology acquisition plan implementation and acquisition begins. Teacher training to buttress technology acquisition.	Technology acquisition 80% complete. Technology is used as a 'how to' in STEM classrooms. IT equipment is operational with an IT part-time person on staff.	Technology tools will be viewed as an extension of the students own capabilities. Given that the understanding many students have of technology relative to possible gaps with teacher knowledge about technology, continued training will be critical. Goal is for FAST to be at or near one-to-one computing.
15. Accountability	The school did not meet state accountability measures for the past two consecutive years.	The school met minimum state accountability measures for two out of the past three years. There is a plan in place to meet accountability.	The school meets state accountability measures and STEM student scores are increasing by at least 1-10% in one STEM area.	The school meets/exceeds state accountability STEM student scores are increasing by at least 1-10% in all STEM fields.
FAST STEM Certification Plan FAST will be continually reviewing the accountability measures on student performance relative to the implementation of STEM oriented curriculum.				

Appendix 8 - Teacher Advertisement



Where We Stand Get Involved

Search



Elementary School Teachers (K-5)

Find Jobs

Keyword

County

Clear

Find

Or search by classification or job type:

Classification

All

Job Type

All

Clear

Job Seekers

User Name

Password

[Register](#) [Lost Password](#)

Login

Need to register as a Job Board employer? [Click here.](#)

Employers

User Name

Password

[Register](#) [Lost password](#)

Login

Organization [Fulton Academy of Science and Technology \(view profile\)](#)

Location



Roswell/Alpharetta

Classification [Elementary Teacher](#)

Job Type [Full-Time](#)

Date of posting 03/02/2015

County North Fulton County

Description

Elementary School Teachers (K-5)

Fulton Academy of Science and Technology is seeking experienced and well-rounded Elementary School teachers to

About Us:

Serving students in K-5, the goal of Fulton Academy of Science and Technology (FAST) is to provide a problem-solving with an emphasis on science, technology, engineering and mathematics (STEM) to the children in the diverse Fulton County. FAST's goal is to provide children a foundation to be creative innovators and problem solvers so they are prepared for leadership in our rapidly changing world. By applying our background theme for academics, children will develop focus and thinking that prepares them for success in post-secondary education and careers.

Fulton Academy of Science and Technology is committed to:

- Teaching the skills and habits necessary for success in the areas of STEM
- Recruiting, training and retaining excellent teachers
- Building partnerships between the school, parents and the wider community

About You:

As Teachers you will engage in:

- Developing age and content appropriate lessons aligned to the FAST core curriculum
- Collaborating with other team members and administration
- Helping students gain critical, creative and problem solving skills
- Supporting and participating in school wide activities
- Ensuring classroom is attractive, safe, and conducive for learning
- Effectively communicating with parents and caregivers
- Supporting FAST's mission and vision
- Creating positive educational climate for students to learn in

Education and Training:

- A minimum of four year Bachelor degree required. Degrees in Early Childhood Education or curriculum related subject
- Georgia State Teaching Certification required to be earned during the first two years of employment.
- Two years of demonstrated success as a full-time elementary classroom teacher preferred

Compensation:

As part of the FAST team, you will enjoy a full-time position with a competitive salary, medical, dental, and vision benefits in a supportive and collaborative environment.
To Apply:

Appendix 9 – Additional information on Literacy

- Close Reading and Writing to Learn
 - help students read narrative and expository text fluently and accurately and with appropriate pacing, intonation, and expression; identify and interpret figurative language and words with multiple meanings
 - recognize the origins and meanings of frequently used foreign words in English and use these words accurately in speaking and writing
 - analyze the influence of setting on the problem and its resolution
 - define how tone or meaning is conveyed in poetry through word choice, figurative language, sentence structure, line length, punctuation, rhythm, repetition, and rhyme
 - identify and analyze features of themes conveyed through characters, actions, and images
 - explain the effects of common literary devices such as symbolism, imagery, and metaphor, in a variety of fictional and nonfictional texts
- Working with Evidence
 - identify structural features of popular media such as newspapers, magazines, and online information. They analyze text that uses the compare-and-contrast organizational pattern
 - note instances of unsupported inferences, fallacious reasoning, persuasion, and propaganda in text
 - critique the credibility of characterization and the degree to which a plot is contrived or realistic (e.g., compare use of fact and fantasy in historical fiction)
- Understanding Perspectives
 - read and respond to historically or culturally significant works of literature that reflect and enhance their studies of history and social science; clarify their ideas and connect them to

Fulton Academy of Science and Technology

other literary works; identify various forms of fiction, and describe major characteristics of each form

- comprehension and analysis of reading level appropriate text in order to connect and clarify main ideas by identifying their relationships to other sources and related topics
- point of view, identifying the main speaker and recognizing the difference between first-and third-person narration, not only in fiction but also in biographies and autobiographies
- Research, Decision Making and Forming Positions
 - clarify an understanding of texts by creating outlines, logical notes, summaries, or reports
 - demonstrate reading skill by following multiple-step instructions for preparing applications (library card, bank savings account, sports club, and/or league membership)
 - make reasonable assertions about a text through accurate, supporting citations

Exhibit 1 – Non Profit Incorporation



DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
CINCINNATI OH 45999-0023

FOUNDING FOURTEEN
8230 SENTINAE CHASE DR
ROSWELL, GA 30076

Date of this notice: 01-08-2015

Employer Identification Number:
47-2730451

Form: SS-4

Number of this notice: CP 575 E

For assistance you may call us at:
1-800-829-4933

IF YOU WRITE, ATTACH THE
STUB AT THE END OF THIS NOTICE.

