

Loudoun County Public Charter School Application

Charter School Name: Loudoun Math & IT Academy

Date of Submission to Loudoun County School Board: August 14, 2012

Name of Authorized Official: Ali Gokce Date: 8/14/2012

Signature of Authorized Official: Date:

Part A: Applicant Information

School Information

Charter School Name:	Loudoun Math & IT Academy			
Local School Division:	Loudoun County Public Schools			
Does the applicant presently	y have access to a fac	ility suitable for a school?	Yes 🗌 No 🔀	
If the answer is yes to the quadrility:	uestion above, insert	address and information rega	arding ownership of the	
School Location (City/Town	n and Zip Code):	Loudoun County, VA		
Ownership:		Possible site is owned by E	Buchanan Partners	
Date of Application Submis School Board:	ssion to Local	August 2012		
Proposed Opening Date:		Fall of 2013		

Applications for public charter schools should be submitted to the Board of Education within a time frame that is adequate enough to ensure that the public charter school application will also be submitted to the local school board in accordance with the application policies of the local school board.

Grades to be Served (Please Check All That Apply)*				
Pre-K		Sixth Grade	~	
Kindergarten		Seventh Grade	~	
First Grade		Eighth Grade	~	
Second Grade		Ninth Grade	~	
Third Grade		Tenth Grade	~	
Fourth Grade		Eleventh Grade	~	
Fifth Grade		Twelfth Grade	V	

If the public charter school is going to have a specialized focus (e.g., Science, Technology, Engineering, Mathematics [STEM], at-risk students, special education, career and technical education, gifted education), please describe the focus:

Loudoun Math & IT Academy is going to be a Science, Technology, Engineering and Mathematics (STEM) public charter school in Loudoun County that will serve grades 6 through 12 with an emphasis on mathematics and information technologies.

^{*} If the public charter school intends to add or change grade levels at some point during the school's operation, please provide this information in the education program section of the narrative.

1. Please describe the relevant experience of the members of the proposed management committee:

As defined in § 22.1-212.6 of the Code of Virginia, Loudoun Math & IT Academy (LMITA) will be administered and managed by a management committee, hereinafter called the Governing Board, composed of founding members, parents of students enrolled in the school, teachers and administrators working in the school, and representatives of the community sponsors.

Short bios and relevant experience of current founding members of LMITA are as follows:

Ali Gokce, Ph.D.

Dr. Ali Gokce received his Ph.D. degree in Mechanical Engineering from University of Delaware in 2003. Next, he worked as a Research Associate at University of Delaware's Center for Composite Materials, a leading institution on composite materials research and development, until 2005. Currently, he has been working as a project engineer at ATA Engineering since July 2005, serving engineering needs of renowned clients like BAE, Lockheed Martin, and Orbital.

Dr. Gokce graduated from his undergraduate college third in a class of 210. During his graduate studies, he has authored/co-authored more than 15 journal and conference publications and wrote a book chapter. He reviewed articles for scientific journals. As an ASME and SAMPE member, he actively participated in the professional events. As a

professional engineer in the workforce, he has been successfully contributing to the nation's advancement by addressing challenging engineering problems mostly in the aerospace field.

Dr. Gokce worked as a teaching assistant during part of his graduate studies, tutoring students, preparing and grading quizzes. He served at labs of some classes, explaining experiments to students and assisting them during the experiment. Among his extracurricular activities are teaching pre-teens at local cultural centers on various subjects and supervising them during field trips. Dr. Gokce has a personal stake in this endeavor as he has two children attending Loudoun County Public Schools in the second and fourth grades at this time, whom he would like to see attending LMITA. As such, he will ensure that LMITA has a strong school leadership that will carry out its mission and achieve its vision.

Ali Bicak, Ph.D.

Dr. Ali Bicak received his Ph.D. in Computer Science from University of Maryland Baltimore County in 2004. Currently he is an Assistant Professor at the School of Business at Marymount University teaching IT courses targeting advanced certifications. He is a Certified Information Systems Security Professional (CISSP) and Cisco Certified Network Associate (CCNA), with professional experience in design, development and security of computer network systems. At Marymount he has been serving at the University Technology Committee and representing Marymount at the Workforce & Education committee at Northern Virginia Technology Council. Prior to joining the faculty at Marymount, he held positions with the Maryland Center for Telecommunications Research, University of Maryland Baltimore County, University of Maryland University College and TeleniX Corporation.

Dr Bicak was also one of the founding members of Chesapeake Science Point, the most accomplished public charter school in Maryland, and Baltimore IT Academy, a transformational career and technology school opened in 2010. He designed and developed both schools' innovative math, science and IT focused curricula, and has served as the school board's president and treasurer for more than five years. Dr. Bicak will ensure that LMITA follows the best practices in establishing a charter school, and that the curriculum reflects the needs of current students by incorporating technology into daily instruction.

Fatih Kandil

Mr. Fatih Kandil holds a Ms. Ed. in School Administration from Marian College of Fon du Lac, Milwaukee, Wl. During his education career, he has travelled and taught in various states. He served as a high school assistant principal and principal in Milwaukee, Wisconsin and Dayton, Ohio. In 2006, he had become the principal at Chesapeake Science Point Public Charter School. After administering the school for five years, he has become the director of

outreach and development for three sister charter schools in Maryland.

Prior to moving to the US, Mr. Kandil received a bachelor's degree in Biology Education from the University of Marmara, Istanbul and began his teaching career in 1994 as a high school biology teacher. During his graduate studies in molecular biology and genetics at the City University of New York, he got a teaching position in general science and became a full time middle school teacher in Brooklyn, NY.

Mr. Kandil is currently residing in South Riding, Loudoun County. He is married and has two children attending Loudoun County Public Schools. He is known to be a strong supporter of innovation and choice at public schools. Mr. Kandil will ensure that LMITA has an integrated STEM program, and the school administration follows the best practices in charter school management.

Sinan Yildirim

Mr. Sinan Yildirim holds M.Sc. in Civil Engineering from The George Washington University and is a contractor and structural engineer with extensive experience in structural engineering, building design for commercial and industrial facilities. He is also an entrepreneur establishing two start-ups providing contractual services in the DC metro area. Mr. Yildirim will ensure that LMITA has sound financial and facilities plans in the start-up years. He will also make sure the school administration follows the generally accepted accounting principles and the best business practices.

Mustafa E. Sahin, Ph.D.

Dr. Mustafa E. Sahin received his Ph.D. degree in Electrical Engineering from the University of South Florida in 2009. During his graduate studies he taught various laboratory courses in wireless communications. He is currently working as a Senior Wireless Systems Engineer at Reverb Networks in Ashburn, VA. He is a Loudoun county resident and married with two children. Dr. Sahin has extensive research experience in wireless communication systems, which is reflected by more than 20 journal/conference articles that he authored. Dr. Sahin will ensure that the curriculum is based on up-to-date technology requirements and will oversee establishment and maintenance of IT labs at LMITA.

Sharon Inetas

Sharon Inetas is an experienced and recognized Loudoun business executive and entrepreneur. Ms. Inetas has been an active participant in a range of organizations in the Loudoun community; she has served as an LCPS volunteer and an active PTA member. Ms. Inetas published several articles related to entrepreneurialism and specific trades. Ms. Inetas will focus on promoting awareness and building business relationships for the LMITA.

Nataliya Blyznyuk, Ph.D.

Dr. Nataliya Blyznyuk conducted research in the field of nanotechnology, antenna miniaturization and "seeing through walls" DARPA projects. She worked at the Jet Propulsion Laboratory, NASA, in California, on Mars exploration programs such as Phoenix, Mars Science Lab (MSL), Jupiter programs (JUNO), and other space missions. Dr. Blyznyuk had been working at Orbital Science Corporation as a lead engineer for several communication satellites. She has recently joined Loral Space Systems. Dr. Blyznyuk will assist in curriculum development and establishment of partnerships with the industry.

Part B: Narrative

The application narrative must contain all of the elements listed below as required by <u>Section 22.1-212.8</u> of the *Code of Virginia*.

I. *Executive Summary:* Provide an executive summary that addresses the need for the public charter school and its goals and objectives. (The suggested length is two pages.)

Background

Loudoun Math & IT Academy (LMITA) will be a public charter school in Loudoun County that will serve grades 6 through 12 with a STEM program focusing specifically on Mathematics and Information Technologies (IT), giving Loudoun County parents and students a choice in education.

LMITA is modeled after Chesapeake Science Point Public Charter School (CSP), a highly successful charter school in Anne Arundel County, MD. CSP was the recipient of the Charter School of the Year Award in 2010 with the second highest math scores and fifth highest reading scores among all the public middle schools in the State of Maryland based on the 2009 Maryland School Assessment scores. With standardized test scores up to 26% above the state and county averages, free weekend tutoring, and after-school activities CSP has proven itself to be a highly successful model.

As the founders of LMITA, our goal is to reproduce the success of the CSP model in Loudoun County while giving it a greater emphasis on Information Technologies and tailoring the model to better fit the needs of the Loudoun County students.

Need for a Charter School

By founding LMITA, we believe that we will be able to educate our children not only for today's job market or for the academic programs in today's colleges and universities, but for those of the future. The U.S. Department of Labor predicts that virtually all IT jobs will continue to have excellent prospects and projects much faster than average growth for the industry. The founders strongly believe that LMITA will be a highly valuable alternative choice for education in Loudoun County—an area where one out of every six county residents is employed in an IT-related field. For the past eight years, the number of businesses in the IT field has grown by 220%, and its employment more than doubled. As Moody's "Economy.com" noted: "The Dulles Technology Corridor, centered in Loudoun County, hosts the largest number of internet, satellite and defense companies in the nation." MSNBC calls Loudoun County the "Silicon Valley of the East". Loudoun County's IT sector is growing exponentially, adding more than 400 new businesses in 2009, despite the recession.

These data show the strong need for an IT-based school in Loudoun County. Although the Loudoun County Public School (LCPS) System does offer the C. S. Monroe Tech Center and Loudoun Academy of Science flagship programs, both are part-time and offer a very limited

number of seats. Each program enrolls only 150–250 students, and the admission is extremely competitive, requiring high GPAs and strong recommendations. Per the charter school law, LMITA will be an open enrollment school, providing a choice for students who were unable to get accepted to the Loudoun Academy of Science or Monroe Tech Center programs but have an intrinsic interest in information technologies.

In assessing the need for a STEM public charter school in Loudoun County, numerous elected officials and members of local community organizations were contacted for their input. The feedback we have received thus far has been very supportive and encouraging and, we believe, it justifies the need for a school such as LMITA in the area. Our preliminary research shows that there is an immediate need for a middle and high school in the Dulles district. LMITA founding group is willing to work with the LCPS administration team to locate a facility that would maximize the positive impact on the current needs of the school system and neighborhood residents.

Goals and Objectives

Our goal in undertaking the LMITA project is to replicate the Chesapeake Science Point Public Charter School (CSP) success story in Loudoun County while adapting the CSP concept to better fit the needs of the Loudoun County students with more emphasis on information technologies. In line with the Federal Administration's support for charter schools, the U.S. Department of Education has launched the "Race to the Top" program (\$1.35 billion is allocated for the program in the FY 2011 budget) to expand and replicate successful charter school models across the nation. Considering the considerable success of CSP, expansion of the CSP concept into Loudoun County as the LMITA is an excellent fit to the goals of the Department of Education.

The focus of LMITA is to reflect the increasing role of computers and technology in today's world and, more importantly, to provide a unique opportunity for Loudoun County youth to pursue professional careers, as well as college education, in the high paying and everexpanding field of information technologies.

Educational Program

At LMITA, the curricula for all subject areas are rigorous and aligned with the Virginia Standards of Learning & Common Core Standards. Another characteristic of LMITA will be its robust foundational education on math and hands-on education in Information Technologies (IT) targeting advanced IT certifications. Upon submission of a proposal to Loudoun County Public Schools and an approval from the Loudoun County Board of Education, we plan on admitting 6th and 7th grade students in fall of 2013 with 96 students in each grade. One more grade will be added in each subsequent year until full enrollment is reached.

Throughout middle school, all students will take language arts, social studies, mathematics, computer, and science for a full year during each grade. All middle school students will also take a course in health education, physical education, art or music each year. The students

will also be exposed to various IT topics aligned with the Virginia Computer & Technology Standards of Learning and will be given additional opportunities to use computer applications in all core courses. While the emphasis of the curriculum is Math and IT, LMITA will provide all state-required courses in other subject areas.

At the high school level, students will have an opportunity to specialize in IT tracks such as applications and web development, systems and network engineering, and cybersecurity. In addition to specializing in one of these IT fields, students will also get a solid education in civics and citizenship, and also learn a critical language of their interest. Within any course track of choice LMITA faculty will help students prepare for college with individualized SAT tutoring and customized practice testing opportunities. Such an approach will ensure that LMITA graduates will be prepared to pursue both advanced degrees in higher education and also seek career and internship opportunities in the local high-tech companies and research institutions.

- **II.** *Mission Statement:* Provide a mission statement that is consistent with the principles of the Standards of Quality (SOQ). The following components must be addressed:
 - 1. A description of the public charter school's mission and how it is consistent with the principles of the Virginia SOQ. (Section 22.1-253.13:1, *Code of Virginia*)

LMITA will partner with parents, educators and the community to have middle and high school students attain educational excellence through a rigorous and technology-integrated program with an emphasis on mathematics and information technologies.

Aligned with the Virginia Standards of Quality, LMITA will enable its students to develop the skills that are necessary for academic excellence and social growth, gain habits of mind for innovation, and in particular, a career in the ever-growing IT fields. LMITA will provide a well-rounded education to have its students develop their full potential in critical thinking, problem solving, communication, collaboration and ethical decision making.

LMITA will provide an appropriate working environment for its instructional staff and a learning environment designed to promote student achievement. Moreover, per the Standards of Learning, LMITA will provide its students with the basic skills of communication, computation and critical reasoning, especially proficiency in the use of computers and related technology.

Furthermore, LMITA will follow the program of instruction developed by Loudoun County Public Schools, with a special emphasis on mathematical concepts and computations, use of computers and related technology, and scientific concepts and processes. LMITA will ensure that each student will earn necessary credits required to graduate with the diploma type the student is pursuing. Besides, LMITA will implement programs of prevention, intervention, or remediation for students who are educationally at risk including, but not limited to, those who fail to achieve a passing score on any Standards of Learning assessment in grades 6-12.

LMITA will provide the knowledge of various technical careers to its students according to a career education program that is spread over years. This program introduces various forms of employment opportunities, which are not limited to salaried full time positions, but also include starting up and owning a small business, as well as apprenticeships and internships. The main target of this program is to give the students the notion that they will have a variety of choices when they complete school if they furnish themselves with marketable skills by the time they graduate. Furthermore, the career education program will provide the students with information about how they can match the academic outcome of their secondary education in their professional life and what should be the guidelines in building their careers considering the current needs of the market as well as their personal interest.

Lastly, the program will introduce job searching skills to the students such as performing online job search, conducting a phone or on-site interview. LMITA will also provide early identification of students with disabilities, with reading and mathematics problems, with limited English proficiency, as well as gifted students, and enroll such students in appropriately differentiated instructional programs. Finally, LMITA will also make a program of physical fitness available to all students with a goal of at least 150 minutes per week on average during a regular school year. This program will include an appropriate combination of physical education classes, extracurricular athletics, and other physical activities.

2. A description of any specialized area of academic concentration.

Loudoun Math & IT Academy (LMITA) will be a Science, Technology, Engineering and Mathematics (STEM) public charter school in Loudoun County that aims to serve grades 6 through 12 with an emphasis on mathematics and information technologies (IT). Throughout middle school, the students will be exposed to various IT topics aligned with the Virginia Computer & Technology Standards of Learning and will be given additional opportunities to use computer applications in all the core courses. At the high school level, in addition to the core areas, there will be an emphasis on certifications in information technologies and advanced placement courses.

Highlights of the proposed educational program are as follows:

- STEM focus with specialization opportunities in fields like cybersecurity
- Technology integrated and data-driven differentiated instruction in all core areas
- Exposing middle school students to core high school STEM courses
- Self-paced year-long STEM project studies at middle school grades
- Hands-on computer training targeting advanced IT certifications
- Rigorous language arts program with an opportunity to learn critical languages
- Strong social studies program with a focus on civic education and citizenship
- Advanced placement and dual-enrollment courses at high school grades
- 3. Information about the public charter school's anticipated student population consistent with <u>Section 22.1-212.6</u>, of the *Code of Virginia*.

LMITA will be an open enrollment school. Any child who resides in Loudoun County will able to enroll in LMITA, regardless of their race, color, gender, national origin, religion, disability if any, or need for special education services. In case the number of applicants exceeds the number of available seats, a lottery will be held.

The ethnic breakdown of the student body in all Loudoun County Public Schools is as follows¹.

¹ http://www.lcps.org/cms/lib4/VA01000195/Centricity/Domain/4/LCPS%20Fact%20Sheet%20Summary%20-%202010-2011.pdf

•	American Indian	0.6%
•	Asian	14.6%
•	Black	7.2%
•	White	57.8%
•	Hawaiian/Pacific Islander	0.1%
•	Multiracial, not Hispanic	4.6%
•	Hispanic	15.1%

As for the support programs, 10.7% of students are receiving special education services and 7.4% are English Language Learners (ELL), whereas the percentage of economically disadvantaged students add up to 14.6%. Around 9.8% of the students are enrolled in the gifted and talented programs.

The ethnic breakdown could slightly vary at LMITA depending on the location of the school, but as an open-enrollment school student body is expected to reflect the same or similar demographics as listed above.

- **III.** Goals and Educational Objectives: State the goals and educational objectives to be achieved by the public charter school that meet or exceed the Standards of Learning (SOL). The following components must be addressed:
 - 1. A description of the performance-based goals.

LMITA will work in partnership with parents, teachers, students, Loudoun County Public Schools and the community at large to provide a superior education and a safe learning-conducive school climate. LMITA's educational program will aim to exceed all Standards of Learning (SOL) and "No Child Left Behind" (NCLB) requirements.

Aligned with the goals of Loudoun County Public Schools (LCPS)², LMITA will:

- 1) Ensure that students and school will exceed the federal and state required pass rates for all SOLs.
- Reduce disparity in student achievement among all educationally accepted subgroups.
- 3) Increase critical thinking, inquiry and project-based learning in math, science and technology classes.
- 4) Meet and exceed the county PSAT, SAT, ACT and AP performance.
- 5) Ensure that all graduates demonstrate readiness for higher education or entry level skills and certifications for immediate employment in the IT fields.
- 6) Increase involvement of parents, local businesses, colleges and universities.
- 7) Provide a safe and healthy learning environment.

LMITA will provide the necessary physical and health education to its students according to the LCPS middle and high school program of studies. Accordingly, students will be offered numerous challenging activities with an emphasis on fitness for life. In middle school grades, health and physical education classes will be offered every other day. Students will be exposed to a wide variety of activities including cooperative games, individual and dual sports, team sports, rhythmic activities, physical fitness testing, lifetime fitness, and recreational activities.

In health and physical education classes, students will be instructed about

- 1) diet and nutrition; stress and mental health; lifetime fitness and wellness; as well as abstaining from alcohol, tobacco, and other drugs
- 2) relationship of healthy body systems to overall wellness
- 3) first aid and safety; the impact of exercise and diet on the body
- 4) consumer health and health agencies; global health issues; community health
- 5) organ donation, nutrition and wellness planning; risk behaviors; emotional health; peer pressure, and conflict resolution

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² http://www.lcps.org/cms/lib4/VA01000195/Centricity/Domain/113/SB%20Goals%202010-2011.pdf

2. A description of the related measurable educational objectives to be achieved by the public charter school. (Section 22.1-253.13:1.B, Code of Virginia)

Aligned with the educational goals of Loudoun County Public Schools, LMITA will promote intellectual growth, individual initiative, mutual respect, and personal responsibility for productive citizenship. In order to achieve above listed goals, LMITA sets the following measurable objectives for its educational program:

Goal 1: Ensure that students and school will exceed the federal and state required pass rates for all SOLs.

- 1.1 Ensure that all students attain the annual measurable objectives called for in the Adequate Yearly Progress requirements of NCLB.
- 1.2 Ensure that students in identified racial, ethnic, and socio-economic groups exceed the requirements of Standards of Learning and NCLB.

Goal 2: Reduce disparity in student achievement among all educationally accepted subgroups.

- 2.1 Reduce achievement gap among minority student groups at each grade.
- 2.2 Reduce achievement gap between at-risk students and their peers at each grade.
- 2.3 Increase the transition rate of special education students to general education.

Goal 3: Increase critical thinking, inquiry and project-based learning in math, science and technology classes.

- 1.1 Have all students participate in annual science fairs
- 1.2 Have all high school students participate in statewide college fairs
- 1.3 Have all students compete in state and national co-curricular competitions.

Goal 4: Meet and exceed the county PSAT, SAT, ACT and AP performance.

- 4.1 Have students complete Algebra I and also take PSAT by end of eighth grade.
- 4.2 Have students complete four or more Advanced Placement courses by graduation.

Goal 5: Ensure that all graduates demonstrate readiness for higher education or entry level skills and certifications for immediate employment in the IT fields.

- 5.1 Have all high school students graduate with at least one IT certification.
- 5.2 Have all high school students take the SAT by the end of their junior year.
- 5.3 Revise the career and technology tracks to meet evolving employment and higher education requirements.
- 5.4 Revise the curriculum and teaching methods according to the emerging technologies.

Goal 6: Increase involvement of parents, local businesses, colleges and universities.

- 6.1 Have two parent members on the governing board on a continuous basis.
- 6.2 Have all parents participate in school activities through Parent Task Forces³.
- 6.3 Provide parents real-time access to student academic and non-academic performance via Student Information System (SIS).
- 6.4 Partner with local businesses to expand extracurricular activities, authentic experiences, and internship opportunities.
- 6.5 Organize day-long seminars to special interest groups on a quarterly basis provided by well established corporations.
- 6.6 Have content experts from local colleges and universities lecture and mentor students in their projects on a one-on-one basis.

Goal 7: Provide a safe and healthy learning environment.

- 7.1 Integrate character education into the fabric of curriculum.
- 7.2 Provide a safe learning environment free of bullying, teasing, and violence.
- 7.3 Promote programs that enhance students' health, safety and well-being.
- 7.4 Implement Positive Behavior Intervention System.
- 7.5 Implement school uniform and dress code policy.
- IV. **Evidence of Support:** Provide evidence that an adequate number of parents, teachers, pupils, or any combination thereof, supports the formation of a public charter school. The following components must be addressed:
 - 1. Information and materials indicating how parents, the community, and other stakeholders were involved in supporting the application for the public charter school.

The need for a secondary school with a STEM focus was first identified by a group of Loudoun parents, who started the founding group of LMITA. Existing public schools in Loudoun County that offer a similar curriculum had limited seating and very strict admission criteria. Moreover the students who enrolled in these programs had to be transported to Monroe Technology Center or Loudoun Academy of Science from their home schools. After preliminary research and discussion with other concerned parents, establishing a public charter school with STEM focus was identified as a possible and viable alternative.

At the first step, the founding group finalized its mission and goals in the form of a brief executive summary [Part-B; Section-I]. Then a one-page flier was developed, and a portfolio, including the flier and executive summary was distributed to publicize the initiative. The founding group later institutionalized itself as a non-

³ Defined and described in Section 3: Parental involvement

profit entity, the Northern Virginia Education Foundation (NVEF) [Appendix A: Articles of Incorporation and Bylaws].

The founding group further advanced their initiative by inviting educators with charter school experience to join the founding board. Chesapeake Science Point Public Charter School (CSP) in Anne Arundel County, MD, was identified as a model school for the reasons listed below.

- CSP is a small STEM school.
- Anne Arundel County has similar demographics as Loudoun County.
- CSP is strongly supported by parents, local businesses and colleges.
- CSP was the recipient of the Charter School of the Year Award in 2010 with the second highest math scores and fifth highest reading scores among all the public middle schools in the State of Maryland.

Having one of the founders and former principal of CSP join the initiative, the founding group also started receiving help from Washington Education Foundation, a non-profit organization providing educational services to STEM schools including CSP. The founding group also contracted with Access Point Public Affairs, LLC, to extend its outreach activities.

In order to learn more about the charter school process in Virginia, the founding group also visited existing charter schools in the tri-state area. The experience of these people who successfully opened charter schools was very helpful.

NVEF became a member of the Loudoun Chamber of Commerce to establish itself in business circles. Since a major goal of the LMITA is to prepare local students for local IT jobs, it was critical to establish a strong connection with the local business community. Foundation members and affiliates participated in the Chamber activities and met with the Chamber officials and local businesses to gather support for the initiative [Appendix B: Sample Support Letters].

The founding group focused on reaching out to the elected officials and visited most of the county delegates, supervisors, administrators and state senators.

Volunteer help was used to reach out to the general public. First, a survey form and informative flyers on charter schools were created for distribution to the public [Appendix C: Community Support Surveys]. Stands were setup at crowded public places to distribute these materials, and volunteers visited houses to inform people about the charter school initiative and receive their feedback.

2. Tangible evidence of support for the public charter school from parents, teachers, students, and residents, or any combination thereof, including but not limited to

information regarding the number of persons and organizations involved in the process and petitions related to the establishment of the charter school.

The founding group made significant efforts to publicize LMITA and assess the level of support from the community. In this regard, we distributed hundreds of fliers to households in various neighborhoods. We collected 340 surveys from the residents of the County neighborhoods (Ashburn, Dulles, Sterling, Leesburg, Potomac Falls, Broadlands, South Riding, Aldie, etc.); 261 people were in favor of a charter school option in Loudoun county, while 79 people were against it as listed in Table 1. The feedback we received was very positive; the local community showed great interest in the LMITA initiative and expressed their support for such a school in the area. Sample support surveys from those individuals are also included in Appendix C: Community Support Surveys.

Breakdown of community survey results Classification Count % Support, with children 134 39% Support, without children 127 37% 261 77% Support, total 23% Not supporting 79 Void 7 2% Total 347 100%

Table 1. Breakdown of community surveys on charter schools

During conducting support surveys, we have emphasized that (1) LMITA will offer Loudoun County parents a choice for their children's education, (2) charter schools are innovative schools of choice, where parents choose to send their children for their education, and (3) LMITA will provide a tuition-free alternative to the existing public schools with a strong educational STEM program focusing on mathematics, and IT, thus preparing students for a successful higher education. The support from the local community stands extremely strong for LMITA. It truly affirms the need for such a school in Loudoun County. Some comments from the County residents on LMITA project is given below.

Samples of Loudoun County Residents' Comments (Jan-March, 2011):

- "I think that charter schools would be a good addition and reduce overcrowding"
- "We totally support the concept of charter schools"
- "Give students more choices regarding courses and activities!"
- "We need a charter school in the area. My nieces in Massachusetts and friends in Florida attend charter schools and they are great!"
- "Support a charter school that emphasizes math & science as well as classic literature"

In order to assess the need for a STEM charter school in Loudoun County, we also met with numerous elected officials. The feedback we received was very positive, supportive, and encouraging. Included among the individuals we met as part of our community outreach efforts are:

- Delegate Tag Greason, District 32. Delegate Greason visited CSP in March 2011 to learn more about our model school.
- Delegate Joe May, District 33
- Delegate Barbara Comstock, , District 34
- Delegate Jim LeMunyon, District 67
- Delegate Tom Rust, District 86
- Chairman Scott York, Board of Supervisors
- Former Vice Chairman Susan Buckley, Board of Supervisors
- Former Supervisor Andrea McGimsey, Potomac District
- Former Supervisor Stevens Miller, Dulles District
- Former Supervisor Susan Buckley, Sugarland Run District
- Supervisor Ralph Buona, Ashburn District
- Supervisor Suzanne Volpe, Algonkian District
- Supervisor Kenneth Reid, Leesburg District
- Senator Mark Herring
- Senator Jill Vogel

We have met with the Loudoun County Public Schools Administration to get their advice and to develop a joint effort with them:

- We met with Superintendent Dr. Hatrick and his staff to get their advice.
- Deputy Superintendent Mr. Ned Waterhouse and Assistant Superintendent for Instruction Ms. Sharon Ackerman visited our model school to observe firsthand of our daily operation, mission and vision.
- Ms. Shirley Bazdar, Director of Career and Technology Education, gave us a
 guided tour to C. S. Monroe Technology Center and Academy of Science, and
 the STEM program at Eagle Ridge Middle School. During these visits, we met
 with Mr. Wagner Grier, Dr. George Wolfe, and Mr. Wes Walters to discuss
 the STEM programs at Loudoun County Public Schools.
- We met President of Loudoun Education Alliance of Parents (LEAP) Ms.
 Cholakis and Chair of Minority Student Achievement Advisory Committee (MSAAC), Mr. Jeff Dunn, and discussed the need for alternative programs.
- We met Former School Board members Mr. John Stevens, Dr. Joe Guzman, Mr. Robert Dupree, Mr. Tom Reed, Mr. Bob Ohneiser, Mrs. Priscilla Godfrey.
- We met current School Board members Mr. Eric Hornberger, Mr. Jeffrey Morse, Ms. Jill Turgeon, Ms. Debbie Rose, Mr. Bill Fox, Mr. Tom Reed.

We also met educators at local colleges, universities, think-tanks, neighbor school districts and Virginia Department of Education:

- Former Secretary of Education Mr. Gerard Robinson visited CSP in March
- Ms. Diane Jay, Associate Director, Office of Program Administration and Accountability, Virginia Department of Education
- Dr. Margaret N. Roberts, Former Executive Assistant to the Board of Education, Virginia Department of Education
- Ms. Isis Castro, Member of the Board of Education, and chair of Charter School Committee, Virginia Department of Education
- Dr. Bob Templin, President of Northern Virginia Community College
- Dr. Craig Linebaugh, Director of GWU Science and Technology Campus
- Ms. Paula Harper, Executive Director of Program Development at GWU
- Dr. Eleanor Smalley, COO of The Jason Project
- Dr. Pam Moran, Superintendent of Albemarle County Public Schools
- Ms. Ashby Kindler, Principal of Murray High Charter School
- Ms. Sandy Richardson, Co-founder of Community Public Charter School
- Ms. Bobbi Snow, Co-founder of Community Public Charter School
- Ms. May Harris, Director of STEM Programs at NVCC
- Don Soifer, Executive Vice President at Lexington Institute and Member at DC Public Charter School Board
- Kirsten Langhorne, Educate Loudoun
- Roy Gamse, Vice President of Imagine Schools
- Mary Porter, Curiosity Zone

We have met local business leaders to get feedback and support from them:

- John Wood, Telos Corporation
- Russ Gestl, Buchanan Partners
- Scott Hamberger, Fortessa
- Kurt Krause, National Conference Center
- Tony Howard, Loudoun Chamber of Commerce
- Eileen Curtis, Dulles Chamber of Commerce

Support letters from Delegates Tag Greason, Joe May, Tom Rust, Jim LeMunyon, Barbara Comstock, Board of Supervisors Chairman Scott York, Vice Chairman Supervisor Susan Buckley, Supervisor Stevens Miller, Senator Mark Herring, Senator Jill Vogel, Don Soifer of Lexington Institute and DC Public Charter School Board, Mary Porter of Curosity Zone, Loudoun Chamber of Commerce and Dulles Regional Chamber of Commerce, Northern Virginia Technology Council are all included in Appendix B: Sample Support Letters.

3. A description of how parental involvement will be used to support the educational needs of the students, the school's mission and philosophy, and its educational focus.

"Research has conclusively shown that parental involvement and community participation in education benefits students, parents, teachers and schools, whether the program is at the preschool, elementary or secondary school level"⁴. Just as our model school CSP did, we will take this scientific fact to the heart at LMITA and it will be one of the areas where we aim to make a difference.

Involvement of parents will start with the registration of the students to LMITA . All school administrators and volunteer teachers will visit the parents of enrolled students at home to brief them on the academic and disciplinary expectations. During these visits, school mission, policies and education environment, and expectations from the students will be shared with the parents and their support will be requested in bringing out the best in their kids. These visits will continue periodically to keep the parents informed on their children's progress.

To involve parents at the decision making level at LMITA, two permanent seats at the school board will be reserved for parents of current students.

At a larger scale, community meetings, focus groups, parental satisfaction surveys, open houses, and parent-teacher conferences will serve as platforms for parents to voice their views and values.

Parent Task Forces instead of PTO or PTA

The traditional parent organizations usually consist of a core group that usually try to accomplish all the goals and objectives of the school while struggling to receive support from the big majority of the school parent body. The challenge even gets worse when it comes to middle and high school grades. The common assumption on the non-participating parent body is that "there is someone dealing with the school's needs", and they may be out of loop for an entire school year. On the other hand, the core group receiving requests from the school administration and the staff, find themselves in the middle of many missions to be accomplished with very limited human and financial capital. At the end they may end up producing poorly or decide not to go under any such burden for the upcoming years. Experiencing all this at the CSP, the CSP leadership developed an innovative organizational approach called Parent Task Force (PTF).

The CSP school leadership identified forty five various tasks to be accomplished by the parents. Each one of those tasks were described along with expected outcomes, calendar, along with available resources and needed resources. During the first week of the school year all those tasks were introduced to all the families. Parents and guardians were asked to identify their first three choices to participate in this volunteer process. The interested parents were put into groups of 3-4 for each task.

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⁴ http://www1.pgcps.org/WorkArea/downloadasset.aspx?id=123640

All the task forces were empowered to be independent from each other. However, a facilitator parent task force was developed to coordinate the calendar and the support among all the PTF groups. As the LMITA team, we also believe that the aforementioned practice would increase the ownership, reduce the load and the bureaucracy and increase the efficiency of the process and the product.

To achieve and regulate active participation of the parents in school activities, LMITA will create PTFs, each of which will be assembled with specific and clearly defined goals. One of these PTFs will serve as a hub for information sharing, communication, and cooperation between the school and our parents. PTFs will facilitate strengthening the partnership between LMITA, parents, and the community and expand LMITA's connections with the communities it serves.

The ways and means parents can help and contribute to LMITA, include but not limited to:

- Tutoring and mentoring students.
- Volunteering in extracurricular activities like after school clubs or field trips.
- Sharing their experiences with the students in order to increase students' awareness on careers and higher education opportunities.
- Acting as liaisons between LMITA and local businesses.
- Participating and organizing in talks and seminars by distinguished scientists, engineers, educators, and business and community leaders.
- Serving as advisors and judges in science fairs.

Last but not least, LMITA founding members are committed to always have two parent seats at the school board in order to have parents involved at every step of decision making in their children's education.

- **V. Statement of Need:** Describe the need for a public charter school in a school division or relevant school divisions in the case of a regional public charter school, or in a geographic area within a school division or relevant school divisions. The following components must be addressed:
 - 1. A statement of the need for a public charter school that describes the targeted school population to be served and the reasons for locating the school within a particular school division.

LMITA fills the following needs in Loudoun County

- LMITA will provide a specialized choice and innovation in Math & IT education.
- LMITA will provide additional seats to the student population in Loudoun County, that is increasing by roughly three thousand students per year.
- LMITA will provide a cost-effective choice in education, as it will not require capital funding for its facilities.
- Loudoun County employs more than 22,000 people in information and communication technologies. LMITA will be instrumental in training local population for these local jobs.

An innovative education choice

Loudoun Math and IT Academy will be unique in the LCPS system in that, it will be an open and equal access school that provides math and IT focus starting in the middle school to all Loudoun students regardless of their school districts.

Additional space for growing school population

Table 2 shows Loudoun County Public Schools enrollment projection until 2016. On the average, the number of students increases by 2,000 students per year. It was also stated in the Capital Improvement Plan that current capacity use in the middle and high schools in the county is 90% on the average.

Table 3 shows program capacity and actual enrollment district by district. Since prospective students of future LMITA are at elementary school right now and LMITA will start as a middle school, data was presented for elementary and middle schools. Elementary schools and middle schools in Ashburn are clearly overcrowded currently. Dulles north and Central Loudoun elementary schools are overcrowded and middle schools are likely to be overcrowded in the near future.

Note that LCPS is currently working to build more schools in needed areas, and, being a small school, LMITA does not aim to address the school shortage in Loudoun County. Nevertheless, it will take some pressure off of the public school system and it will be a part of the solution.

Table 2. Loudoun County public schools, student population projection

	09/30/11	2012-13	2013-14	2014-15	2015-16
	ACTUAL	PROJECTION	PROJECTION	PROJECTION	PROJECTION
LOUDOUN COUNTY PUBLIC SCHOOLS	65,668	68,170	70,652	72,396	73,789
PRESCHOOL ENROLLMENT	953	999	1,017	1,036	1,055
ELEMENTARY SCHOOL (Gr K-5) ENROLLMENT	31,785	32,593	33,270	33,506	33,505
MIDDLE SCHOOL (Gr 6-8) ENROLLMENT	14,824	15,591	16,477	17,110	17,715
HIGH SCHOOL (Gr 9-12) ENROLLMENT	18,106	18,987	19,888	20,744	21,514

Table 3. Loudoun County elementary and middle schools, program capacity versus enrollment

-	Elementary School		Middle School		
	2011-12	09/30/11	2011-12	09/30/11	
	Program	Actual	Program	Actual	
	Capacity	Enroll	Capacity	Enroll	
Eastern Loudoun	7,264	6,821	3,444	3,056	
Ashburn	6,119	6,427	2,469	2,658	
Dulles North	4,119	4,763	2,507	2,233	
Dulles South	5,200	4,938	2,506	1,905	
Central Loudoun	6,003	6,287	3,468	2,971	
Western Loudoun	4,592	3,435	2,337	2,001	

Cost-effective choices in education

Loudoun County Board of supervisors initially asked Loudoun County School Board to cut \$44M from their 2013 budget. Later the budget cut request was decreased to \$22M. The school board is still in the process of deciding how to meet the budget reduction requested by the board of supervisors. LCPS slashed the Foreign Language in the Elementary Schools (FLES) Program to reduce budget. Also construction of some planned schools was postponed. Budget constraints combined with the growing student population in Loudoun necessitates alternative solutions. Loudoun Math & IT Academy will open with \$0 start-up costs to the county and it will seat 672 students at full capacity. While it will not resolve public school system's challenges, it is a step in the right direction and it will be a part of the solution.