WE ASSIGNED YOU AN EMPLOYER IDENTIFICATION NUMBER

Thank you for applying for an Employer Identification Number (EIN). We assigned you EIN 47-2730451. This EIN will identify you, your business accounts, tax returns, and documents, even if you have no employees. Please keep this notice in your permanent records.

When filing tax documents, payments, and related correspondence, it's very important that you use your EIN along with your complete name and address exactly as shown above. Any variation may cause a delay in processing, result in incorrect information in your account, or even cause you to be assigned more than one EIN. If the information shown above isn't correct, please send us the correction using the attached tear-off stub.

Annual filing requirements

Most organizations with an EIN have an annual filing requirement, even if they engage in minimal or no activity.

A. If you are tax exempt, you may be required to file one of the following returns or notices:

Fulton Academy of Science and Technology

(IRS USE ONLY) 575E

01-08-2015 FOUN O 999999999 SS-4

Applying for Tax-Exempt Status

Receiving an EIN from the IRS is not the same thing as receiving IRS recognition of tax-exempt status. To apply for formal recognition of tax-exempt status, most organizations will need to complete either Form 1023, *Application for Recognition Under Section 501(c)(3) of the Internal Revenue Code*, or Form 1024, *Application for Recognition of Exemption Under Section 501(a)*. Submit the completed form, all applicable attachments, and the required user fee to:

Internal Revenue Service
PO Box 12192
Covington, KY 41012-0192

Publication 557, *Tax Exempt Status for Your Organization*, has details on the application, process as well as information on returns you may need to file.

Additional information

To obtain tax forms and publications, including those referenced in this notice, visit our Web site at www.irs.gov. If you don't have access to the Internet, call 1-800-829-3676 (TTY/TDD 1-800-829-4059) or visit your local IRS office.

IMPORTANT REMINDERS:

- * Keep a copy of this notice in your permanent records. **This notice is issued only one time and the IRS will not be able to generate a duplicate copy for you.** You may give a copy of this document to anyone asking for proof of your EIN.
- * Use this EIN and your name exactly as they appear at the top of this notice on all your federal tax forms.
- * Refer to this EIN on your tax-related correspondence and documents.
- * Provide future officers of your organization with a copy of this notice.

If you have questions about your EIN, you can contact us using the phone number or address shown at the top of this notice. If you write, please tear off the stub at the bottom of this notice and send it along with your letter. If you don't need to write us, please don't complete and return this stub.

Your name control associated with this EIN is FOUN. You will need to provide this information, along with your EIN, if you file your returns electronically.

Thank you for your cooperation.

01-08-2015 FOUN O 9999999999 SS-4

CP 575 E (Rev. 7-2007)

CP 575 E

9999999999

Your Telephone Number: () - Best Time to Call: DATE OF THIS NOTICE: 01-08-2015
EMPLOYER IDENTIFICATION NUMBER: 47-2730451
FORM: SS-4 NOBOD

INTERNAL REVENUE SERVICE
CINCINNATI OH 45999-0023
|||

FOUNDING FOURTEEN
8230 SENTINAE CHASE DR
ROSWELL, GA 30076

Control No.: 15000737

STATE OF GEORGIA

Secretary of State
Corporations Division
313 West Tower
#2 Martin Luther King, Jr. Dr.
Atlanta, Georgia 30334-1530

CERTIFICATE OF INCORPORATION

I, **Brian P. Kemp**, The Secretary of State and the Corporation Commissioner of the State of Georgia, hereby certify under the seal of my office that

Founding Fourteen Inc
a Domestic Non-Profit Corporation

is hereby issued a CERTIFICATE OF INCORPORATION under the laws of the State of Georgia on **December 01, 2014** by the filing of all documents in the Office of the Secretary of State and by the paying of all fees as provided by Title 14 of the Official Code of Georgia Annotated.

WITNESS my hand and official seal in the City of Atlanta and the State of Georgia on January 06, 2015



A handwritten signature in black ink, appearing to read "B: P. Kemp".

Brian P. Kemp
Secretary of State

Tracking #: 84EbqHM6



DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
CINCINNATI OH 45999-0023

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Form: SS-4

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1-800-829-4933

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ROSWELL, GA 30076

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STUB AT THE END OF THIS NOTICE.

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When filing tax documents, payments, and related correspondence, it's very important that you use your EIN along with your complete name and address exactly as shown above. Any variation may cause a delay in processing, result in incorrect information in your account, or even cause you to be assigned more than one EIN. If the information shown above isn't correct, please send us the correction using the attached tear-off stub.

Annual filing requirements

Most organizations with an EIN have an annual filing requirement, even if they engage in minimal or no activity.

A. If you are tax exempt, you may be required to file one of the following returns or notices:

Form 990, Return of Organization Exempt From Income Tax
Form 990-EZ, Short Form Return of Organization Exempt From Income Tax
Form 990-PF, Return of Private Foundation
Form 990-N, e-Postcard (available online only)

Additionally, you may be required to file your annual return electronically.

If an organization required to file a Form 990, Form 990-PF, Form 990-EZ, or Form 990-N does not do so for three consecutive years, its tax-exempt status is automatically revoked as of the due date of the third return or notice.

Please refer to www.irs.gov/990filing for the most current information on your filing requirements.

B. If you are not tax-exempt, you may be required to file one of the following returns:

Form 1120, U.S. Corporation Income Tax Return
Form 1041, U.S. Income Tax Return for Estates and Trusts
Form 1065, U.S. Return of Partnership Income

Please refer to Publication 1635, Understanding Your EIN, for more information about which forms you may be required to file.

(IRS USE ONLY) 575E

01-08-2015 FOUN O 999999999 SS-4

Applying for Tax-Exempt Status

Receiving an EIN from the IRS is not the same thing as receiving IRS recognition of tax-exempt status. To apply for formal recognition of tax-exempt status, most organizations will need to complete either Form 1023, *Application for Recognition Under Section 501(c)(3) of the Internal Revenue Code*, or Form 1024, *Application for Recognition of Exemption Under Section 501(a)*. Submit the completed form, all applicable attachments, and the required user fee to:

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IMPORTANT REMINDERS:

- * Keep a copy of this notice in your permanent records. **This notice is issued only one time and the IRS will not be able to generate a duplicate copy for you.** You may give a copy of this document to anyone asking for proof of your EIN.
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- * Provide future officers of your organization with a copy of this notice.

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Thank you for your cooperation.

01-08-2015 FOUN O 9999999999 SS-4

CP 575 E (Rev. 7-2007)

CP 575 E

9999999999

Your Telephone Number: () - Best Time to Call: DATE OF THIS NOTICE: 01-08-2015
EMPLOYER IDENTIFICATION NUMBER: 47-2730451
FORM: SS-4 NOBOD

INTERNAL REVENUE SERVICE
CINCINNATI OH 45999-0023
|||

FOUNDING FOURTEEN
8230 SENTINAE CHASE DR
ROSWELL, GA 30076

Exhibit 2

**BYLAWS OF
FOUNDING FOURTEEN, INC.**

Section 1

GENERAL

1.1Name. The name of the corporation shall be **Founding Fourteen, Inc.** hereinafter referred to as the “Corporation.”

1.2Purpose. The Corporation was established as a non-profit corporation under the laws of the State of Georgia and is organized exclusively for educational and charitable purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, or the corresponding provision of any future Federal tax law (the “Code”). The express purpose of the Corporation is to organize and operate a charter school.

Section 2

OFFICES

2.1 Registered Office and Agent. To be determined. The Corporation’s main office will be in or around the North Fulton learning communities of Roswell or Alpharetta.

Section 3

GOVERNING BOARD

3.1Number and Qualification. The Governing Board Members shall serve as the Governing Board of the Corporation. The Governing Board shall consist of between seven (7) and eleven (11) members. Members shall be natural persons who are 18 years of age or older. . Between the time of incorporation and the time the charter petition is submitted, the Board may

recruit additional members.

3.2Appointment and Term of Office. The initial Governing Board shall serve staggered, initial terms and be divided into thirds. The first third of Members' terms shall end on the date of the annual meeting held in the 2016 calendar year. , The second third of members' terms shall end on the date of the annual meeting held in the 2017 calendar year. The third third of Members' terms shall end on the date of the annual meeting held in the 2018 calendar year.

Thereafter, the Board's nominating committee, known as the Committee on Members, shall present a slate of potential Members and officers for election by the Governing Board. This slate shall be presented at the annual meeting of the Board. Members shall be elected for a term of three (3) years, unless the Member is sooner removed by or as a result of the earliest to occur of: (1) operation of law; (2) an order or decree of any court of competent jurisdiction; (3) voluntary resignation, or (4) removal by a two-thirds majority of the Governing Board, as further described in Section 3.5. A Member may serve up to two (2) consecutive terms. An individual who has served up to two (2) consecutive terms as Member will not be eligible for another term until one

(1) year has passed following the last day of the individual's preceding term as Member.