Training for jobs in communication technology

LMITA aims to educate its students not for today's job market or for the academic programs in today's colleges and universities, but for those of at least five to ten years from now. The US Department of Labor predicts that virtually all IT jobs will continue to have excellent prospects, and it projects a much faster growth for the industry than average employment. The founders strongly believe that LMITA will be a highly valuable alternative and choice for education in Loudoun County – an area that employs more than 22,000 people in information and communication technology. IT related jobs represent 17% of total Loudoun County employment. For the past eight years, the number of businesses in the IT field has grown by 220%, and its employment more than doubled. As Moody's "Economy.com" noted, "The Dulles Technology Corridor, centered in Loudoun County, hosts the largest number of internet, satellite and defense companies in the nation." MSNBC calls Loudoun

County as the "Silicon Valley of the East". Loudoun's IT sector is growing exponentially and added more than 400 businesses in 2009, despite the recession. The founders think LMITA will provide a choice for students who want to focus on Math and IT starting from the middle school.

Northern Virginia Community College contracted Career Builder to determine current and projected job market in Northern Virginia. The top 5 jobs in demand were all IT jobs. IT job demand exceeded all other occupations combined.

In a regional job analysis report published by George Mason University, 9 of the top 20 jobs in the next 10 years will be in IT industry. Table 4 shows the forecasted growth of these jobs.

Table 4. Job Growth in the IT industry (by Net New Jobs)in Northern Virginia

SOC Code	Description	2010 Jobs	2020 Jobs	Net New Jobs	% Change	Education Level
15-1051	Computer systems analysts	18,473	25,175	6,702	36%	Bachelor's degree
15-1031	Computer software engineers, applications	17,742	26,788	9,046	51%	Bachelor's degree
15-1032	Computer software engineers, systems software	16,680	25,144	8,464	51%	Bachelor's degree
15-1081	Network systems and data communications analysts	8,188	13,853	5,665	69%	Bachelor's degree
15-1071	Network and computer systems administrators	7,812	12,541	4,729	61%	Bachelor's degree
15-1021	Computer programmers	7,656	8,375	719	9%	Bachelor's degree
15-1041	Computer support specialists	7,322	10,764	3,442	47%	Associate's degree
15-1099	Computer specialists, all other	6,534	7,841	1,307	20%	Associate's degree
11-3021	Computer and information systems managers	6,458	8,868	2,410	37%	Degree plus work experience

A significant number of these jobs will either be in Loudoun County or somewhere close to Loudoun County. Loudoun County students who receive appropriate education for these jobs will be at an advantage against their peers.

The aforementioned statistics show that the need for an IT-based school in Loudoun County is evident. LCPS has the flagship programs C. S Monroe Tech Center and Loudoun Academy of Science, but both programs are part-time and offer very limited number of seats. Both programs enroll only 150-250 students in total, and the admission is pretty competitive requiring high GPAs and strong recommendations. Per the charter school law, LMITA will be an open enrollment school providing a choice for students who cannot attend Loudoun Academy of

Science or Monroe Technology Center programs but have an intrinsic interest in the information technologies.

2. An explanation of why the public charter school is being formed. (Is the school being formed at the requests of parents or community organizations? How was the need determined? What data were examined as part of the needs assessment? Briefly describe the need and include a summary of the quantitative data.)

As an engineer, Loudoun parent Ali Gokce was aware of the importance of IT technologies. He observed the high number of IT companies in the county and the influx of IT employees from all over the world. He has a daughter at fifth grade and a son at third grade. His daughter Dalia is an outstanding student enrolled in FUTURA program. This gifted and talented program seeks to enhance and to develop the intellect of fourth and fifth grade students who have been formally identified as generally intellectually gifted. His son Aydin, on the other hand, was having some attention issues at school.

He wanted his children to get educated in high-income fields so they will be competitive in future job markets. While Dalia had a good chance of getting into advanced programs such as Loudoun Academy of Science or Thomas Jefferson High School, Aydin needed some alternative setups.

After some research, he identified charter schools as an economical and viable solution for his kids, and other kids in similar situation in the county. He was sharing his concerns with his circle of friends throughout the process. Mustafa Emin Sahin, Sharon Inetas, Sinan Yildirim and later in the process, Nataliya Blyznyuk got on board with him. After the group was convinced that a charter school is a doable option, they formed Northern Virginia Education Foundation and started their outreach efforts. By word of mouth, they reached Ali Bicak, who has successfully founded a charter school, Chesapeake Science Point (CSP) in MD, which turned out to be an exceptionally successful school. Ali Bicak agreed to join the founding board and the group decided to take CSP as a model school. Later in the process, former principal of CSP, Fatih Kandil, moved to Loudoun for family-related reasons. He decided to join the effort as well. Meanwhile, group contracted with Public Access Point for PR purposes for a nominal fee and was able to reach out to political and business leaders, and community stakeholders of Loudoun. Also local volunteers distributed survey sheets to the Loudoun parents to gage their interest in a school like LMITA.

Consultation with numerous elected officials and members of local community organizations, and neighborhood associations revealed that there is demand for a small school with STEM focus in Loudoun, so that local population can be trained for local jobs.

Currently, admission rate for Loudoun Academy of Science is less than 15%; that is six out of the seven applicants do not make it to this STEM program. Admission to C.

S. Monroe Technology Center is also very limited. Clearly, there is enough room for more schools that provide STEM education; there is a demand for it from the students, there is a need for it in the industry, and there is support for it at the administrative level.

Superintendent of Albemarle County Public Schools, Dr. Pam Moran, said that when they opened a STEM school in Charlottesville, they achieved their enrollment goals in half the time they have forecasted because of the parents who are working in the technology companies nearby. The same phenomenon will likely replay in Loudoun County due to the high number of IT companies.

3. An explanation of why a public charter school is the appropriate vehicle to address the identified need.

Charter schools were originally intended to serve as "experimental laboratories" for the educational system. Where it can be time consuming and costly to try new educational approaches throughout an entire public school district, charter schools are afforded a degree of autonomy thereby allowing the school to implement innovative programs on a small scale and make modifications and improvements with minimal disruption on student learning. Approaches, programs, testing and such can be modified and better tailored to meet student needs overnight, literally. These successful programs, approaches and models can be transferred and replicated subsequently throughout the entire school district to enhance student performance.

The charter school model is a proven successful model of efficiency and costeffective means of developing and engaging innovative and effective teaching, both on the individual school level as well as district-wide. The model charter school we have identified, CSP, has a success track record in terms of academic and social growth of the students, school finance and facilities, as public charter school.

LMITA will be an open-enrollment public school choice of all Loudoun students with Math and IT focus. Any Loudoun student may choose to apply to LMITA. LCPS does not have such an option currently. Any student enrolled in the public school system has to go to his\her base school which is determined by his\her address. Admission to other programs with strong technical focus such as Loudoun Academy of Science or Thomas Jefferson is very competitive.

Charter schools traditionally boast increased ownership among parents and the community. Parents tend to spend more time at charter schools and local community supports it more.

LMITA will be a small school with 288 students at the middle school and 384 students at the high school at full capacity. These school sizes are not economical for public school system due to its building and staffing standards. Being a small school,

LMITA will provide personalized education, individualized attention and timely interference. It will be able to track the performance of its students better and prevent bullying and other negative behavior patterns easier.

- **VI.** *Educational Program:* Describe the public charter school's educational program. The following components must be addressed:
 - 1. A synopsis of the public charter school's educational program.

LMITA is proposing a Science, Technology, Engineering, and Math (STEM) program which will replicate Chesapeake Science Point (CSP) charter school model with a specific focus on Mathematics & Information Technologies (IT). Our STEM program will prepare Loudoun County students for higher education particularly in STEM fields as the U.S. demand for scientists and engineers is expected to increase four times the rate for all other occupations during the next decade⁵. At LMITA, the curricula for all subject areas will be rigorous and aligned with the Virginia Standards of Learning & Common Core Standards.

Throughout middle school, all students will take language arts, social studies, mathematics, computer, and science for a full year during each grade. All middle school students will also take a semester course in health education, physical education, art or music each year. The students will also be exposed to various IT topics aligned with the Virginia Computer & Technology Standards of Learning⁶ and will be given additional opportunities to use computer applications in all the core courses.

At the high school level, in addition to the core areas, students will have hands-on training in advanced IT-fields. LMITA will also have a focus on college preparation with individualized SAT tutoring and customized practice testing opportunities. Such an approach will ensure that LMITA graduates will be prepared to pursue both advanced degrees in technology and engineering fields and also seek career and internship opportunities in the local high-tech companies and research institutions (e.g. Telos, Orbital, Oracle, Microsoft, etc.).

LMITA educational program will differentiate mainly in its instructional methods; the content will be different only in specialized programs offered mostly at the high school grades. For all the required courses, LMITA follow the LCPS Middle and High School Programs of Studies.

LMITA will continuously update and improve the curriculum, as necessary, based on student pre/post assessment and learning research. LMITA will differentiate its curricula for groups and individuals based on their skills, knowledge, and progress which will be measured by a variety of assessment methods (please see Section VI. Educational Program, Subsection 4 - Student Assessment for details on assessment methods utilized at LMITA).

⁵ http://www.usinnovation.org/state/pdf_stem/STEMEdVirginia2010.pdf

⁶ http://www.doe.virginia.gov/testing/sol/standards_docs/computer_technology/index.shtml

While LMITA focus and emphasis will be on Math and IT, students will also have an option to pursue "Critical Languages" such as Chinese, Arabic, Turkish, etc. Furthermore, students will have a rigorous education in civic and citizenship as described in the following sections.

LMITA Curriculum

LMITA educational program differentiates in providing personalized education for each child by allowing them to progress in their own learning pace and providing them customized support according to their specific needs. In addition to being a small and structured school, LMITA will utilize well-researched and studied teaching methodologies and innovative technologies to help each student to achieve their maximum potential.

In terms of curriculum, LMITA will differentiate in only the specialized programs offered mostly at the high school grades. For all the required courses, LMITA will follow Virginia Board of Education approved course titles and the LCPS Middle & High School Programs of Studies. Course names listed in the tables on pages 37-41 of the application were taken from CSP, the model charter school in MD. In order to ensure students receive all required credits for graduation and various diploma types, the following course titles are corrected, and those subject areas will be offered under VBOE approved course titles.

- Science course titles: Science at sixth grade, Life Science at seventh grade, and Physical Science at eighth grade will follow LCPS Middle School Program of Study. Similarly, Earth Science, Biology, Physics and Chemistry at the high school grades will follow the LCPS High School Program of Study. LMITA will offer these science courses at the same grades as LCPS, but also will allow students take Biology or other high school courses earlier if they want to pursue an Advanced Diploma. Advanced students will also have an opportunity to enroll in Advanced Placement courses if they choose to do so. In any case, LMITA science program will allow for all students to earn four science credits in three disciplines of science, while earning two verified science credits.
- Foreign Language courses: LMITA will provide a foreign language option for middle school as required in Standards of Accreditation (SOA). LMITA will offer one or two of the Spanish, French, German and Latin language courses depending on the demand from students. LMITA will also offer one or two of the critical languages as an option again depending on the demand from students. Diploma requirements are corrected and aligned with the VBOE approved diploma requirements as shown in the following subsection.
- Social Studies course titles: Social Studies courses will be aligned with the VBOE approved course titles at all grades. Following LCPS Program of studies, at the middles school grades, LMITA will offer US History to 1865, US History 1865 to

Present, Civics and Economics. Similarly, at the high school grades LMITA will offer World history (to 1500), World history (1500 to Present) and US & Virginia History.

• Mathematics Course Sequence: LMITA will expose its students to advanced Math topics at earlier grades, but will follow the same course titles and similar sequences as offered at LCPS. Following are sample math course sequence options for LMITA students. Depending on the students progress these sequences might vary.

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Math 6 \rightarrow Math 7 \rightarrow Math 8 \rightarrow Algebra I \rightarrow Data Analysis \rightarrow Geometry \rightarrow Algebra II \rightarrow Pre-Calculus Math 6 \rightarrow Math 7 \rightarrow Algebra I \rightarrow Geometry \rightarrow Algebra II \rightarrow Pre-Calculus \rightarrow AP Calculus AB Math 6/7 \rightarrow Algebra I \rightarrow Geometry \rightarrow Algebra II/Trigonometry \rightarrow Mathematical Analysis \rightarrow AP Calculus AB Math 6/7 \rightarrow Algebra I \rightarrow Geometry \rightarrow Algebra II \rightarrow Pre-Calculus \rightarrow AP Calculus AB Math 6/7 \rightarrow Algebra I \rightarrow Geometry \rightarrow Algebra II \rightarrow Pre-Calculus \rightarrow AP Statistics Math 6/7 \rightarrow Algebra I \rightarrow Geometry \rightarrow Algebra II \rightarrow Pre-Calculus \rightarrow AP Computer Science
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• LMITA students will have enough number of required and elective courses to meet the requirements to complete two sequential electives as stated in 8 VAC 20-131-50, for Standard and Modified Standard Diploma. All course titles to be offered at LMITA are not listed within the application, as most of the electives to be offered will be determined according students' progress and interest areas. At the minimum, students will have enough number of required and elective courses to meet their diploma requirements.

How LMITA will implement information technologies (IT)

In addition to the core subject areas of Math, Science, Language Arts, and Social Studies, LMITA will put emphasis on information technologies to enhance student learning. LMITA will not only teach Math and IT courses but also infuse IT tools in instruction of all subject areas. Specifically, LMITA's curriculum will incorporate Technology Integrated Education (TIE) in all the core courses. Microsoft and Cisco Academies provide sample lesson plans for new ways to enhance student learning through technology integration. LMITA's curriculum will include an optimized blend of these resources as well as other TIE-based curricula.

LMITA middle school curriculum will provide 6th, 7th, and 8th graders with exposure to basic computer skills that will help them with their academic courses and prepare them to advanced IT studies. To accomplish these aims the students will be taught computer skills, such as word processing, graphic design, presentations, and desktop publishing. Materials for programming in innovative learning tools like *Alice* and *Scratch* will be utilized with some mathematical reinforcement and an opportunity for creativity.

LMITA Math Program

The Mathematics program at LMITA will be focused on providing all students with the mathematical skills they will need to compete in advanced technology fields. The goal of mathematics program will be to enable students to comprehend concepts, operations, and relationships in mathematics as well as proficiency in application of those concepts to model and solve problems. Students will develop fluency in solving multi-step equations, modeling functions and algebraic thinking.

Critical thinking and problem solving will be an integral part of learning objectives at each grade and in every course. Students will have considerable experience in analyzing data, graphs, charts and presenting them verbally, to describe a wide variety of patterns and relationships. Using knowledge and tools they have acquired so far, students at LMITA will be asked to model the problem they are facing, develop an approach to solve it, come up with an acceptable success criteria, implement the solution and assess the outcome.

LMITA IT Program

The Information Technologies program at LMITA will be based on Virginia Standards of Learning for Computer Technology⁷. At the middle school grades students will excel in utilizing IT tools in writing and presenting their reports, managing files and spreadsheets, as well as communicating with their peers and teachers. At high school students will continue building on their strong foundation with the following three courses designed and described by Computer Science Teachers Association⁸.

IT in the Modern World: This course aims to solidify students' understanding of IT principles and practices so that they can make informed choices and use appropriate computational tools and techniques in whatever career they decide to pursue. They should also appreciate the breadth of computing and its influence in almost every aspect of modern life. Finally, they should understand the social and ethical impact of their various choices when using computing technology in their work and personal lives.

IT Principles: This course is a more in-depth study of computer science and its relation to other disciplines, and contains a significant amount of algorithmic problem solving and related activities. Students should come out of this course with a clear understanding of the application of computational thinking to real-world problems. They should also have learned how to work collaboratively to solve a problem and use modern collaboration tools during that work.

IT College and Career Tracks: This is an elective course that provides depth of study in one particular area of computing. This may be, for example, an AP Computer Science course, which offers depth of study in Java programming. Alternatively, it may be a course that leads to a professional computing certification. Through this course students will start pursuing one of the following tracks provided at LMITA.

⁷ http://www.doe.virginia.gov/testing/sol/standards_docs/computer_technology/complete/computertechk-12.pdf

 $^{^8}$ http://csta.acm.org/includes/Other/CSTAStandardsReview2011.pdf

LMITA Career Tracks

Once the students have a solid background in the IT foundations, they will be able to choose an IT track of their interest and pursue more advanced IT certifications. According to their progress and interests, students may be guided at earlier grades into one of the three career tracks:

- Systems/Network Engineering
- Software Development
- Cybersecurity Engineering

At any grade a student can enroll in one or more tracks or transfer from one track to another, depending on their background and performance in that area. At the end of each quarter, students will be required to complete certain assignments to demonstrate their progress in the track they are pursuing. Students who fail in the quarterly assignments may be required to repeat the current phase of the track, or they could be transferred to a track in which they are more likely to succeed. Career tracks offered at LMITA and associated certificates are depicted in Figure 1.

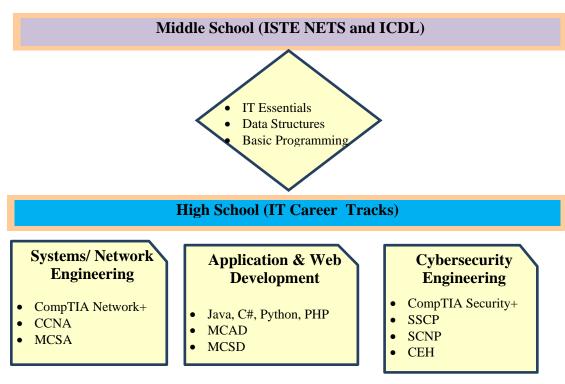


Figure 1: LMITA IT Career Tracks

1. Systems/Network Engineerring

Each student will study to earn either a Microsoft Certified System Administrator (MCSA) or a Cisco Certified Network Associate (CCNA) certification. These credentials validate students' ability to manage and troubleshoot network environments in the enterprise systems. They reflect a unique set of skills required

to succeed in a variety of job roles, such as systems administrator, network administrator, information systems administrator, network operations analyst, network technician, and technical support specialist⁹.

2. Application Development

Students will pursue a course of study to become either a Microsoft Certified Application Developer (MCAD)¹⁰ or a Microsoft Certified Solution Developer (MCSD)¹¹. MCAD certification enables students to demonstrate their ability to use Microsoft technologies to develop and maintain department-level applications, components, Web or desktop clients, or back-end data services. MCSD certification demonstrates students' ability to design and develop leading-edge business solutions with Microsoft development tools, technologies, platforms, and the Windows operating system. Students who have earned an MCAD or MCSD in earlier grades can also pursue a Microsoft Certified Professional Developer (MCPD) certification. The MCPD credential validates a comprehensive set of skills that are necessary to deploy, build, optimize, and operate applications successfully by using Microsoft Visual Studio and the Microsoft .NET Framework.

3. Cybersecurity Engineering

Each student will study to earn widely accepted IT security certifications such as CompTIA Security+, (ISC)² associate, Systems Security Certified Practitioner (SSCP), Security Certified Network Professional (SCNP) and Certified Ethical Hacker (CEH). These certifications require students to gain skills in one or more of the following:

- Telecommunications and Network Security
- Access Control Systems and Methodology
- Business Continuity and Disaster Recovery Planning
- Security Management Practices
- Security Architecture and Models
- Law, Investigation, and Ethics
- Application and Systems Development Security
- Computer Operations Security
- Physical Security
- Cryptography

LMITA will revise these career tracks annually according to current technology trends and industry demands. Once a strong foundation is established among the majority of the students, LMITA expects to be able to implement a wider career track program like the Dunbar Academy for Technology Excellence (ATE), which has been certified by Microsoft as the first Microsoft Certified High School in the

http://www.microsoft.com/learning/en/us/certification/mcsa.aspx

¹⁰ http://www.microsoft.com/learning/en/us/certification/mcad.aspx

¹¹ http://www.microsoft.com/learning/en/us/certification/mcsd.aspx

world¹², and was recognized by former US Secretary of Education Margaret Spellings in 2007.¹³ A fundamental characteristic of the Dunbar ATE program is the numerous IT certification courses made available to the students and the requirement of earning IT certifications for graduation. Similar to Dunbar, LMITA will offer a wider variety of career tracks so that its graduates will have the skills and knowledge base to pursue college degrees and careers in the STEM fields.

Last not but least, LMITA will revise and update its STEM curriculum according to the new methods, and skills required to work with emerging technologies. We have incorporated such new methods discussed at a panel sponsored by Brookings Institute on September 12, 2011 titled "New Ideas to Advance STEM in the US" 14.

LMITA Cybersecurity Program

Among the LMITA career tracks, there will be a specific emphasis on cybersecurity. "Cybersecurity is the protection of all things Internet -- from the networks themselves to the information stored in computer databases and other applications. The concept grew out of necessity as businesses and agencies sent more data and processes online, and it's even more crucial now with the emergence of Web 2.0 technologies, which foster online collaboration and information sharing" ¹⁵. By teaching cybersecurity at LMITA, we will expose our high school students to these emerging concepts and technologies.

LMITA will use the National Initiative for Cybersecurity Education (NICE) Framework by National Institute of Standards. The NICE Cybersecurity Workforce Framework offers a working taxonomy and common lexicon to define and describe the skills and knowledge base required in the cybersecurity industry. LMITA will partner with Telos Corporation, a major cybersecurity solutions provider in Loudoun County, to design, develop and revise its curriculum to train and educate the local workforce meeting the needs of this critical field.

"A recent study by (ISC)² and Frost and Sullivan reveal a need of more than 700,000 new information security professionals in the United States by 2015. What is more, the U.S. Bureau of Labor Statistics estimate that there will be 295,000 new IT jobs created in the United States between 2008 and 2018 — many of which will require cybersecurity expertise. This data points out a great responsibility within the U.S. education system and other industry groups to help produce cybersecurity capable citizens" ¹⁷.

¹² http://www.microsoft.com/presspass/features/2009/jan09/01-12ITAcademy.mspx

¹³ http://www.ed.gov/news/pressreleases/2007/02/02222007a.html

¹⁴ http://www.brookings.edu/events/2011/0912 stem education.aspx

¹⁵ http://topics.nextgov.com/Cybersecurity/

¹⁶ http://csrc.nist.gov/nice/framework/

¹⁷ http://www.homelandsecuritynewswire.com/new-partnership-promote-cybersecurity-education

Cybersecurity gives a great context to teach advanced math and IT topics. It is also a hot topic in the current news, articles as well as STEM research, which will enable LMITA faculty to utilize cybersecurity in an interdisciplinary approach to improve students' reading, writing, critical thinking and problem solving skills.

LMITA Civics and Citizenship Education Program

"History is who we are and why we are the way we are." David McCullough

According to the recently released National Assessment of Educational Progress results, 75 percent of high school seniors cannot name a power granted to Congress by the Constitution, and less than 50 percent of eight graders know the purpose of the Bill of Rights. Besides, it also indicates that less than 25 percent of young Americans regularly vote. Another recent research conducted by the FDR Group for the AEI Program on American Citizenship, 70 percent of the social studies teacher state that social studies classes are lower priority because of pressure to show progress on statewide math and language arts tests, while 67 percent of them indicate that they rely on the text books less and less in their classrooms. On the other side, the same study indicates that vast majority of the those teachers which is 83 percent share the critical core value that the United States is a unique country that stands for something special in the world.

It is apparent that there is a great consensus on the importance of civics and citizenship education in the public schools and also on the fact that the current practices and resources in place are not meeting those common sense expectations. The undeniable need for innovative practices are already sought for across the nation as discussed at a panel sponsored by AEI on September 14, 2011 titled "Teaching America: How Charter Schools Can Help Close the Civic Achievement Gap"

LMITA recognizes the importance of civics and citizenship education as a critical component of its liberal arts program. While having a special emphasis on math, science and IT fields, LMITA also believes that our students should be well equipped with the necessary social skills that will allow them to have a better understanding of our roots and utilize such skills for better planning of future.

LMITA will utilize the traditional educational resources while including more hands on practices which will allow our students to conduct individual research projects, trips, interviews, surveys, seminars, and competitions towards developing strong civic and citizenship.

LMITA's social studies teachers, administrators and governing board will work together and develop a network of advisory board which will consist of residents from all avenues of life who has special interest in the importance of more civics and citizenship education at LMITA. The main function of the advisory board will be not only to advise but also to mobilize external instructional, financial, and human resources towards accomplishing this exceptional and crucial goal for our nation.

LMITA Critical Languages Program

Critical Languages is a term used to designate world languages for which there is large demand for more trained speakers but little supply. The list of critical languages could change over time as economic and political situations change and develop, but often these languages are radically different from English in grammatical structures, sound systems and writing systems. Thirteen languages considered critical by the US Department of State are Arabic, Azerbaijani, Bengali, Chinese (Mandarin), Hindi, Indonesian, Japanese, Korean, Persian, Punjabi, Russian, Turkish and Urdu.

LMITA Critical Languages Program will offer intensive language instruction as well as summer institute opportunities and cultural enrichment experiences overseas. The languages to be taught will be determined per student interest and nationwide demand.

The understanding of a critical language will enable students to convey a multitude of thoughts and perceptions in a variety of ways. The goal of LMITA will be to teach critical languages in such a way as to promote the development of innovative, creative and critical thinkers and communicators prepared for active participation in a global society.

LMITA Character Education Program

LMITA character education is aimed to support our students to become lifelong, independent and ethical learners. The LMITA Character Education Committee (LCEC) will develop a character education program based on the six pillars of character: Trustworthiness, Respect, Responsibility, Fairness, Caring and Citizenship. ¹⁹ The LCEC will consist of members from parents, staff, and the administration. The character education program will be tailored around the general LMITA mission and vision. The LCEC will then determine the materials of instruction and extracurricular activities to be utilized. The extracurricular activities will include field trips, local and national community events, volunteering and service opportunities at local community organizations.

2. A description of the pupil performance standards and curriculum, which must meet or exceed any applicable Virginia SOQ, <u>Sections 22.1-253.13:1</u> through 22.1-253.13:9, *Code of Virginia*.

LMITA is proposed to be a public charter school within the LCPS system. Therefore, as a public school LMITA will meet the pupil performance standards and curriculum as described in the Virginia SOQ, Sections 22.1-253.13:1 through 22.1-253.13:9. We look forward to working with LCPS officials to meet all requirements to become an

¹⁸ http://www.langology.org/?p=329

¹⁹ http://charactercounts.org/sixpillars.html

accredited school. Beyond meeting the minimum requirements of the Virginia SOQ and SOL, LMITA will exceed these standards by utilizing the Technology Integrated Education (TIE) programs as described in the following.

National Educational Technology Standards (NETS)

In the middle school years students will be exposed to a basic IT program based on Virginia Computer Technology Standards of Learning and the National Educational Technology Standards (NETS)²⁰. Students will gain essential computer skills such as keyboarding and using Microsoft Office tools. During this stage IT tools will be utilized not only to bring the students to their expected current grade level in reading and math, but also establish the foundation for more advanced IT topics.

NETS, along with the Virginia State Common Core Standards and Standards of Learning (SOL), will constitute the core of the academic program at the middle school level at LMITA. NETS are aligned with SOLs (essentially, Virginia Computer Technology Standards of Learning are mostly the same as the following six NETS for Students)^{21,22}. NETS documentation describes these standards as follows:

- Creativity and Innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:
 - a. apply their knowledge to generate new ideas, products, or processes,
 - b. create original works as a means of personal or group expression,
 - c. use models and simulations to explore complex systems and issues,
 - d. identify trends and forecast possibilities.
- 2) **Communication and Collaboration:** Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:
 - a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media,
 - b. communicate information and ideas effectively to multiple audiences using a variety of media and formats,
 - c. develop cultural understanding and global awareness by engaging with learners of other cultures, and
 - d. contribute to project teams to produce original works or solve problems.
- 3) **Research and Information Fluency:** Students apply digital tools to gather, evaluate, and use information. Students:
 - a. plan strategies to guide inquiry,

²⁰ http://www.iste.org/AM/Template.cfm?Section=NETS

http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS for Students 2007 Standards.pdf

http://www.doe.virginia.gov/testing/sol/standards_docs/computer_technology/index.shtml

- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media,
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks, and
- d. process data and report results.
- 4) **Critical Thinking, Problem Solving, and Decision Making:** Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:
 - a. identify and define authentic problems and significant questions for investigation,
 - b. plan and manage activities to develop a solution or complete a project,
 - c. collect and analyze data to identify solutions and/or make informed decisions, and
 - d. use multiple processes and diverse perspectives to explore alternative solutions.
- 5) **Digital Citizenship:** Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:
 - a. advocate and practice safe, legal, and responsible use of information and technology,
 - b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity,
 - c. demonstrate personal responsibility for lifelong learning, and
 - d. exhibit leadership for digital citizenship.
- 6) **Technology Operations and Concepts:** Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:
 - a. understand and use technology systems,
 - b. select and use applications effectively and productively,
 - c. troubleshoot systems and applications, and
 - d. transfer current knowledge to learning of new technologies.

Virginia Standards of Learning for Computer Technology

At the high school grades, while the students will be pursuing advanced IT certifications, the basic IT courses at LMITA will be based on the following standards of learning for computer technology²³:

Basic Operations and Concepts

C/T 9-12.1 The student will demonstrate knowledge of the nature and operation of technology systems.

²³ http://www.doe.virginia.gov/testing/sol/standards_docs/computer_technology/complete/computertechk-12.pdf

- Discuss the inherent advantages and limitations of technology.
- Define the relationship between infrastructure, electronic resources, and connectivity.
- Identify and describe the impact of new and emerging technologies and their applications.

C/T 9-12.2 The student will demonstrate proficiency in the use of technology.

- Identify and resolve hardware and software compatibility issues.
- Develop and communicate strategies for solving routine hardware and software problems.

Social and Ethical Issues

C/T 9-12.3 The student will demonstrate knowledge of ethical, cultural, and societal issues related to technology.

- Assess the potential of information and technology to address personal and workplace needs.
- Demonstrate knowledge of electronic crimes such as viruses, pirating, and computer hacking.
- Explore and participate in online communities, and online learning opportunities.
- Identify the role that technology will play in future career opportunities.

C/T 9-12.4 The student will practice responsible use of technology systems, information, and software.

- Adhere to fair use and copyright guidelines.
- Adhere to the school division's Acceptable Use Policy as well as other state and federal laws.
- Model respect for intellectual property.

C/T 9-12.5 The student will demonstrate knowledge of technologies that support collaboration, personal pursuits, and productivity.

- Respectfully collaborate with peers, experts, and others to contribute to an electronic community of learning.
- Model responsible use and respect for equipment, resources, and facilities.

Technology Research Tools

C/T 9-12.6 The student will use technology to locate, evaluate, and collect information from a variety of sources.

- Integrate databases, spreadsheets, charts, and tables to create reports.
- Use available technological tools to expand and enhance understanding of ideas and concepts.

C/T 9-12.7 The student will evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

- Analyze and draw conclusions about the comprehensiveness and bias of electronic information sources.
- Design and implement a variety of search strategies to retrieve electronic information.

Problem-solving and Decision-making Tools

C/T 9-12.8 The student will use technology resources for solving problems and making informed decisions.

- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Select and apply technology tools for information analysis, problem-solving, and decision-making.
- Use technology resources such as educational software, simulations, and models for problem-solving, and independent learning.
- Produce and disseminate information through collaborative problem-solving activities.

Technology Communication Tools

C/T 9-12.9 The student will use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

- Determine the most effective tool, format, and style to communicate to specific audiences.
- Use technology-based options, including distance and distributed education, to collaborate, research, publish, and communicate.
- Practice self-directed use of advanced technology tools for communicating with specific audiences.

Technology Integrated Education (TIE)

LMITA will not only teach IT but also utilize IT tools in instruction of all subject areas. Specifically, LMITA's curriculum will incorporate Technology Integrated Education (TIE) in all the core courses. Microsoft Corporation provides sample lesson plans for new ways to enhance student learning through technology.²⁴ Department of Education at Virginia Tech and Virginia's CTE Resource Center provide sample TIE based lesson plans for each core course as demonstrated in the following sample cases. 25 26 LMITA's curriculum will include an optimized blend of these resources as well as other TIE based curricula.

²⁴ http://www.microsoft.com/education/lessonplans.mspx

²⁵ http://www.soe.vt.edu/istemed/

²⁶ http://www.cteresource.org/featured/stem.html

Once the LMITA is approved, LMITA school leadership will collaborate with LCPS Department of Instruction to adjust and fine tune its educational program to meet the needs of Loudoun County youth. Sample TIE lesson plans for various subject areas and SOLs can be found in a recent study by the Virginia Department of Education "Technology Sparks: Ideas for Teachers—Integrating Technology with the Virginia Standards of Learning" ²⁷:

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²⁷ http://www.doe.virginia.gov/instruction/career_technical/resources/technology_sparks.pdf

6th Grade: English

VA SOL Strand for Content	VA SOL for Content	VA SOL Essential Understanding	VA SOL Essential Knowledge
Reading	6.5 g: The student will read and demonstrate comprehension of a variety of informational selections and select informational sources appropriate for a given purpose.	All students should: read in order to gather, organize, and restate information for written and oral presentations.	The student will understand and use the references available in the classroom, school, and public libraries, including general and specialized databases and Internet resources, as appropriate for school use.

VA SOL for Technology

C/T 6-8.4: The student will practice responsible use of technology systems, information, and software. [Demonstrate the correct use of fair use and copyright regulations. Demonstrate compliance with the school division's Acceptable Use Policy and other legal guidelines.]

C/T 6-8.9: The student will use a variety of media and formats to communicate information and ideas effectively to multiple audiences. [Choose the appropriate tool, format, and style to communicate information. Independently use technology tools to create and communicate for individual and/or collaborative projects. Produce documents demonstrating the ability to edit, reformat, and integrate various software tools.]

Technology Integration Strategies

Students should select appropriate technology for researching information for an intended purpose and audience.

Internet Safety: If students use the Internet as a resource, remind them that they must follow the division's Acceptable Use Policy and that not all Web sites contain truthful and accurate information.

6th Grade: Math

VA SOL Strand for Content	VA SOL for Content	VA SOL Essential Understanding	VA SOL Essential Knowledge
Computation and Estimation	6.7: The student will use estimation strategies to solve multistep practical problems involving whole numbers, decimals, and fractions (rational numbers).	All students should be able to: produce an approximate answer for a given problem and understand that an estimated answer helps validate the reasonableness of a computer answer.	The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to solve multistep practical problems involving whole numbers, decimals, and fractions by using estimation strategies and checking for the reasonableness of results.

VA SOL for Technology

C/T 6-8.4: The student will practice responsible use of technology systems, information, and software. [Demonstrate compliance with the school division's Acceptable Use Policy and other legal guidelines.]

Technology Integration Strategies

Students should use computer software and/or Web sites to provide simulated situations and practice in estimation (the following free Web sites provide practice exercises: http://www.aaamath.com/est.html#topic10 and http://www.shodor.org/interactivate/activities/EstimatorQuiz/).

Internet Safety: Remind students that they must follow the division's Acceptable Use Policy.

7th Grade: English

VA SOL Strand for Content	VA SOL for Content	VA SOL Essential Understanding	VA SOL Essential Knowledge
Writing	7.8 e and f: The student will develop narrative, expository, and persuasive writing, revising for clarify and effect, and using a word processor to plan, draft, revise, edit, and publish selected writings.	All students should: use a process for writing, including planning, drafting, revising, proofreading, editing, and publishing, and use peer and individual revising and editing.	The student will apply revising procedures.

C/T 6-8.4: The student will practice responsible use of technology systems, information, and software. [Demonstrate compliance with the school division's Acceptable Use Policy and other legal guidelines.]

C/T 6-8.9: The student will use a variety of media and formats to communicate information and ideas effectively to multiple audiences. [Independently use technology tools to create and communicate for individual and/or collaborative projects. Produce documents demonstrating the ability to edit, reformat, and integrate various software tools.]

Technology Integration Strategies

Students should use a word processor to draft and revise their writings, using feedback from other students—either from their own class or a Web site—which allows them to share their work.

Internet Safety: Remind students that they must follow the division's Acceptable Use Policy; review the potential dangers and pitfalls involved with e-mail communications and social networking sites (such as the lack of visual signals, revealing too much personal information, or the permanence of electronic information) and the potential dangers of cyberbullying that occur when people have strong opinions about topics.