3.3Vacancy. Any vacancy occurring in the Governing Board and any position to be filled by reason of an increase in the number of Members may be filled, upon recommendation of a qualified candidate by the Governance Committee, by two-thirds (2/3) vote of the seated Members. A Member elected to fill the vacancy shall be elected for the unexpired term of his/her predecessor in office.

3.4Powers. The property, affairs, and business of the Corporation shall be managed by the Governing Board, which may exercise all such powers of the Corporation and do all such lawful acts and things as are not prohibited by statute, the Articles of Incorporation, or these bylaws.

3.5Resignation or Removal. Any individual Member may resign at any time by delivering written notice to the Chair or Vice Chair of the Corporation. Unless otherwise specified in the notice, the resignation shall take effect upon receipt thereof by the officers, and the acceptance of the resignation shall not be necessary to make it effective; provided, however, that a Member who resigns may postpone the effectiveness of his resignation to a future date or to the occurrence of a future event specified in a written tender of resignation. A vacancy shall be deemed to exist at the time of such tender; and the Governing Board may then or thereafter

elect or appoint a successor to take office when the resignation, by its terms, becomes effective. Any Member may be removed for cause by a two-thirds majority vote of the remaining Members then in office and present at any regular or special meeting of the Board. Among other things, an unexcused absence from two (2) consecutive regular meetings or missing more than three (3) regular meetings in any calendar year shall constitute cause for removal of a Member. Notwithstanding the previous sentence, the Chair is authorized to excuse any Director's absence from a regular or special meeting of the Board, provided that said Member provides notice of his/her absence to the Chair at least twenty-four (24) hours in advance of the meeting. In the event the Chair excuses a Director's absence, that absence shall not count as an unexcused absence for purposes of determining cause for removal of that Member as provided by this paragraph.

3.6 Conflicts of Interest.

3.6.1 Conflicts of Interest Policy. Each Board Member will sign a conflict of interest policy at the beginning of each school year affirming his or her unconflicted loyalty to the interest of Corporation.

3.6.2 Inquiry into Self-Dealing Transactions - In its consideration of any action, the Board and its committees shall first conduct appropriate inquiry to determine whether such action involves a Self-Dealing Transaction. "Self Dealing Transaction" means any transaction having the School as one party and one or more of the following among the other proposed parties to the transaction:

- (1) Members, Officers, or employees of the Corporation or school management company, or blood or marital relations of any of them;
- (2) An entity in which a Member, Officer or employee of the Corporation or school management company, or blood or marital relation of any of them, holds a significant ownership or investment interest;
- (3) An entity which employs or otherwise compensates a Member, Officer or employee of the Corporation or school management company, or employs or compensates a blood or marital relation; and/or
- (4) Any entity which has, as a member of its Governing Board or trustees, a Member, Officer or employee of the Corporation or school management company, or a blood or marital relation of any of them.

3.6.3 Approval of Self-Dealing Transactions - A Self-Dealing Transaction, as defined above, shall be voidable at the sole election of the Corporation unless the following provisions are satisfied:

- (1) The Board shall hold one or more meeting(s) to discuss and vote on the transaction or arrangement resulting in the conflict of interest. An Interested Person may make a presentation to the Board, but after such presentation, shall leave the meeting(s) during the discussion of, and the vote on the conflict of interest transaction.
- (2) The Chair shall, if appropriate, appoint a disinterested person or committee to investigate alternatives to the proposed arrangement with reasonable efforts from a person or entity that would not give rise to a conflict of interest.
- (3) After exercising due diligence to determine whether the Corporation can arrange an alternative transaction more favorable to the school with reasonable efforts, the Governing Board concludes that it is in the Corporation's best interests and is fair and reasonable to authorize the Self-Dealing Transaction
- (4) The Governing Board authorizes, approves, or ratifies the transaction by the affirmative vote of a majority of the disinterested Members, and with disclosure or knowledge of the material facts concerning the Self-Dealing Transaction.

Interested Members may be counted in determining the presence of a quorum at a meeting of the Governing Board (or a committee thereof) that authorizes, approves, or ratifies such contract or transaction.

Notwithstanding the above, no loan shall be made by the Corporation to any of its Members or officers, as provided further in Section 7.4 of these Bylaws.

3.7 Compensation of Members. Whether or not employed by the Corporation for other purposes, Members and members of any committee of the Governing Board shall serve in that capacity without compensation, but may be entitled to reimbursement for any reasonable expenses incurred in attending meetings. Any Member barred from receiving compensation under these provisions shall not be barred from serving the Corporation in any other capacity and receiving reasonable compensation for such other services.

3.8Board Training. The members of the Governing Board will participate in annual training on their proper function as a charter school governing board, which shall be conducted by a qualified educational attorney or consultant.

Section 4

MEETINGS AND COMMITTEES OF THE GOVERNING BOARD

4.1Timing and Notice. The Governing Board shall meet at least annually. Regular meetings of the board may be held without notice at such locations, dates and times as shall be determined by the Governing Board; provided, however, that all meetings shall be held in compliance with the Georgia Open Meetings Act. Special meetings of the board may be held upon actual notice to each Member or notice that is mailed or transmitted by facsimile or email, to each Member, at least two (2) days prior to the meeting. Notice of special meetings shall include the date, time, and place of the meeting. The order of business at all meetings shall be set by the Board Chair.

4.2Annual Meeting. The annual meeting shall be held every April or May (the date, time, and place to be fixed by the Governing Board and notice given to all members, at least three (3) weeks in advance), for the purpose of electing officers, deciding upon a slate of members to present to the charter school parents/legal guardians for election, and for the transaction of such other business as may come before the meeting.

4.3Waiver of Notice. Whenever any notice of the meetings of the board is required to be given under law, the Articles of Incorporation, or these bylaws, a waiver thereof in writing signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto. Attendance at a meeting by a person entitled to notice shall constitute a waiver of proper notice of such meeting, except where attendance is for the express purpose of objecting to the transaction of business because the meeting is not lawfully called or convened.

4.4Quorum and Voting. A majority of the Members in office shall be necessary and sufficient to constitute a quorum for the transaction of business. Any less number may: (1) set a time to adjourn, (2) adjourn, (3) recess, or (4) take measures to obtain a quorum. Each Member shall have one vote on each matter coming before the Governing Board. The act of a majority of the Members present and voting at a duly constituted meeting of the Governing Board shall be the act of the Board, except in the following circumstances, which shall require a two-thirds (2/3) or greater majority: (1) the selection of the school principal; (2) the approval of the school budget; (3) the selection and financing of the school facility; and (4) the removal of a Member.

4.5 Participation by Alternative Means of Communication. Members and members of any committee of the Governing Board may participate in a meeting of the board or such committee by means of conference telephone or other communications mechanism whereby all persons participating in the meeting can contemporaneously and collegially communicate with each other. Participation by such means shall constitute presence in person at such meeting. When such a meeting is conducted by means of conference telephone, email, or similar communications equipment, the minutes recording any action taken at such meeting shall also note who participated in person, and who participated by alternative communications.

4.6 Committees. A Board resolution shall appoint committees or task forces of the Board, except for the Standing Committees expressly provided for herein. Committees may be composed of Members or community members, or both, unless otherwise provided in these Bylaws. The Board may prescribe the need and/or the composition of such committees.

4.7 Standing Committees: There shall have four standing committees: the Executive Committee, Development Committee, Finance Committee and Governance Committee. Each Standing Committee will have a charter that defines its respective roles and responsibilities. The Board may elect to name other Standing Committees as it deems appropriate.

4.7.1 Executive Committee - The Board may delegate to the Executive Committee the full powers of the Board to act upon all matters pertaining to the welfare and management of the Corporation between regular meetings of the Board. The Executive Committee shall conduct the annual review of the Principal's performance in the prior fiscal year and recommend performance goals and compensation for the upcoming fiscal year, subject to final Board approval. The Executive Committee shall be chaired by the Chair and shall include as members the Officers of the Board and any additional Members nominated by the Chair and approved by the Board. Only Members may serve on this committee. The Executive Committee shall report to the next regular meeting of the Board any action taken by it during the interim between any regular meetings.

4.7.2 Development Committee - The Development Committee is responsible for preparing and approving an annual fundraising plan, coordinating Members' participation in all fundraising programs, assisting with development initiatives, and facilitating the continued cultivation of friends and patrons of the Corporation. The Development Committee is also charged with ensuring that accurate and secure giving records are maintained by the Corporation.

4.7.3 Finance Committee - The Finance Committee is responsible for seeking

to maintain the financial viability of the Corporation. The Finance Committee shall approve the annual operating budget and present it to the Board for review and approval. The Finance Committee shall monitor the financial operations and report on the Corporation's financial status at each regular meeting of the Board. The Finance Committee shall review and approve the organization's fiscal policies and procedures and shall present recommend changes to the Board as appropriate. The Finance Committee shall recommend the selection of the independent auditing firm and oversee the auditing process and recommend approval of the annual audit to the Board. The Finance Committee also will oversee the major business operating risks of the Corporation, along with any pending litigation, to ensure that all such risks are being identified and managed appropriately. The Finance Committee shall be chaired by the Treasurer of the Board.

4.7.4 Committee on Members - The Committee on Members is responsible for overseeing matters pertaining to the Corporation's Board, including membership and evaluation. The Committee on Members will nominate the Chair, Vice Chair, Secretary and Treasurer for election after consultation with the Chair. The Committee on Members shall establish criteria for the selection of new Members, evaluate such candidates, and make recommendations to the Board for new Members for Board approval at the annual meeting. The Committee on Members shall perform such other tasks related to the membership and performance of the Board as set forth more specifically in its charter.