7th Grade: Math

VA SOL Strand for Content	VA SOL for Content	VA SOL Essential Understanding	VA SOL Essential Knowledge
Geometry	7.9: The student will compare and contrast the following quadrilaterals: a parallelogram, rectangle, square, rhombus, and trapezold. Deductive reasoning and inference will be used to classify quadrilaterals.	All students should: understand that all quadrilaterals can be classified according to the attributes of their sides and/or angles.	The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to classify quadrilaterals, using deductive reasoning and inference.

VA SQL for Technology

C/T 6-8.8: The student will use technology resources for solving problems and making informed decisions. [Employ technology in the development of strategies for solving problems. Use content-specific tools, software, and simulations such as environmental probes, graphic calculators, exploratory environments, and Web tools.]

Technology Integration Strategies

Using mathematics software or Internet sites that allow students to create quadrilaterals, pairs of students should challenge each other, practicing their reasoning skills to identify specific types of quadrilaterals (the following Web site provides a free online geoboard: http://standards.nctm.org/document/eexamples/chap4/4.2/part2.htm).

Internet Safety: Remind students that they must follow the division's Acceptable Use Policy.

8th Grade: English

VA SOL Strand for Content	VA SOL for Content	VA SOL Essential Understanding	VA SOL Essential Knowledge
Oral Language	8.1 d: The student will use interviewing techniques to gain information and evaluate the effectiveness of the interview.	All students should: synthesize information gathered in an interview.	The student will evaluate the effectiveness of his or her own and/or peer interviews using rubrics or checklists.

VA SOL for Technology

C/T 6-8.9: The student will use a variety of media and formats to communicate information ideas effectively to multiple audiences. [Independently use technology tools to create and communicate for individual and/or collaborative projects.]

Technology Integration Strategies

Using an audio or video tape of their interviews, students should review their techniques and questions to identify gaps or misinformation. They should then plan a follow-up interview to address these issues.

8th Grade: Math

VA SOL Strand for Content	VA SOL for Content	VA SOL Essential Understanding	VA SOL Essential Knowledge
Patterns, Functions, and Algebra	8.16: The student will graph a linear equation in two variables, in the coordinate plane, using a table of ordered pairs.	All students should: understand that the graph of a linear equation in two variables is the set of all ordered pairs that satisfy the equation.	The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to construct a table of ordered pairs by substituting values for x in a linear equation to find values for y; plot in the coordinate plane ordered pairs (x,y) from a table; and connect the ordered pairs to form a straight line.

VA SOL for Technology

C/T 6-8.8: The student will use technology resources for solving problems and making informed decisions. [Employ technology in the development of strategies for solving problems. Use content-specific tools, software, and simulations such as environmental probes, graphic calculators, exploratory environments, and Web tools.]

Technology Integration Strategles

Students should use graphing software to create graphs and Investigate different ordered pairs (the following Web site includes an example of a free graphing software tool: http://illuminations.nctm.org/ActivityDetail.aspx?ID=38).

Internet Safety: Remind students that they must follow the division's Acceptable Use Policy.

3. A description of how the Virginia SOL and the corresponding SOL Curriculum Framework will be used as the foundation for curricula to be implemented for each grade or course in the public charter school. Include within the description how the goals and objectives of the curricula will meet or exceed the Virginia Standards of Learning (SOL), address student performance standards, relate to state and federal assessment standards, and include measurable student outcomes (See http://www.doe.virginia.gov/testing/index.shtml on the Department's Web site for more information about the SOL).

LMITA will use the Virginia SOL and the corresponding SOL Curriculum Framework as a foundation for curricula at each grade level in grades 6-12. In addition to the previously mentioned TIE framework, LMITA school leadership will develop its full curriculum framework in collaboration with LCPS Department of Instruction and subject matter experts and educators from the local high tech businesses and colleges. The current draft list and sequence of proposed courses in each subject and grade are as follows.

LMITA middle school s	sample course sequence
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Grade 6	Grade 7	Grade 8
Language Arts 6	Language Arts 7	Language Arts 8
Mathematics	Mathematics	Mathematics
(Math 6/PreAlgebra/	(Math 7/PreAlgebra/	(Math 8/Algebra I/
Algebra I)	Algebra I)	Geometry)
Science	Life Science	Physical Science
US History to 1865	US History 1865 to Present	Civics and Economics
Art/Music	Family and Consumer	Family and Consumer
	Science 7	Science 8
Health and Physical Ed 6	Health and Physical Ed 7	Health and Physical Ed 8
World Language I	World Language II	World Language III
(Spanish/French/German/	(Spanish/French/German/	(Spanish/French/German/
Latin)	Latin)	Latin)
Tech Ed: NETS/ICDL	Tech Ed: NETS/ICDL	Tech Ed: NETS/ICDL

LMITA high school sample course sequence for standard diploma

Grade 9	Grade 10	Grade 11	Grade 12
English 9	English 10	English 11	English 12
Algebra I	Geometry	Algebra II or Functions	Pre-Calculus/Math Electives
Earth Science	Biology	Physics or Chemistry	Economics and Personal Finance
World History (to 1500)	World History (1500 to Present)	US & Virginia History	Fine Arts or World Language
Health/Physical Ed 9	Health/Physical Ed 10	Basic Technology (CTE Elective)	Advanced Technology (CTE Elective)

IT in the Modern World	Network/Systems	Network/Systems	Network/Systems
and IT Principles	Engineering or App	Engineering or App	Engineering or App
(CTE Elective)	Development or	Development or	Development or
	Cybersecurity	Cybersecurity	Cybersecurity
	(CTE Elective)	(CTE Elective)	(CTE Elective)
Civics & Citizenship	Civics & Citizenship	Civics & Citizenship	Civics & Citizenship
and/or Critical	and/or Critical	and/or Critical	and/or Critical
Languages	Languages	Languages	Languages
(Elective)	(Elective)	(Elective)	(Elective)

At LMITA each student will have an Individual Achievement Plan (IAP) by the end of their sixth grade. The components of the IAP will include, but not be limited to, the student's program of study for middle and high school graduation and a postsecondary career pathway based on the student's academic and career interests. For the students in the advanced track, students could take high school credits at the middle school grades, and also purse their career or college track.

As for promotion, LMITA will follow LCPS Policies. Specifically, in middle school grades, a student will be promoted if the student has passed a minimum of three of the four core academic subjects: Language Arts, Math, Science and Social Studies. By the end of the 8th grade, the student should also pass a yearlong elective, two-semester courses or health/physical education.

At the high school grades, per LCPS policy, a student will be promoted if the student has earned the minimum number of credits as listed below:

Grade 10 5 credits
Grade 11 11 credits

Grade 12 Student must meet all graduation requirements by June

For Standard Diploma a student must earn following credits by graduation:

English	4
Mathematics	3
Laboratory Science	3
History and Social Sciences	3
Health and Physical Education	2
Fine Arts, World Language or CTE	2
Economics and Personal Finance	1
Electives	4
TOTAL	22

For Advanced Technical Diploma a student must earn following credits by graduation:

English	4
Mathematics	4

Laboratory Science	4
History and Social Sciences	4
Health and Physical Education	2
World Language	3
Economics and Personal Finance	1
Fine Arts or CTE	1
CTE	3
TOTAL	26

LMITA high school sample course sequence for advanced technical diploma

Grade 9	rade 9 Grade 10 Grade 11		Grade 12	
English 9	English 10	English 11	English 12	
Algebra I (7th or 8th	Algebra II/Trigonometry	Mathematical Analysis	AP Calculus –BC	
grade) / Algebra II (8th	Mathematical Analysis	AP Calculus –BC	AP Calculus –AB	
or 9 th grade)/ Geometry	Pre-Calculus	AP Calculus –AB	AP Statistics	
Earth Science/	Biology/	Physics or Chemistry	Economics and Personal	
Biology	AP Biology	AP Physics	Finance / Fine Arts or	
ыоюду	Physics or Chemistry	AP Chemistry	World Language	
World History (to 1500) / World History (1500 to Present)	AP World History	AP US History	AP US Government	
Health /Dhysical Ed O	Health /Dhysical Ed 10	Basic Technology	Advanced Technology	
Health/Physical Ed 9	Health/Physical Ed 10	(CTE Elective)	(CTE Elective)	
IT in the Modern World	Network/Systems Engineering/Application	Network/Systems Engineering/Application	Network/Systems Engineering/ pplication	
/ IT Principles	Development/	Development/	Development/	
(CTE Elective)	Cybersecurity	Cybersecurity	Cybersecurity	
,	(CTE Elective)	(CTE Elective)	(CTE Elective)	
Civics & Citizenship	Civics & Citizenship	Civics & Citizenship	Civics & Citizenship	
and/or Critical	and/or Critical	and/or Critical	and/or Critical	
Languages	Languages	Languages	Languages	
(Elective)	(Elective)	(Elective)	(Elective)	

LMITA will use the Virginia Career and Technical Education essential competencies as the foundations as described by Virginia's CTE Resource Center. Essential competencies defined and described for the following courses will be used for foundations of IT career tracks at LMITA:²⁸

- 6150 Keyboarding (Middle School)
- 6151 Keyboarding (Secondary)
- 6152 Keyboarding Applications
- 6153 Keyboarding Applications

http://www.cteresource.org/verso2/results?program_area=business_and_information_technology&document_type=a ll&course_codes=&text=

²⁸

- 6161 Digital Input Technologies
- 6610 Computer Solutions
- 6611 Computer Applications
- 6612 Computer Information Systems
- 6613 Computer Information Systems, Advanced
- 6621 Office Administration
- 6625 Word Processing
- 6630 Design, Multimedia and Web Technologies
- 6630 Design, Multimedia and Web Technologies, Advanced
- 6640 Programming
- 6641 Programming, Advanced
- 6650 Computer Network Software Operations
- 6651 Computer Network Software Operations, Advanced
- 6660 Database Design and Management
- 6661 Database Design and Management, Advanced
- 6670 Information Technology Fundamentals

LMITA will provide a variety of courses targeting CompTIA, Microsoft and Cisco certifications. In these courses, the tasks/competencies will reinforce the Virginia Computer Technology Standards of Learning correlated with them. Students will start building on their strong foundation with IT Essentials and then pursue a career track of their choice. Students will combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Sample course descriptions for CTE electives targeting popular IT certifications:

- IT Essentials: The IT Essentials course will be offered at the ninth grade as a one-year, three-credit course. This course covers the fundamentals of IT with exploration of computer technology, networking, and security. Students acquire the skills required to identify hardware, peripherals, networking, and security components. Successful candidates will understand the functionality of operating systems and troubleshooting methodology of hardware, installation, configuration, upgrade and maintenance, practice proper safety procedures and will effectively interact with customers and peers. In addition, individuals will gain real industry experiences through subject matter expert workshops that are designed to address the core skills of information technology for employability in today's careers.
- **CompTIA-A+:** In this course students gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition,

students explore the relationships between internal and external computer components. Emphasis is placed on technical proficiency, skill-building, and workplace readiness. The course prepares students for postsecondary education and training, and a successful career in IT. Upon successful completion of the course, students may qualify to take the A+ certification exam.

- CompTIA-Network+: In this course students examines how data gets from one computer to another, including through local area networks (LANs), wide area networks (WANs), and the Internet. Networks are discussed in terms of the Open Systems Interconnect (OSI) seven-layer model. Network operating systems and network middleware are examined. The course is designed to prepare students with the knowledge necessary to pass the CompTia Network+ certification, a prerequisite for preparing for a career in network administration. CompTIA Network+ is vendor neutral and provides students with a fundamental understanding of computer networks, including such topics as Network Media, Topologies, Technologies and Devices, Wireless Networking, Network Protocols and Standards, Network Management, Tools, Monitoring, Security and Troubleshooting.
- CompTIA-Security+: This certification is widely recognized as the first level of computer security competence. Students will be introduced to five areas of concentration: IT security concepts (including the wide variety of network attacks), communications security, infrastructure security, the basics of cryptography, and operational organizational security. Specific topics covered include firewalls, host security, cryptography, privacy, application, security, and incident and disaster response. The course is designed to prepare students with the knowledge necessary to pass the CompTia Security+ Certification, a prerequisite for a career in the information security field.
- System Administration: System Administration is a comprehensive, hands-on computer course in which students are taught basic administration skills using Windows and Microsoft Server. Topics covered throughout the year include server concepts, installation, configuration, management, and troubleshooting. System Administration is designed to teach many aspects of computer support and system administration. Students learn how to install the operating systems, set up and manage accounts, load software, and set up and implement security plans. Upon successful completion of System Administration, students may elect to obtain industry-recognized professional certification by taking the Microsoft Certified IT Professional (MCITP) exams leading to Systems or Enterprise Administrator careers.
- Network Administration (CCNA) Network Administration prepares students to enter employment and/or further education in the computer networking field. Students learn how to design, install, configure, operate, and trouble shoot simple and complex networks. Topics covered include network architecture, industry standards and communication protocols, network devices

(such as routers, switches, and hubs), media selection, data transmission, and cabling. Students study installation, configuration and troubleshooting techniques used in computer networks. Network Administration uses the Cisco Certified Network Associate (CCNA) curriculum. This course prepares students to take two Cisco certification tests: Cisco test #ICND1 Cisco Certified Entry Network Technician (CCENT) and the Cisco test ICND#2 (CCNA).

As listed above advanced IT certifications will be available as part of certain courses. Students successfully completing the course will also be eligible to earn a Career and Technical Education diploma seal. Students successfully completing the course in conjunction with another one credit course within the same program area will satisfy the sequential elective requirement for the standard or modified standard diploma. Successful completion of the course in conjunction with a corresponding IT certification may qualify for a student selected verified credit.

In addition to the local colleges and businesses, LMITA will also work with cocurricular student organizations such as:

- The Future Business Leaders of America (FBLA) is the career and technical education student organization for all individuals enrolled in business courses.
 The activities of FBLA are an integral part of the business program and are designed to enhance the business course offerings.
- VTSA- Virginia Technology Student Association: VTSA is the only student
 organization that focuses specifically on students enrolled in technology
 education. TSA includes educators, parents, students, and business leaders
 who believe in the need for a technologically literate society and are working
 hard to achieve that goal. Virginia TSA is composed of more than 16,000
 middle and high school students throughout the Commonwealth.
- 4. A description of any assessments to be used to measure pupil progress towards achievement of the school's pupil performance standards, in addition to the SOL assessments prescribed by <u>Section 22.1-253.13:3</u>, in the *Code of Virginia*.

LMITA will utilize SOL tests to ensure that students are meeting Measures of Academic Progress (MAP) and the SOLs. LMITA will also utilize online assessment tools (such as Studylsland.com) to assess the school's academic level when measured against a national norm. Such online assessment tools as will enable LMITA staff to see analysis of students' achievement by sorting the data based on date and/or SOL standards. Students' achievement may also be compared with other LMITA students' data or the results of other county students who are utilizing the same online tool.

LMITA will work with LCPS Office of Testing Services in order to accommodate the testing needs of students with disabilities. Under the supervision of LCPS Office of Testing, LMITA will provide the SOL assessments, the Virginia Alternate Assessment Program (VAAP), the Virginia Grade Level Alternative (VGLA) assessment, the Virginia Substitute Evaluation Program (VSEP), Virginia Modified Achievement Standards Test (VMAST) and the Assessing Comprehension and Communication in English State-to-State for English Language Learners (ACCESS for ELLs) tests.

VAAP is specifically designed to evaluate the performance of students with significant cognitive disabilities who are working on academic standards that have been reduced in complexity and depth. LMITA will follow the Aligned Standards of Learning (ASOL) for the students participating in the VAAP. Applying VAAP participation criteria, LMITA IEP team will examine how students with disabilities accesses content and demonstrate their knowledge and skills.

LMITA will follow LCPS testing schedule for all required SOL tests. All LMITA students will be required to participate in the SOL tests.

In addition, the following assessment tools will be utilized:

- Testing students in all grade levels with StudyIsland.com or CTBS during both Fall and Spring semesters.
- Monthly student performance evaluations by the faculty.
- Quarterly benchmarks utilizing grade cards and progress reports.
- Pre-SAT and SAT tests for all high school students.

Alternative assessments at LMITA will include the following:

- Authentic Assessments
- Computer Skills Assessment
- Student Portfolio Requirements
- Benchmark Assessments of Standards

Authentic Assessments: LMITA will use authentic assessments to evaluate the student performance by having students create a response to a specific question or task, including essay questions, case studies, oral presentations, demonstrations, and exhibitions. By using authentic assessment tools, LMITA aims to:

- encourage problem/project/case based studying among its students
- help students perform meaningful tasks that replicate real-world applications

invoke critical thinking and self-assessment opportunities for students

Computer Skills Assessment: Teaching the ISTE NETS will provide our students with a strong foundation in reference to advanced IT certifications. Starting with 8th grade, students will have an opportunity to take the **International Computer Driving License** (ICDL) certification exam to demonstrate their computer skills. ²⁹ ICDL is the world's largest vendor-neutral end-user computer skills certification and is internationally recognized as the global benchmark in this area. Since ICDL is also NETS aligned ³⁰, students will easily demonstrate their qualifications in the following seven modules in order to earn their ICDL certification:

- Basic Concepts of Information Technology
- Using the Computer and Managing Files
- Word Processing
- Spreadsheets
- Database
- Presentation
- Information and Communications

Student Portfolio Requirements: A student portfolio is a systematic collection of student work and related material that depicts a student's activities, accomplishments, and achievements in one or more school subjects. The collection should include evidence of student reflection and self-evaluation, guidelines for selecting the portfolio contents, and criteria for judging the quality of the work. The goal is to help students assemble portfolios that illustrate their talents, represent their writing capabilities, and tell their stories of school achievement.³¹

Benchmark Assessments of the Standards: LMITA will utilize benchmarks for the Student Accountability Standards, due to the critical factor of providing intervention as early and as focused as possible. Benchmark assessments will offer regular checkups on student achievement. LMITA faculty will frequently and systematically collect data across a grade level or content area at several predetermined times throughout the school year. These frequent, periodic assessments will measure students' progress throughout the curriculum and/or on material in state tests. Data expert Douglas Reeves refers to benchmark and common assessments as "the best practice in assessment" and "the gold standard in educational accountability". 32

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²⁹ http://www.icdlus.com

http://www.iste.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=853

³¹ Venn, J. J. (2000). Assessing students with special needs, Second edition. Columbus, OH: Merrill, pp. 530-531

³² Reeves, D. (2004). Accountability for learning: How teachers and school leaders can take charge. Alexandria, VA: Association for Supervision and Curriculum Development, pp. 71 and 114

5. A description of the public charter school assessment plan to obtain student performance data, which includes how the data will be used to monitor and improve achievement and how program effectiveness will be measured over a specified period of time. Also provide benchmark data on how student achievement will be measured and how these data will be established and documented in the first year of operation and how the data will be measured over each year of the term of the charter as approved by the local school board. The benchmark data should address targets for student improvement to be met in each year.