4.7.5 Academics Committee – The Academic Committee is responsible for curriculum and other academic matters at the school. The Academic Committee shall review and recommend revisions to the curriculum as necessary and recommend educational strategies, establish criteria for evaluation of faculty and student performance, and establish and implement provisions for the regular assessment of the academic performance of the students population in accordance with the provisions of the charter.

4.8Advisory Council. The Governing Board, a committee of the Board, or the chair may select and appoint individuals to serve on the school's Advisory Council. Such individuals are not required to be Members. The Advisory Council shall have no delegated or governance authority, but shall serve in a strictly advisory capacity to the Governing Board and its committees. Any members of the advisory group may be removed by the Board or by the appointing authority whenever in their judgment the best interests of the Corporation shall be served by such removal.

Section 5

OFFICERS

5.1Number and Positions. The officers of the Corporation shall be the Chair, Vice-Chair, Secretary, and Treasurer. The officers of the Corporation shall be elected by the Governing Board, and shall report directly to the Governing Board. The Board may also elect one or more assistant secretaries, and assistant treasurers. The Board may elect such other officers and agents as it shall deem necessary, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board. The selection of an officer shall not of itself create any contract rights in favor of the officer. Any two or more offices may be held by the same person, except the Chair may not also hold another office.

5.2Term of Office and Qualifications. The officers of the Corporation shall serve at the pleasure of the Governing Board. Officers shall be nominated by the Committee on Members and elected by the Governing Board at its annual meeting, and shall hold office for three-year terms or until their successors are chosen and qualify, or until death, resignation, or removal. In the case of absence or disability of an officer of the Corporation, or in any other case that the Governing Board may deem sufficient reason therefor, the Board may delegate for the time being any or all of the powers or duties of any officer to any other officer, Member, or any other person.

5.3Resignation or Removal. Any officer may resign at any time by delivering written notice to the Governing Board of the Corporation. Unless the written notice specifies a later effective date, the resignation shall be effective when the notice is accepted by the Governing Board. Any officer may be removed by the Board, whenever in its judgment the best interests of the Corporation would be served thereby, by a two-thirds majority vote of the remaining Members then in office and present at any regular or special meeting of the Board. Any such removal will be without prejudice to the contract rights, if any, of the officer so removed.

5.4Vacancy. A vacancy in any office because of death, resignation, removal, disqualification or otherwise, may be filled by the Governing Board for the unexpired portion of the term. In the event of such a vacancy, the vacancy may be filled temporarily by appointment by the chair until such time as the Governing Board shall determine.

5.5Chair. The Chair shall preside at meetings of the Governing Board; shall make reports to the Board; shall have the general powers and duties of management usually vested in the office of the chief executive and chair of a corporation; and shall have such other rights, duties, and powers as are authorized by the Governing Board.

5.6Vice-Chair. The Vice-Chair shall, in the absence of the chair, perform the duties and exercise the powers of the Chair, or such of them as may be so delegated, and shall have such other rights, duties, and powers as are authorized by the Governing Board from time to time.

5.7Secretary. The Secretary, or an assistant secretary, shall attend all meetings of the Governing Board and shall record the minutes of all proceedings, including all votes, in a book or database to be kept for that purpose, and shall perform like duties for the standing committees when required. The Secretary shall give, or cause to be given, such notice as is required of all meetings of the Governing Board and shall perform such other duties as may be prescribed by law, the Articles of Incorporation, these bylaws, or the Governing Board.

5.8Assistant Secretaries. If the Governing Board elects to fill the position, the assistant secretary (or any of the assistant secretaries in order of their seniority) shall, in the absence or disability of the secretary, perform the duties and exercise the powers of the secretary, and shall perform such other duties as the Governing Board shall prescribe.

5.9Treasurer. Except as the Board may otherwise determine, the Treasurer shall ensure or cause to be ensured that a true and accurate accounting of the financial transactions of the Corporation is made and that such accounting is presented to and made available to the Board. These records will include cash, outstanding advances, investments, accounts receivable and other assets, accounts payable, and fund balances (net assets). The Treasurer shall also meet regularly with the appropriate designee to ensure oversight and budget compliance and perform such other duties as may be prescribed by the Board. The Board shall utilize its best efforts to ensure that the Treasurer is a Georgia certified public accountant. With the support of the Board's Finance Committee, the Treasurer shall be required to make routine reports to the Board related to the financial condition of the Corporation.

5.10Assistant Treasurers. If the Governing Board elects to fill the position, the assistant treasurer (or any of the assistant treasurers in the order of their seniority) shall in the absence or disability of the Treasurer, perform the duties and exercise the powers of the treasurer, and perform such other duties as the Board shall prescribe.

5.11School Principal. The school principal shall manage daily operations of the school; shall hire and supervise instructional and support staff; shall ensure that the charter contract goals are met; shall report at least quarterly to the Governing Board on charter compliance and progress toward meeting goals; shall serve as an ex-officio, non-voting member of the Board and assist the Board chair with scheduling and setting agendas for Governing Board meetings; shall facilitate and implement policies duly adopted by the Governing Board; shall act as liaison between the school, the charter sponsor and the state department of education; and shall perform such other duties as the Governing Board shall prescribe.

Section 6

BOOKS AND RECORDS

6.1Records. The Corporation shall keep correct and complete books and records and records of its accounts and transactions, and minutes of the proceedings of its Governing Board and any executive or other committee when exercising any of the powers of the Governing Board.

6.2Form. The books and records of the Corporation shall be in written form, electronic form, or in any other form which can be converted within a reasonable time into written form for visual inspection.

Section 7

FISCAL MATTERS

7.1Deposits. The Treasurer shall select banks, trust companies, or other depositories in which the funds of the Corporation not otherwise employed shall, from time to time, be deposited to the credit of the Corporation. The Treasurer shall report said selections to the chair and the Governing Board.

7.2Checks. All checks or demands for money and notes of the Corporation shall be signed by the Treasurer or other such person or persons as the Governing Board may from time to time designate.

7.3Fiscal Years. The Governing Board shall have the power to fix, and from time to time to change, the fiscal year of the Corporation. Unless otherwise fixed by the Board, the fiscal year shall commence on July 1 and shall terminate on the following June 30.

7.4Loans to Members and Officers Prohibited. No loans shall be made by the Corporation to any of its Members or officers. Any Member or officer who assents to or participates in the making of any such loan shall be liable to the Corporation for the amount of such loan, including reasonable interest until it is repaid.

7.5Contracts. The Governing Board may authorize any officer or officers, agent or agents of the Corporation, in addition to the officers so authorized by these bylaws, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Corporation. Such authority may be general or confined to specific instances. Unless so authorized, no officer, agent, or employee shall have any power or authority to bind the Corporation by any contract or engagement or to pledge its credit or to render it liable

pecuniarily for any purpose or in any amount.

7.6Partnerships and Joint Ventures. The Governing Board may authorize any officer or officers, agent or agents of the Corporation to enter into any partnerships or joint ventures that the Board determines will advance the purposes and goals of the Corporation as described in the Articles of Incorporation or standing policies of the Board.

7.7Gifts and Contributions. The Governing Board or, by delegation, any officer, may accept on behalf of the Corporation any contribution, gift, or bequest for the general purpose or for any special purpose of the Corporation.

7.8Endowments. Any endowments for the general purposes or for any special purpose of the Corporation shall be approved by the Governing Board.

Section 8

INDEMNIFICATION

Any person made or threatened to be made a party to any action or proceeding, whether civil or criminal, by reason of the fact that he is or was a Member, shall be indemnified by the Corporation, and the Corporation may advance his related expenses, to the fullest extent permitted by law.

The Corporation may purchase and maintain insurance to indemnify: (a) itself for any obligation which it incurs as a result of the indemnification of its Members and officers in the manner provided by law; and (b) its Members and officers to the extent permitted under law.

Section 9

AMENDMENTS

The Articles of Incorporation and these bylaws may be amended by the affirmative vote of a two-thirds majority of the Members then in office at any meeting of the Governing Board, provided that the Members shall be provided with at least two (2) days prior notice that an amendment will be brought to a vote, which notice shall include a draft of the proposed amendment, and that no such amendment shall authorize the Governing Board or the officers of the Corporation to conduct the affairs of the Corporation in any manner or for any purpose contrary to the provisions of Section 501(c)(3) of the Code.

Exhibit 3 – FAST Pre-Enrollment Form

**FULTON ACADEMY OF SCIENCE AND TECHNOLOGY
PRE-ENROLLMENT APPLICATION**

Mother's County of Residence _____

Mother's Address (if different from student's address)

Street _____

City _____ Zip _____

Work phone: (____) ____ - ____ Home phone: (____) ____ - ____

Cell phone: (____) ____ - ____

E-mail address: _____

Guardian's Name: _____

Guardian's County of Residence _____

Guardian's Address (if different from student's address)

Street _____

City _____ Zip _____

Work phone: (____) ____ - ____ Home phone: (____) ____ - ____

Cell phone: (____) ____ - ____

E-mail address: _____

Sibling Information

Siblings Enrolled at Fulton Academy of Science and Technology

Enrollment Status

Name: _____ Grade _____

☐ New ☐ Currently Enrolled

Name: _____ Grade _____

☐ New ☐ Currently Enrolled

Name: _____ Grade _____

☐ New ☐ Currently Enrolled

Name: _____ Grade _____

☐ New ☐ Currently Enrolled

Form Completed By

Please accept this completed document to pre-enroll _____ into Fulton Academy of Science and Technology Charter School. I understand that completion of this Pre-Enrollment Application does not guarantee admission to the school. I understand that pre-enrollment for

**FULTON ACADEMY OF SCIENCE AND TECHNOLOGY
PRE-ENROLLMENT APPLICATION**

FAST charter school is contingent on approval of the charter application from Fulton County Board of Education. I also understand that all information on this enrollment form will be treated as confidential.