LMITA will use the Student Information System (SIS) provided by the Washington Education Foundation free of charge for the first school year, which will have an interface for students, parents, teachers, and school administration. The SIS will include all types of databases which would normally be kept as paper copies. Students will have a chance to check their grades, test results, or homework results through this software. Parents will also have access to see what their children are able to see through the SIS. Teachers can publish test and homework results, as well as the grades, through this software.

LMITA will use multiple measures to assess the students' and school's progress towards meeting the academic goals described in the previous sections. Assessments will be aligned to the school's mission and the curriculum. Results of these assessments will be used to revise and improve the educational program. LMITA will participate in all the SOL tests and conduct alternative and alternate assessments required by the SOL and common core standards.

LMITA will follow the SOLs and will implement proven processes that will help students excel at their classes. The written test exams will be used as the main metric for the student's improvement. At LMITA, the students' level and progress will not only be measured against the entire student body, but rather against the state-wide or district-wide assessments.

The performance data of the LMITA students who are already enrolled in the program will be requested from their previous school or school system. The students' previous performance reflected on their report card, the SOL test scores will provide the baseline standard of achievement.

As for yearly targets for student improvement, LMITA will use the Virginia state accreditation ratings based on the performance of students on SOL tests. School accreditation ratings reflect student achievement on SOL tests and other approved assessments in English, Mathematics, Science and History/Social Studies. LMITA will target to be fully accredited by having all students achieve pass rates of 70 percent or higher in all four content areas. At its full capacity,

LMITA will also attain a point value of 85 or greater based on the Graduation and Completion Index (GCI) in order to be fully accredited. 33

Like CSP, LMITA will conduct pre-assessment tests at the beginning of each year. Once a student is admitted to LMITA through the state approved enrollment process, LMITA faculty will conduct a diagnostic assessment in math and reading in April while the students are still 5th graders at their elementary school. By end of May, the second diagnostic assessment will be conducted to identify the year end academic status and the progress gained in the last month. Later on, at the beginning of the school year, students will receive the third diagnostic test. During the first two week period, students will be exposed to generic content areas that will allow the instructors to better observe each and every student. At the end of the second week, teachers will utilize all three diagnostic test results, their observation, students' SOL test results and most recent report cards, to identify the individual needs of all LMITA students. The diagnostic tests will be adapted from the Maryland model school, CSP, and modified accordingly with the SOLs for all relevant grades and subject areas.

Quarterly benchmarks in core academic subjects will be utilized to monitor students' progress throughout the year. The quarterly benchmark assessment items are aligned with the state learning objectives and within the assessment limits. The benchmark assessments will have emphasis on concepts and skills that are assessed on the SOL tests. Another advantage of the quarterly benchmark assessments is to guide teachers to modify their lesson plans and pacing depending on the students' progress.

Benchmark Assessments will enable LMITA faculty to: 34

- Identify students who need interventions or further instruction;
- Foster consistent expectations, curricular priorities, and pacing within a grade level or course, thus, helping to ensure that all students have access to the same essential curriculum;
- Provide students and parents timely feedback regarding their current level of understanding, so they can monitor their own progress and identify for themselves what they already know and what they have yet to learn;
- Identify students for flexible instructional groups;
- Identify areas for grade-level celebration of successes;
- Evaluate the effectiveness of instructional initiatives, enrichments, and interventions so that ineffective practices are not continued throughout the year; and effective ones are maximized.

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³³ http://www.doe.virginia.gov/statistics_reports/school_report_card/accountability_guide.shtml

³⁴ http://mdk12.org/practices/benchmark/improve/study/index.html

Loudoun County Public Schools has an excellent Response to Intervention (RtI) systemic approach. The purpose of RtI initiative is "to ensure the effectiveness of instructional interventions and strategies, as determined through ongoing data analysis of student assessments, so that all students meet or exceed growth expectations." This is fully aligned with the mission and vision of LMITA, therefore LMITA will work with LCPS in order to implement RtI and provide high-quality instruction/intervention matching the needs of its students. LMITA will also adjust its educational programs and instructional methods according to students learning and performance levels over time.

LMITA will also establish a benchmark assessments system through an internet-based test system that enables tests to be constructed, delivered, and reported electronically. This online access of benchmark assessments will allow LMITA to ensure a continuous diagnostic and informative basis about students learning progress that can be accessible through using any school computer. In this online system multiple-choice tests are immediately scored and reported. This online benchmark assessment system will specifically help LMITA to prepare students for examinations such as the SAT. These assessments support and are in alignment with the data-driven differentiated instruction at LMITA.

6. The timeline for achievement of pupil performance standards, in accordance with the Virginia SOL.

The timeline for achievement of pupil performance standards will aim to achieve advanced or proficient level in all standards of learning at the student's grade level as measured by the Virginia SOL tests. Therefore, students will demonstrate consistent satisfactory or exceptional attainment of the knowledge and skills necessary in each subject area as defined, described by Virginia SOL and SOQ.

7. An explanation of the procedures for corrective actions needed in the event that pupil performance at the public charter school falls below the standards outlined in the Virginia Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia*, (8 VAC 20-131-310).

LMITA affirms that it will meet all the requirements listed in the Virginia Board of Education's Regulations Establishing Standards for Accrediting Public Schools in Virginia, (8 VAC 20-131-310). In case LMITA fails to meet the Virginia BOE standards for accreditation, LMITA leadership will create an annual improvement plan to meet these objectives and goals. The improvement plan will be evaluated promptly and the results will be made available to the public. Additionally,

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LMITA will form a subcommittee, Quality Assurance Committee, consisting of LMITA staff, parents and LCPS representative and LMITA administrator, on school improvement for annual program evaluation and reporting.

This committee will review the program every quarter and provide evaluations on the progress of meeting program objectives. The strategies for assessing the project's objectives will be a two-pronged approach using both business and scientific research strategies. The evaluation will be designed to determine if the program has achieved the stated objectives and will identify accomplishments that can be attributed to the project. An annual evaluation will provide quantifiable results by analyses of data collected through surveys, interviews, and focus groups, review of documentation, and other evaluation measures.

Upon admission, LMITA faculty will conduct a comprehensive individual assessment for each new student including interviews with the student and parents/guardian and also a review of the records from previous schools. Based on this assessment, the faculty will develop an individualized achievement plan (IAP) for the student.

LMITA faculty will review each student's IAP at least twice a year. During these reviews, as well as during the development of the student's first IAP, the student will be evaluated as to whether or not he or she is 'at risk' of not completing his/her education based on factors such as poor school performance, poor attendance, economic or environmental disadvantages, and/or behavioral difficulties. If this is the case, the faculty will make modifications to the student's IAP that will appropriately address the student's needs, including tutoring, counseling, mentoring, and apprenticeship programs.

Figure 1 shows English and math pass rates for various subgroups in Loudoun County³⁶. According to this data, Black and Hispanic students underperform White students by about 10%. The situation is similar in Writing, History and Science. Figure 2 shows drop-out rates at LCPS. The dropout rate is 3 times as high for Black student and 5 times as high for Hispanic students as White students. So, clearly there is an achievement gap among various subgroups in the student body. LMITA will utilize the following strategies to remedy the achievement gap.

- Professional development for school teachers
- Baseline Assessment for Incoming Students
- Skill-Based Tutoring for All Students
- Data-driven Instruction based on Diagnostic Assessments
- School Culture that Drives Achievement

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³⁶ Loudoun report from https://p1pe.doe.virginia.gov/reportcard/

- · Emphasis on Study and Organizational Skills
- Before/after school and Saturday Tutoring
- Customized Assignments and Assessments

Percentage of Students Passing/Tested/Not Tested							
		2010-2011			2009-2010		
Student Subgroup	Туре	Passed	Tested	Not Tested	Passed	Tested	Not Tested
		Englisl	h Performa	ance	Mathem	natics Perf	ormance
All Students	Division	92	100	0	89	100	0
	State	88	100	0	87	99	1
Black	Division	84	100	0	77	100	0
	State	80	100	0	77	99	1
Hispanic	Division	81	100	0	78	100	0
	State	84	100	0	83	99	1
White	Division	95	100	0	93	100	0
	State	92	100	0	90	100	0
Students with Disabilities	Division	68	100	0	66	99	1
	State	67	99	1	66	99	1
Economically Disadvantaged	Division	76	100	0	74	100	0
	State	80	100	0	78	99	1
Limited English Proficient	Division	70	100	0	75	100	0
	State	79	100	0	82	100	0

Figure 1. English and Math test pass rates for subgroups in Loudoun County

School Division - Dropout Information					
	Count / Percentage				
Student Subgroup	2008-2009	2009-2010	2010-2011		
All Students	147 / .62%	115 / .46%	*		
Female	49 / .42%	41 / .33%	*		
Male	98 / .81%	74 / .58%	*		
Black	17 / .77%	19 / .83%	*		
Hispanic	73 / 2.44%	45 / 1.39%	*		
White	42 / .27%	39 / .24%	*		
Asian	13 / .48%	<	*		
American Indian	<	<	*		
Native Hawaiian	-	-	*		
Race Unknown	17 / 5.15%	13 / 3.26%	*		

Figure 2. School division drop-out information

8. Information regarding the minimum and maximum enrollment per grade as well as class size and structure for each grade served by the public charter school.

Class sizes are tabulated grade by grade in the table below. The class size for CTE courses will vary depending on the demand in specific specializations.

Children with disabilities who attend LMITA shall be served by LCPS in the same manner as children with disabilities in its other schools, including the provision of supplementary and related services on site at LMITA to the same extent to which LCPS provides such services on the site to its other public schools.

GRADES	6	7	8	9	10	11	12	TOTAL
# classes per grade	4	4	4	4	4	4	4	28
Class Size	24	24	24	24	24	24	24	672
Year 1	96	96						192
Year 2	96	96	96					288
Year 3	96	96	96	96				384
Year 4	96	96	96	96	96			480
Year 5	96	96	96	96	96	96		576
Year 6 & after	96	96	96	96	96	96	96	672

9. Information regarding the proposed calendar and daily schedule, including any plans to open prior to Labor Day and how and when a waiver to open early will be submitted by the local school board to the Virginia Board of Education, under § 22.1-79.1, of the *Code of Virginia*.

LMITA will follow Loudoun County Public Schools annual calendar. A sample daily schedule for LMITA Middle School will be as follows.

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7:55 - 8:10	Homeroom	Homeroom	Homeroom	Homeroom	Homeroom
8:10 - 8:55	Social Studies	World Languages	Math	Science Lab	Language Arts
8:58 - 9:43	World Languages	World Languages	Math	Science Lab	Language Arts
9:46 - 10:31	Physical Ed	Language Arts	Science	Language Arts	Social Studies
10:34 - 11:19	Math	Language Arts	Science	Language Arts	Social Studies
11:22 - 12:07	Math	Character Education	Computer	Math	Music
12:07 - 12:37	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
12:37 - 1:22	Elective	Math	Elective	Math	Math
1:25 - 2:10	Computer	Science	Language Arts	Computer	Math
2:13 - 3:01	Special Interest Projects	Science	Language Arts	Art	Special Interest Projects

10. A description of plans for identifying and serving: a) students with disabilities; b) English Language Learners (ELLs); c) academically at-risk students; and d) gifted and talented students. Such plans must include the extent of the involvement of the local school board in providing such services and must comply with state and federal laws and regulations.

In order to provide a safe and supportive climate at LMITA, we will have half-time counselor for the first two years and at least one full-time counselor in the following years to provide students counseling services. LMITA will collaborate with LCPS in student/support services such as counseling, social services, mental health, and substance-abuse prevention to address conditions that interfere with student learning.

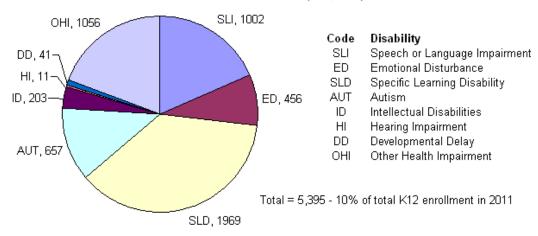
a) **Students with disabilities:** LMITA will operate in accordance with all the applicable local, state, and federal laws in meeting the needs of Exceptional Education students, including Title VI of the Civil Rights Act of 1964 and the Equal Educational Opportunities Act of 1974. LMITA will adhere to all applicable provisions of federal law, relating to students with disabilities, including the IDEA, Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act of 1990.

LMITA will comply with FAPE requirements as stated in 8VAC20-81-100. (34 CFR 300.209) In order to comply with FAPE requirements we will hire one or more licensed special education teachers starting from year one. LMITA will work with the Loudoun County Public Schools Special Education Department to ensure that the IDEA provisions for evaluation/eligibility of any student suspected of having a disability are met, and to ensure that provisions for Individual Education Programs are also met for all eligible students identified with disabilities. Children with disabilities who attend LMITA shall be served by LCPS in the same manner as children with disabilities in its other schools, including the provision of supplementary and related services on site at LMITA to the same extent to which LCPS provides such services on the site to its other public schools.

Breakdown of LCPS student populations with special needs is given in Figure 3³⁷. Assuming the same or similar percentage will apply to LMITA, we expect to have 10% our student population have some type of special needs.

³⁷ http://www.doe.virginia.gov/special_ed/reports_plans_stats/child_count/2010.pdf

Number of Students with Disabilities in Loudoun (Dec, 2010)



http://www.doe.virginia.gov/special_ed/reports_plans_stats/child_count/index.shtml

Figure 3. Breakdown of students with disabilities in Loudoun County K12 schools

Once the admissions lottery process is completed, LMITA will request information from LCPS regarding which students have special needs including those with disabilities, gifted and talented status, and English language learners (ELL). Should an enrolled student have any disabilities, LMITA staff will complete the Individualized Educational Plan (IEP) process where all decisions will be made in accordance with LCPS regulations and Individuals with Disabilities Act (IDEA). In order to provide the appropriate special education services to the students who need them, LMITA will work with the LCPS Special Education Department to ensure that appropriate services, accommodations, and modifications are provided accordingly.

LMITA will work with LCPS to ensure that all students with disabilities who qualify under the IDEA:

- will have available a free appropriate public education (FAPE);
- are appropriately evaluated;
- are provided with an IEP;
- receive an appropriate education in the least restrictive environment;
- are involved in the development of and decisions regarding the IEP, along with their parents;
- will have access to appropriate procedures and mechanisms, along with their parents, to resolve any disputes or disagreements related to LMITA's or LCPS' provision of FAPE.

LMITA will designate one of the school's special education teachers as the school's special education liaison with LCPS. Responsibilities of this individual will include coordinating with the LCPS special education office throughout the year to ensure that all required special education and related services are being

provided and that all IEPs are appropriately updated. LMITA shares the vision that "special education is built on the belief that all students can and will learn". LMITA targets to support and enhance the social, emotional, and academic functioning of all students in the school, especially the special education students. This education shall include special services supported with special education teachers, and will meet their unique needs by providing a full range of educational opportunities offered in the least restrictive environment.

To achieve these goals, LMITA will conduct a comprehensive individual assessment for each new student including interviews with the student and the parents/guardians and also will review of records from previous schools.

If the comprehensive individual assessment shows that a student has one or more of the following conditions, he or she will be eligible to receive special education services under the IDEA:

- Physical Disability,
- Auditory Impairment,
- Visual Impairment,
- Deaf-Blind,
- Mental Retardation,
- Emotional Disturbance,
- Learning Disability,
- Speech Impairment,
- Autism,
- Multiple Disabilities, and
- Traumatic Brain Injury.

If the student qualifies as a special education student as a result of this comprehensive assessment, a team consisting of at least one regular education and one Special Education teacher, the Executive Director, and parents/guardian (IEP Team) will develop an IEP for the student. The IEP will include specific learning and social/emotional goals and objectives for the student that correlate with the SOLs established for the student's current grade level. In the event that a new LMITA student has already been identified as a special education student, the student's most recent IEP will be reviewed by the IEP team. Based on this review, a revised IEP will be developed.

All special education students will receive appropriate support, remediation, and consultation services in accordance with FAPE. The student's IEP will be reviewed by the IEP team and also will be discussed with the student at least twice a year. Based on these reviews and discussions, the IEP will be updated accordingly. The IEP team will also develop and implement teaching strategies and classroom modifications so that the special education student will be

educated in the least restrictive environment. Referrals to outside resources will be made on the basis of need in order to address more complex and difficult issues.

LMITA will employ only certified special education teachers. LMITA will also appoint qualified staff to each service required by the IEP of special education students.

b) **English Language Learners (ELLs):** Loudoun County Public Schools receives Title III, Part A, funding for English Language Learners (ELLs); therefore, LMITA will meet with LCPS personnel for guidance to all divisionwide Title III, Part A, policies, procedures and funding for English Language Learners ³⁸.

In the event that a student demonstrates difficulty in reading, comprehending, or expressing him- or herself in English, a Language Assessment Survey Links test will be provided. This test determines ELL students' English proficiency in speaking, listening, reading and writing and whether they are in need of ESOL services. There are about 5,000 ELL students in Loudoun County, around 7.8% of the total student population, with a higher concentration in eastern Loudoun. If LMITA is located in the current target area, Ashburn-Dulles corridor, we expect to have 7% of our students to be ELL39. Based on the number of ELL students, LMITA will hire sufficient number of ESOL teachers, acquire curricular materials including textbooks and audio resources, and allocate ESOL classrooms and a computer lab. The ESOL faculty will ensure readiness of ELL students for content instruction in English and integrating students of all cultures into a common academic program. LMITA staff will adapt their lessons, their classrooms, and their communication to meet the diverse needs of their students.

The school administration will make sure that ELL students are not misplaced or tracked inappropriately in other classes; or excluded categorically from curricular and extra-curricular activities. All LMITA programs and activities will be open for ELL students; additional resources and staff will be available to assist ELL students in all LMITA learning opportunities.

LMITA will have resources available to assist with the translation needs of students and parents/guardian and also in finding volunteers to help facilitate the family's integration into the school's social environment. Multimedia materials in several languages will also be available for this purpose.

c) **At-Risk Students:** The economic status of the family affects the educational performance of the students⁴⁰. Research suggests that early intervention is

³⁸ http://www.ed.gov/policy/elsec/leg/esea02/pg39.html

³⁹ FY 2012 WABE Guide, The Washington Area Boards of Education, September 2011

⁴⁰ Jeanne Brooks-Gunn and Greg J. Duncan, "The Effects of Poverty on Children," *The Future of*

important in mitigating the adverse effects of poverty on students⁴¹. The percentage of individuals of age 17 and younger with income below the poverty level in Loudoun County was 1.7% in 2007⁴² concentrating mainly in Sterling area. 9277 students, 14.4% of the student body, participated in free or reduced lunch in 2011⁴³. We expect to have same or similar percentage of students from low-income families.