Print Name

First

Middle

Last

Exhibit 4 – FAST Proposed Daily Schedule

Example Lower Grades K-3rd

7:40 - 8:00 – Morning Meeting/Calendar Math

8:00 - 9:45 – Reading/Writing

9:45 - 10:30 – ELA

10:30 - 11:00 – Lunch

11:00 - 11:20 – Recess

11:20 – 12:20 – Math

12:20 - 12:40 – Recess

12:40 - 1:40 – Science/Social Studies/Health

1:40 - 2:25 – Specials

2:25 - 3:25 – Innovation

3:25 - 3:30 – Pack-up

Example Upper Grades 4th - 5th

7:40 - 8:00 – Homeroom

8:00 – 10:15 – Block 1 Science and Math block or Reading, ELA and Social Studies Block

10:15 – 11:30 – Block 2 opposite of morning block

11:30 – 12:05 – Lunch

12:05 – 12:40 – Recess

12:40 - 1:25 – Specials

1:25 - 2:25 – Block 2 Continued

2:25 - 3:25 – Innovation

3:25 - 3:30 – Pack-up

Fulton Academy of Science and Technology

Example Middle School Grades 6th – 8th

7:40 - 8:00 – Homeroom

8:00 – 9:00 – Science

9:00 – 9:45 – Health

9:45 – 10:30 – Social Studies

10:30 – 11:45 – Reading / ELA

11:45 – 12:15 – Lunch

12:15 – 12:45 – Recess

12:45 - 1:45 – Mathematics

1:45 - 2:25 – Specials

2:25 - 3:25 – Innovation Class

3:25 - 3:30 – Pack-up

Exhibit 4 - Annual Calendar

FAST will currently use the Fulton County Schools Calendar, but is also considering a Balanced Schedule as discussed in the charter application. A vote will be held in May 2015 to decide if parents and teachers desire a Balanced Schedule.

Fulton County Schools 2015-2016 Calendar

<http://www.fultonschools.org/2015-2016-school-year-calendar>

2015-2016 School Year

First Semester

August 4-7 Preplanning

August 10 First Day of School

September 7 Labor Day (schools closed)

October 9 Teacher Workday (students off)

Fulton Academy of Science and Technology

October 12 Teacher/Student Holiday (schools closed)
November 23-27 Thanksgiving Holidays (schools closed)
December 18 Last Day of First Semester
December 21 – January 1 Winter Break (schools closed)

Second Semester

January 4 Teacher Workday (students off)
January 5 Professional Development Day (students off)
January 6 First Day of Second Semester
January 18 Martin Luther King Jr. Holiday (schools closed)
February 12 Professional Development Day (students off)
February 15 * President's Day Holiday (schools closed)
March 10 * Teacher Workday (students off)
March 11 Professional Development Day (students off)
April 4-8 Spring Break (schools closed)
May 26 Last Day of School
May 27 * Post Planning
May 30 Memorial Day Holiday (schools closed)

* Designated as inclement weather make-up days (if needed)

For State Charter Submission Exhibit requests 5, 6 and 7 do not apply to FAST.

Exhibit 5 - Letter of Intent

Letter of Intent

Fulton Academy of Science and Technology

FAST Charter School/ Name TBD
2265 Azalea Drive
Roswell GA 30075

November 14, 2014

Georgia Department of Education
Charter Schools Division
2053 Twin Towers East
205 Jesse Hill Jr. Drive, SE
Atlanta, GA 30334

Fulton County School Board
786 Cleveland Avenue, SW
Atlanta, GA 30315

RE: Letter of intent to open Fulton Academy of Science and Technology - FAST Charter School/
Name to Be Determined

In accordance with Georgia State Board of Education Rule 160-4-9-.04, please accept our letter of intent to submit a petition for FAST Charter (Name to be determined by Parent Vote) in the Fulton County School system.

Our vision for FAST Charter is to be STEM Certified, Science and Technology focused, helping children learn how to think creatively, scientifically, and how to effectively communicate what they learn.

FAST Charter seeks to create a challenging STEM focused learning environment that encourages high expectations for success through research proven instruction methods that allow for different learning styles and different learning pace for each child. Our school promotes a safe, orderly, caring, and supportive environment. We strive to have our parents, teachers, and community members actively involved on our students' learning.

We are starting this Charter for our children, to give them a place where they can succeed. By doing this we will be helping our community at large by giving parents more choice in their child's education.

FAST Charter proposes to open for the 2015-2016 school year, serving grades K-5 in year one, increasing one grade per year to become K-8.

July 20, 2015

We look forward to working with you towards the completion of our petition and the successful start of our school year.

Sincerely,

June Erickson
Sandi Pool
Phil Chen

Members of the Founding Fourteen Parents of FAST Charter

Exhibit 8 – FAST Proposed Budget

Please see budgets attached.