Upon enrollment of each new student, LMITA will conduct a comprehensive individual assessment for the student, including interviews with the student and parents/guardian and also a review of records from previous schools. LMITA will also assess the student's current academic level prior to the student's first day of school, via validated assessment tools which will allow the faculty to gauge the student's baseline academic skills and determine the needs of the student. Some students might be evaluated as 'at risk' due to not meeting their grade level standards based on factors such as poor school performance, poor attendance, economic or environmental disadvantages, and/or behavioral difficulties. The faculty will appropriately address these students' needs with tutoring, counseling, mentoring, and apprenticeship programs.

Students will also be assessed at different points throughout the year. Based on how a student performs on those assessments, interventions can be enacted; interventions already in place can be increased, deceased, or ceased. LMITA does not believe that, for at-risk students, catching up is good enough. Our program will remediate the effects of academic neglect, just as it will embrace our students' ability and push them to excel. The challenges of educating at-risk students require programs that address this complex problem relentlessly. In this regard, LMITA plans to implement a number of strategies as listed below.

- Incoming Baseline Assessment and Skill-Based Tutoring for All Students
- Results-Driven Instruction based on Diagnostic Assessments
- School Culture that Drives Achievement
- More Time on Task
- Tutoring
- d) Gifted and Talented Students: LMITA will work closely with LCPS Curriculum and Instruction - Gifted Education Office to make sure that our future students showing high performance capability academically and intellectually are correctly identified as "gifted" and their highly unique and specialized needs are fully met in our nurturing school environment. LMITA will adhere to LCPS

Children: Children and Poverty, Vol. 7, No. 2 (Summer - Autumn, 1997), pp. 55-71.

⁴¹ See http://www.nccp.org/topics/childpoverty.html for data and articles

⁴² A Portrait of Children in Northern Virginia 2010, The Community Foundation for Northern Virginia and Voices for Virginia's Children

⁴³ FY 2012 WABE Guide, The Washington Area Boards of Education, September 2011

requirements of the referral and identification criteria for gifted and talented students.⁴⁴ LMITA will establish a Gifted & Talented Committee Review Team to be comprised of an Administrator, "gifted" teacher, classroom teachers, and special educators where applicable. This committee will meet to review nominations and pertinent data to determine the continuation of the screening process for identification.

LMITA's elective curriculum is aimed to provide extra enrichment opportunities along with the LCPS SPECTRUM/SIGNET programs. LMITA's mission statement promotes an education system that enables "all learners to develop their full potential." All students, including our students in the gifted and talented program, will receive the following opportunities at LMITA:

- Access to rigorous content and course work
- Content-based skills
- Highly trained and certified staff
- Cultural and inter-cultural competence skills
- Ethical and moral reasoning skills
- Decision-making skills
- Creative thinking skills
- Social skills

In cooperation with LCPS Curriculum and Instruction - Gifted Education Office, LMITA will find out whether each student was already placed in a LCPS SPECTRUM/SIGNET program before; students who have previously been designated as gifted will then be further screened by LMITA to confirm eligibility.

"Every child has the basic right to an education that promotes the development of his or her potential. Each child has a unique profile of strengths and abilities. Children who have been identified as gifted have the potential to achieve high levels of accomplishment, and this potential needs to be recognized and addressed correctly. These students exhibit unusual performance capability in intellectual, creative, and/or artistic endeavors. They may also demonstrate exceptional leadership capacity and may excel in specific academic areas. In order to meet their needs and develop their abilities, these highly able learners require a differentiated curriculum providing advanced learning opportunities."

Once a student is identified as a gifted student, with the signed consent from legal guardians or parent, LMITA will take following steps:

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⁴⁴ http://www.lcps.org/page/625

⁴⁵ http://www.fcps.edu/is/aap/pdfs/localplan/FinalLocalPlan.pdf

Students will be observed during the first half of the academic year. If teachers report that a student has the necessary academic potential, the student will be invited to a special interest team such as the Science Olympiad Team or the Math Olympiad Team.

Science Olympiads: Those students who demonstrate solid background in applying principles to daily life will be given projects to work with under a "guide teacher." This team will also represent LMITA in all state and nationwide Science Olympiads. The Science Olympiad is open both to middle school students and high school students throughout the Commonwealth of Virginia. LMITA's Science Olympiad Team will join national and international Science Olympiads. Our Science Olympiad team will work closely with the Virginia Science Olympiad ⁴⁶. The Science Olympiads are rigorous scholastic competitions that consist of a series of individual and team events for which students prepare throughout the year. The competitions, covering a wide range of scientific disciplines and skills, follow the format of popular board games, TV shows and athletic games.

Math Olympiads: Among the gifted and talented students who have proven records of solid problem solving and strategic thinking ability, LMITA will form a Math Olympiad Team. Math Olympiad team will also represent our school in both national and international math competitions. Our team will be registered with the Mathematical Association of America (MAA) to join international math competitions. The American Mathematics Competitions (AMC) is dedicated to the goal of strengthening the mathematical capabilities of our nation's youth. LMITA believes that one way to meet this goal is to identify, recognize and reward excellence in mathematics through a series of national contests called the American Mathematics Contest 8 (AMC 8), the American Mathematics Contest 10 (AMC 10), the American Mathematics Contest 12 (AMC 12), the American Invitational Mathematics Examination (AIME), and the United States of America Mathematical Olympiad (USAMO).

11. A description of the learning environment and scientifically research-based instructional strategies to be used at the public charter school to ensure student achievement.

Our educational model is based on a firm belief that one teaching method does not work for all students all the time. A variety of learning styles needs to be incorporated and students need to be motivated to achieve a productive learning environment. We strongly believe in a student-oriented experiential learning environment where students will have the opportunity to work collaboratively on reflective hands-on assignments.

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⁴⁶ http://www.virginiaso.com/

LMITA's learning environment will be designed to meet a wide range of academic levels and learning styles within a smart classroom setting. Differentiated instruction, multi-sensory teaching approaches and student-centered learning will be utilized in all subject areas and all classrooms.

The key elements of the instructional methods that LMITA will utilize are based on CSP experience. Our educational foundation is based on following pillars:

- Technology Integrated Education
- Comprehensive Guidance Program
- Advanced Studies Program
- Data-driven Differentiated Instruction
- Individualized Achievement Plans

Technology Integrated Education: LMITA will focus on "learning with technology" as much as it focuses on "learning about technology." Justification for learning with technology at LMITA is supported by an article by Marc Prensky titled "Digital Natives, Digital Immigrants":

"Today's students – K through college – represent the first generations to grow up with this new technology. They have spent their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and all the other toys and tools of the digital age. Today's average college grads have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games (not to mention 20,000 hours watching TV). Computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives.

It is now clear that as a result of this ubiquitous environment and the sheer volume of their interaction with it, today's students think and process information fundamentally differently from their predecessors. These differences go far further and deeper than most educators suspect or realize. "Different kinds of experiences lead to different brain structures "says Dr. Bruce D. Perry of Baylor College of Medicine. As we shall see in the next installment, it is very likely that our students' brains have physically changed — and are different from ours — as a result of how they grew up. But whether or not this is literally true, we can say with certainty that their thinking patterns have changed. I will get to how they have changed in a minute.

What should we call these "new" students of today? Some refer to them as the N-[for Net]-gen or D-[for digital]-gen. But the most useful designation I have found for them is Digital Natives. Our students today are all "native speakers" of the digital language of computers, video games and the Internet."⁴⁷

"What distinguishes a Digital Native from others when it comes to learning styles? The native prefers to receive information very rapidly. They are typically processing multiple forms of information media concurrently" 48.

LMITA will utilize multimedia and multi-sensorial education tools, relevant software, and other technologies to improve learning in all subject areas. At a minimum, most classrooms will have PCs, smart boards, data projectors, and online educational tools related to the coursework to provide a rich technological environment. Blended and virtual learning tools like Khan Academy, Jason Project, e2020, etc. will be utilized according to student needs.

Comprehensive Guidance Program: LMITA will provide after school programs and free tutoring on Saturdays. CSP has been offering Saturday school to all its students for five consecutive years with the voluntary efforts of teachers and parents. This practice is well-researched and justified, as reported by Achievement Gap Task Force: "Students needing additional help in making the transition to more challenging curricula must be aided through intensive beforeand after school programs..." (Achievement Matters Most: The Final Report of the Visionary Panel for Better Schools). ⁴⁹

Advanced Studies Program: LMITA will provide advanced math and computer courses targeting various IT certifications. As discussed by many education and IT experts, "Core computer literacy will be essential in the global job market, so maybe it's time to start looking at programming as a baseline skill and not as a differentiator." As is done at CSP, LMITA will expose students to advanced topics in earlier grades. With the help of a structured and rigorous curriculum, students will aim higher, and in time they will become eager learners.

Data-driven Differentiated Instruction: LMITA will provide an online Student Information System (SIS) to track student progress. CSP has been offering an online grade book system that provides real-time updates on students' academics, attendance, and discipline status. With the help of SIS, LMITA faculty will be able to track and analyze student progress, and adjust their lesson plans and instructional methods to address the individual needs of each student.

Individualized Achievement Plans (IAP): LMITA faculty will conduct a comprehensive assessment of each incoming student. Based on this assessment,

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http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

⁴⁸ http://david.koontz.name/digital/Presentation_files/THE_DIGITAL_GENERATION.pdf

⁴⁹http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1a/b6/9d.pdf

⁵⁰ http://weblog.infoworld.com/fatalexception/archives/2008/10/mandatory_compu.html

the faculty will develop an individualized achievement plan (IAP) for the student. IAPs will be developed collaboratively with the students, parents, Math teacher, English teacher and school counselor. The IAP team will take stock of the student's current abilities and areas for improvement. By the end of the school year, all students and parents will have participated in this process, which will result in a set of specific actions for students to achieve their best. ⁵¹

LMITA's teaching philosophy finds its roots primarily in constructivism. Constructivist theory focuses on each student's unique way of learning and creating their own knowledge by integrating their existing knowledge with the new knowledge. To support students to form their personal understanding, LMITA will use teaching approaches that allow students to get involved in effective learning experiences such as:

- indirect instruction
- project-based learning
- discovery learning
- student-based learning in the classroom

Indirect Instruction: Indirect instruction is a teaching and learning approach in which concepts, patterns, and abstractions are taught in the context of strategies that emphasize concept learning, inquiry, and problem solving. ⁵² Constructivist teaching approach supports the usage of indirect instruction in the school settings. As LMITA, we believe that the best way to apply indirect instruction is to design and sequence constructivist lessons to encourage learners to use their own experiences to actively construct meaning. The nature of constructivist lessons at LMITA will have the following characteristics:

- Promoting development of higher level and abstract thinking
- Promoting critical thinking and questioning
- Promoting collaboration and cooperation within the classroom
- Use of questions to guide investigation and discovery
- Encouraging students' self reflection and evaluation
- Using students' ideas to organize the lesson around each student's needs and interests
- Encouraging students' positive attitudes towards learning

Project Based Learning: LMITA will provide a project-based learning environment by utilizing technological tools and authentic, challenging tasks embedded in course projects. The usage of technological tools in challenging projects embedded in LMITA lessons can contribute to students' sense of authenticity and to the "real-life" quality of the task at hand. LMITA lessons

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⁵¹ http://www.acps.k12.va.us/middle-schools/iap/

⁵² http://wps.prenhall.com/chet_borich_effective_6/48/12538/3209833.cw/content/index.html

establish a learning environment which includes many connections with real life situations. These connections are facilitated with the use of technology for simulations and virtual manipulative and with the use of computer software. The accessibility of these technological tools that are used for challenging tasks in the project based learning allows LMITA students to aspire to a level of effort and quality of product that more closely reflects what they see and know of the real world.

Discovery Learning: Students are more likely to remember concepts they discover through their own experiences. LMITA teachers will provide an appropriate teaching and learning environment to better serve each student's understanding and learning abilities by acting as a facilitator and using appropriate instructional technology tools. Current technology allows creation of virtual environments for students to explore, examine, and investigate. LMITA teachers will use innovative technological tools such as educational games, simulations, virtual world creation websites, and software like SimCity in classrooms to provide additional discovery learning opportunities. In this learning approach, students will have a chance to observe and reflect on their first-hand experience, and thus, generate solution strategies.

Student Centered Learning: At LMITA, learning and teaching activities will be focused on each student's learning style, interests, abilities, characteristics, and cultural settings. A student-centered learning environment will be established via the creation of lesson activities that promote increased responsibility and accountability of the student in the classroom. These activities will be engineered to possess the following characteristics:

- Outside settings and classroom settings that enable each student to work along his\her interests and abilities. For example, LMITA teachers will use buzz group techniques for discussion in the classroom so each individual have opportunity to express his/her thinking.
- Portfolio development so students have the chance to reflect their own way of learning.
- Technology integration into the activities. LMITA teachers will use technology to enhance the learning activities to address each student's characteristics, interests and needs.
- Technological assessment tools will be used after the activities. LMITA
 will use diverse assessment tools (e.g., portfolio, self reflection, website
 creation) to assess and diagnose each student's learning level, needs,
 strengths, and weaknesses.

LMITA will also establish and support student clubs where the students can interact with other students sharing similar interests and expand their knowledge base under faculty supervision. Each student will join at least one of

the clubs listed with their description below, which will meet during after-school hours and be overseen by at least one faculty member. This list of student clubs and their descriptions may change to reflect current student needs and interests.

- MATH & SCIENCE OLYMPIAD CLUBS: Students will engage in activities designed to promote their mathematical and scientific skills and critical thinking. Club activities will be directed towards Math and Science Olympiads and other local and national competitions.
- FUTURE CITY CLUB: The mission of the Future City Club is to provide a fun and exciting educational program for students that combines a stimulating engineering challenge with a "hands-on" application to present their vision of a city of the future. Club members will first design their city using SimCity software, then build a large table-top model of it.
- FIRST LEGO LEAGUE CLUB: FLL students will solve real-world engineering challenges, develop important life skills, and learn to make positive contributions to society. Club activities will mainly be directed towards Virginia and US First Lego League competitions.
- DEVELOPERS CLUB: Students will have an opportunity to develop applications in Java, C, C#, Perl, and Python in order to practice and improve their programming skills. The Club activities will also be directed towards USACO competitions.
- MULTIMEDIA CLUB: Students with an interest in art, films, and photography will have an opportunity to apply different methodologies and work with different multimedia tools in order to develop digital audio and video content.
- CHESS CLUB: The purpose of the Chess Club will be to provide students the opportunity to practice chess strategies. Each school year, Chess Club will organize a tournament to determine the champion of the year.
- PUBLIC SPEAKING AND WRITING CLUB: The primary purpose of this club
 will be to make students comfortable and proficient in writing and in
 presenting public speeches. The club will submit articles to student-based
 magazines, especially in the areas of science, math, and technology. The
 club will also be expected to publish a monthly school newspaper.
- SOCCER CLUB: This club will be open to any student interested in soccer.
 This club will team up with drug prevention units to encourage the
 students to engage in sports activities. The students will play soccer,
 participate in soccer tournaments, and have fun.

 STUDENT COUNCIL: The Student Council will consist of students whose main purpose is to make students' interests and concerns known to the faculty and school administration. The Council will also organize and promote social and cultural events in the school and the community. Students will acquire leadership and organization skills.

If applicable, the following components should be addressed by the proposed public charter school:

- 12. If the public charter school plans to utilize virtual learning in its educational program, identify the virtual learning source, describe how virtual learning will be used and estimate how many students may participate.
 - Blended and virtual learning tools at LMITA will be used only for supplementary purposes. Actual teaching of the content will be provided in person in classes and computer labs. Students who need additional/remedial support will be directed to online resources such as Khan Academy, the Jason Project, e2020. LMITA will also comply with the new legislation requiring each high school student to take at least one virtual course before graduation. In order to realize this regulation, LMITA will work with LCPS to have its students participate in the virtual courses provided at LCPS via e2020.
- 13. A general description of any alternative accreditation plans, in accordance with the Virginia Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131-280), that the public charter school would request the local school board to submit to the Virginia Board of Education for approval.

N/A

14. A general description of any alternative accreditation plan for serving students with disabilities, in accordance with the Virginia Board of Education's *Regulations Governing Special Education Programs For Children With Disabilities in Virginia* (8 VAC 20-80-40) that the public charter school would request the local school board to submit to the Virginia Board of Education for approval.

N/A

VII. Enrollment Process: Describe the enrollment process that is consistent with all federal and state laws and regulations and constitutional provisions prohibiting discrimination that are applicable to public schools and with any court-ordered desegregation plan in effect for the school division or, in the case of a regional public charter school, in effect for any of the relevant school divisions. (Section 22.1-212.6, Code of Virginia) The following components must be addressed:

1. A description of the lottery process to be used to determine the public charter school enrollment.

Per Section 22.1-212.6.A of Code of Virginia, in the event that new student applications received by the registration deadline exceed the student spots available, students' eligibility to register will be determined by a lottery system. LMITA will not discriminate on the basis of gender, race, color, ethnic or national origin, or any disability. All applicants will have equal access for enrollment.

The following lottery procedures, where applicable, will be in place:

- During the lottery process, all applicants who applied by the announced application deadline will have equal opportunity in the drawing.
- A public lottery will be held in the presence of a public notary, an administrator, and a parent.
- Students whose application is received by the deadline will be notified of their enrollment status within one week after the lottery.
- Students whose names are drawn in the lottery must confirm their intention of enrollment within the announced timeframe.
- Students whose pre-application is received by the deadline and whose name is drawn in the lottery will be invited to register. Parents/legal guardians of lottery winners will be furnished with all necessary information and deadlines.
- 2. A lottery process shall also be developed for the establishment of a waiting list for such students for whom space is unavailable.

The school will have an admissions process with pre-announced enrollment period and deadlines. All student enrollment process and details, including deadlines for applications, lottery date, registration requirements and necessary documents, and waiting-list enrollment information, will be publicly available and announced at the school website and office.

If and when the school reaches its full student capacity approved by its charter, a waiting list will be formed in the order in which each application is received.

The waiting list will also be prioritized through a lottery process for the student applications submitted by the registration deadline. Parents of waiting list students will be informed of their child's position on the list.

All remaining eligible students will be placed on a waiting list and accepted in order as seats become available.

3. A description of a tailored admission policy that meets the specific mission or focus of the public charter school, if applicable.

LMITA shall be open to all students residing in Loudoun County, as defined in Section 22.1-3 of Code of Virginia, who submit a timely and complete application. Its admission process will be consistent with the federal NCLB Title V, part B Charter Schools Program Non-Regulatory Guidance (USDOE 2004) provided by the US Department of Education. LMITA will comply fully with the ESEA and NCLB Acts and Virginia Charter School Law.

Due to the diverse racial and demographic representations in LCPS, the school is expected to represent demographic diversity of the community it serves. The school will be promoted and publicized in order to reach the entire community and all of its racial/ethnic groups.

4. A timeline for when the lottery process will begin for the first academic year of enrollment and when parents will be notified of the outcome of the lottery process.

	ACTIVITY	TIME FRAME
	Dissemination of Application forms	Opening Day – continuous
	(Marketing & Publicity Campaign)	
	Pre-applications are accepted	October- December
	School open house(s)	October- December
	Application Deadline	January 1
5.	^A ottery Date	Second week of January
	Notification of lottery winners/parents	Third week of January
	Registrations for lottery winners to be	Until March 1
	completed (in three weeks)	
	Unvitations extended to students in the	March 1 – May 1
	rwaiting lists, when applicable, in the	
	iorder in which the application is received	
	pOpen vacancies to be filled on a first-	May 1 - continuous
	tcome, first-served basis	
	ⁱ Parent Orientation	A week prior to first day of
	0	school
	ⁿ First Day of School	The same calendar as Loudoun
	0	County Public Schools to be
	f	followed

Any enrollment-related policies and procedures that address special situations, such as the enrollment of siblings and children of faculty and founders and the enrollment of nonresident students, if applicable.

LMITA will give priority or pre-lottery status in admissions to the following students:

- Only students who meet residency requirements for enrollment at LCPS (per policy §8-12) will be considered for admission to LMITA.
- Students who are siblings of an already admitted and continuing student enrolled at LMITA.
- Students who are the children of a current employee or founding board members of the charter school, as stated in the Federal NCLB Guidance (US DOE, 2004) - it is assumed that total number of students allowed under this exemption will represent only a small percentage of the school's total enrollment.
- Current and continuing students from the previous grade/school year.
- 6. An explanation of how the applicant will ensure that, consistent with the public charter school's mission and purpose, community outreach has been undertaken so that special populations are aware of the formation of the public charter school and that enrollment is open to all students residing in the school division where the public charter school is located or in school divisions participating in a regional charter school.

All student enrollment processes and details, including deadlines for applications, lottery date, registration requirements and necessary documents, and waiting-list enrollment information, will be publicly available and announced at the school website and office.

LMITA will publicize all enrollment information throughout Loudoun County via flyers, bulletins, newspaper ads, websites, mailings, town meetings, informational open house sessions, and presentations at other local schools and public institutions.

LMITA will hold open houses and arrange presentations and publicity events at community centers, churches, public libraries, local schools, and alternate locations, where possible.

The applicants will also be able to fill out the application through the school website at www.lmitacademy.org.

7. A description of how the transfer of students to and from the public charter school will be accomplished.

Transfer students must follow regular lottery procedures and waiting list rules.

The transfer students will be assessed to determine their academic levels with respect to their peers. Those who lag will be given additional attention, while the others are placed in appropriate programs.

Upon registering, each student, transfer or otherwise, will have his/her own personal data files created at LMITA. Where applicable, all previous cumulative records will be requested from other schools. Upon receiving previous documents, the records and previous history will be reviewed and any concerns will be reported to the principal's office (i.e., missing report cards, test cards, test results, IEPs, etc.). If there are concerns, the principal's office will call the former school for further information. If necessary, LMITA will communicate with teachers and the parents/legal guardian of the student to better serve his/her needs. Similarly, when a student transfers to another school, and requests a record from LMITA, the school will fulfill this request with appropriate documentation.

8. A description of how students seeking enrollment after the school year begins will be accommodated.

After the application deadline, applications of students will be accepted on a rolling basis throughout the school year. Each complete application form will be recorded with the acceptance date and time information. These applicants must follow regular lottery procedures and waiting list rules.

An assessment test will be given to those who enroll after the start of the school year. These students will be given additional assignments to help them catch up with their classmates. They might be asked to attend additional after-school or weekend classes.

- **VIII.** *Economic Soundness:* Evidence that the plan for the public charter school is economically sound for both the public charter school and the school division or relevant school divisions. The following components should be addressed:
 - 1. A description of the public charter school's financial plan, including financial controls and audit requirements in accordance with generally accepted accounting principles.

LMITA budget has been developed through a detailed analysis of the CSP financials and research of similar successful charter schools in the DC metro area. All budget items are estimated and adjusted according to the recent LCPS annual budgets. LMITA is the first charter schools proposed to run within LCPS so several assumptions are made at this point on the operations of a charter school within LCPS. We had a good conversation with the Deputy Superintendent of LCPS, who is the point of contact for charter school applications, and we will continue to work with him and other LCPS senior staff on these budget figures throughout the application process.

Once LMITA is opened, Business Manager will be responsible for managing the school's finances. This position will report directly to the Executive Director. For the qualifications for this position, please refer to *Section 5.3.A.1. Job Descriptions*.

The Business Manager and the Executive Director will work together to manage finances in the school's daily business operations. The fiscal year for LMITA will run from July 1 until June 30. The annual budget will be developed as follows: at the beginning of each calendar year, the Business Manager and the Executive Director will evaluate financials of the previous fiscal year. They will then generate the budget for the next fiscal year based on the projected enrollment, staffing plan, and expected revenues and expenditures. LMITA's Governing Board will review, revise and approve the budget in a timely fashion.

In coordination with a Certified Public Accountant, and Department of Business and Financial Services at LCPS, the Business Manager will prepare and update quarterly and annual financial statements following the generally accepted accounting principles. LMITA Governing Board will require the Business Manager to present the cash-flow, budget-to-actual comparisons, and year-to-date comparisons on a regular basis to ensure the fiscal discipline of the school. LMITA's Governing Board will review, revise and approve the budget at their monthly meeting. All audits will be done by independent auditor annually and all audit reports will be shared with both LCPS and BOE.

2. A start-up and three-year budgets with clearly stated assumptions and information regarding projected revenues and expenditures.

A start-up and three-year budget for LMITA is drafted in the worksheets attached to this application. LMITA budget is broken down into the following six sections where the worksheet corresponding to each section is also listed:

- Pre-Operational Budget (Startup budget prior to opening of school)
- Classrooms, Computer & Science Labs (School Furniture and Tech Set up)
- Four-year operating budget presented in two worksheets:
 - Six-year Revenues, and
 - Four-Year Expenditures
- Cash-flow projections for the first year
- An additional "Assumptions" worksheet that specifies common assumptions such as staffing and enrollment levels, number of classes, benefit percentages is also attached.

Please see, Appendix F: Budget Worksheets, for the line-item budget of LMITA.

Note that there are 2 different expenditures on pre-operational budget: staff stipends and curriculum development. Curriculum development will be outsourced prior to opening of the school, and during this stage, staff will not participate in curriculum development. Therefore, staff funding is sufficient during the pre-operational period.

In *PreOperational Budget* worksheet, *Information Technology* item does not include all IT needs of the school. This expenditure covers only the IT needs for staff who will work during pre-operational time period. The school's IT needs were included in the budget as *Classroom IT needs, Science Labs' needs and Computer Labs' needs* (See Appendix F, sheet 2 of 6). These expenditures are in the operational budget.

In *Expenditures* worksheet, annual budgets for IT/computer supplies and repairs and professional development are low because all computers come with a 3 year warranty in general and additional budget has been allocated per computer for any possible repair services not covered by warranty (See Appendix F, sheet 5 of 6).

In *Expenditures* worksheet, food is not included in the budget since its cost will be met from parents and\or agencies.

3. A start-up and three-year cash flow projections with clearly stated assumptions and indications of short- and long-term sources of revenue.

LMITA's budget contains 3% contingency in the first year and 5% after that. As it is seen in the budget the amount of surplus is increasing remarkable each year, and the 5% cut can be managed through replacing some contractual services to

voluntary services if the contingency and surplus are not enough to cover. LMITA would consider a possible staff adjustment without cutting any programs as the worst-case scenario if the other efforts do not solve the problem, and this will happen if and only if the enrollment is way below the expectations. If the cut stems from not having the expected increase in the per pupil amount, LMITA would consider revising the salary raises to make them parallel to the LCPS. Monthly cash flow projections for the first three years are presented in the Cash Flow spreadsheet.

4. A description of anticipated fundraising contributions, if applicable.

LMITA and the fundraising PTF shall coordinate and organize fundraising activities on a regular basis to generate capital and supplement the per pupil allocation for operating expenses. As for raising funds to cover planning and development expenses prior to opening the school, LMITA applied for the US DoE Charter School Program Planning & Implementation Grant.

For the Pre-operational budget, the Federal Charter School Planning grant is assumed in the amount of \$150,000. In case this grant is not awarded, LMITA will apply for a five year low-interest loan, which will be paid back starting in the third year as incorporated to the four-year operational budget.

Also for the first two years, an annual implementation grant of \$200,000 is assumed again through the Federal Charter School Start-up grant. In case this grant is not awarded, LMITA board will reach out to the local businesses and community to raise the corresponding funds, or seek out for in-kind contributions for school lab and classroom setups.

If the per pupil allocations are are lower than expected, LMITA will seek donations from its supporters and will apply for low interest loans. In fact, when similar situations arose at CSP, the LMITA founders were able to obtain more than \$250,000 in donations and secure more than \$200,000 in zero-interest loans.

5. A description of the funding agreement that the public charter school intends to have with the local education agency, including information regarding anticipated local, state, and federal per-pupil-amounts to be received and any information pertaining to the maintenance of facilities.

LMITA will base its financial plan on a per pupil allocation from LCPS that is commensurate with the per pupil amount disbursed to other schools in the county; together with other grants through local, state, and federal government sources as well as private sources. LMITA shall assume that the current per pupil rate is \$11,083 (based on the LCPS FY12 Budget) and that it will increase by 3% each year.

LMITA will have SMART classrooms⁵³ with the required technology in order to implement its educational program. One fully equipped science lab and one computer lab will be furnished in the first year. Two other computer labs and another science lab will be added in the second and third years. LMITA is planning to do all tenant improvements through the landlord's allowance, and if it is not sufficient, we will ask to amortize the dollar amount during the course of the lease. In this regard, in Appendix D: Support for Facilities, please find a letter of intent from Buchanan Partners, a major developer in Loudoun County, explaining how we will work together to address the facility needs of LMITA.

The main advantage of LMITA will be that it will not require any significant Capital Funding from the County or State therefore will save the County millions of dollars during the financial distress.

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⁵³ http://www.youtube.com/user/SMARTClassrooms

- **IX.** *Displacement:* Describe the plan for the displacement of pupils, teachers, and other employees who will not attend or be employed in the public charter school, in instances of the conversion of an existing public school to a public charter school, and for the placement of public charter school pupils, teachers, and employees upon termination or revocation of the charter. (Section 22.1-212.12, Code of Virginia) The following components must be addressed:
 - Identification of a member of the school's leadership who will serve as a single
 point of contact for all activities that may need to take place in order for the
 school to close, including but not limited to the transfer of students to another
 school, the management of student records, and the settlement of financial
 obligations.

LMITA executive director will serve as a single point of contact for all activities that may need to take place in order for the school to close, including, but not limited to, the transfer of students to another school, the management of student records, and the settlement of financial obligations.

2. A notification process to parents/guardians of students attending the school and teachers and administrators of the closure date.

LMITA will send notice of its closure to parents or guardians of students via mail, e-mail and public notice within 10 business days of official revocation or non-renewal of a charter school by LCPS.

The notice will include;

- The effective date of the closure
- The contact information for executive director who will be handling inquiries regarding the closure
- The students' home school (school of residence)
- Information on how parents may obtain copies of student records

LMITA will send notice of its closure to teachers and administrators via mail, e-mail and in school memo. The notice will include;

- The effective date of the closure
- The contact information for executive director who will be handling inquiries regarding the closure
- 3. A notification process to parents/guardians of students attending the public charter school of alternative public school placements within a set time period from the date that the closure is announced.

Upon the closure, LMITA students will be guided to transfer to their home school (school of residence). LMITA will send the alternative public school placements

- to parents or guardians of students via mail, e-mail and public notice within 30 business days of closure announcement.
- 4. Provisions for ensuring that student records are provided to the parent/guardian or another school identified by the parent or guardian within a set time period. If the student transfers to another school division, provisions for the transfer of the student's record to the school division to which the student transfers shall be made upon the request of that school division. (Section 22.1-289, Code of Virginia).
 - LMITA will provide student records to the parent/guardian and another school identified by the parent or guardian within 30 business days of official revocation or non-renewal of a charter school by LCPS. If the student transfers to another school division, LMITA will transfer of the student's record to the school division to which the student transfers shall be made upon the request of that school division.
- 5. Notification to the local school board of a list of all students in the school and the names of the schools to which these students will transfer.
 - Up on the closure, LMITA students will be guided to transfer to schools in their home school (school of residence). LMITA will send notification to the Loudoun County School Board including a list of students along with the names of the schools to which these students will transfer.
- 6. A placement plan for school employees that details the level of assistance to be provided within a set period of time from the date of closure. For teachers and administrators, the level of assistance should address finding employment within the school division where the public charter school is located or other public school divisions.
 - Staff members, as employees of the Loudoun County Public Schools, will be reassigned to positions within the school system, consistent with applicable law (Section 22.1-212.13 of Code of Virginia).
- 7. A close-out plan related to financial obligations and audits, the termination of contracts and leases, and the sale and disposition of assets within a set period of time from the date of closure. The plan shall include the disposition of the school's records and financial accounts upon closure.
 - The formal language on early termination of contracts and leases due to the closure of the school will be included in the initial contracts. LMITA, a nonprofit corporation will be dissolved according to its bylaws. Northern Virginia Education Foundation's bylaws [See Appendix A: Articles of Incorporation and Bylaws] address how assets are to be distributed at the closure of the corporation.

Disposition of Liabilities and Assets

LMITA's closure procedure ensures disposal of any net assets remaining after all liabilities of the charter school have been paid or otherwise addressed. Such disposal includes:

- 1. The return of any donated materials and property according to any conditions set when the donations were accepted.
- 2. The returns of any grant and restricted categorical funds to their source according to the terms of the grant or Virginia State and federal law.
- 3. The submission of final expenditure reports for any entitlement grants.

Disposition of the school's records and transfer

LMITA and LCPS will establish a process for student record transfer to the students' home school (school of residence) or an alternative school to which the student will transfer.

LMITA's closure procedure includes the following plans for the transfer and maintenance of school and student records:

- 1. Transfer and maintenance of personnel records in accordance with applicable law
- 2. Provision of a list of students in each grade level and the classes completed to LCPS
- 3. Provision of the students' home school (school of residence) to LCPS
- 4. Transfer and maintenance of all student records, state assessment results, and any special education records to LCPS
- 5. Submission of personnel records to LCPS. These include, but are not limited to, records related to performance and grievance.

Financial accounts

LMITA's closure procedure ensures completion of an independent final audit within six months after the closure of the school that includes:

- 1. An accounting of all financial assets. These will include cash and accounts receivable and an inventory of property, equipment, and other items of material value.
- 2. An accounting of all liabilities. These will include accounts payable or reduction in apportionments due to loans, unpaid staff compensation, audit findings, or other investigations.
- 3. An assessment of the disposition of any restricted funds received by or due to LMITA.

- **X.** *Management and Operation:* Describe the management and operation of the public charter school, including the nature and extent of parental, professional educator, and community involvement in the management and operation of the public charter school. (Section 22.1-212.7, Code of Virginia) The following components must be addressed:
 - 1. A description of the functions, roles, and duties of the management committee as defined in <u>Section 22.1-212.6</u> of the *Code of Virginia* and its proposed composition and bylaws.

As defined in § 22.1-212.6 of the Code of Virginia, LMITA will be administered and managed by a management committee, hereinafter called the Governing Board, composed of parents of students enrolled in the school, teachers and administrators working in the school, and representatives of the community sponsors.

LMITA will be a public school operated by Northern Virginia Education Foundation, a Virginia non-profit organization. The articles of incorporation and bylaws are included in Appendix A.

Role and Responsibilities of the Governing Board

Day-to-day affairs of LMITA will be managed by the school principal and the executive director, whereas LMITA Governing Board will ensure that LMITA is governed in accordance with applicable federal, state, and municipal laws and regulations relating to public agencies and charter schools. The LMITA Governing Board will assume full responsibility to fulfill the requirements of the charter school contract. Prior to the opening of the school, Governing Board will ensure that an experienced principal and an executive director are hired, and held accountable for the overall success of the school.

In order to maintain diversity and open communication in decision making, founding members of LMITA will recruit additional board members from educators, researchers, teachers, parents, and distinguished community members. The primary responsibilities of the Governing Board can be summarized as follows:

- Ensure that the mission of the school is accomplished;
- Ensure compliance with all state and federal regulations;
- Ensure that all reports are accurate and comply with appropriate procedures;
- Hire the principal and executive director and review his/her performance;
 hold him/her accountable for overall operation of the school;
- Review the financial reports and approve operating budgets;
- Set policies aligned with the mission and vision of the school.

Governing Board Members

The founding members of the LMITA Governing Board are educators and professionals with highly successful careers in business, science, and information technologies, as well as college and K-12 teaching. LMITA's Governing Board brings extensive management and teaching experience to this endeavor.

The Governing Board will initially consist of the five individuals listed below.

- Ali Gokce, PhD
- Fatih Kandil
- Ali Bicak, PhD
- Mustafa E. Sahin, PhD
- Sinan Yildirim

Once in operation, LMITA will add two additional Board Members: the Executive Director of the school and one current LMITA parent. This will give an opportunity to the school staff and the parent body to actively participate in the school's governance as well as have their voices heard at the board level. The Executive Director shall be an Ex-Officio member of the Board.

Below is the list of Governing Board members along with their roles and responsibilities:

Dr. Ali Gokce

- Serve as President of the Governing Board.
- Provide leadership for the Governing Board and oversee LMITA long-term goals and objectives.
- Coordinate relations with parents, Loudoun County Public Schools, and the community, and maintain strong ties with elected officials, local businesses, colleges, and universities.
- Ensure that LMITA continues to receive strong support from the community and that the school delivers results that meet or exceed the public's needs and expectations.
- Explore internship and college placement opportunities for LMITA students via his contacts in the academia and the research institutions.
- Ensures compliance with Federal, State, and Loudoun County rules and regulations.

Mr. Fatih Kandil

- Oversee LMITA's recruitment and professional development activities.
- Provide guidance and consultation on charter school administration.
- Ensure that LMITA staff possesses organization skills that are not only
 essential to any successful effort but are also a pre-requisite to the

- cognitive and intellectual flexibility required to accommodate students' individual learning differences.
- Assist reaching out to the potential parents.

Dr. Ali Bicak

- Serve as Vice-President of the Governing Board.
- Provide guidance and consultation on LMITA's innovative Math and ITfocused curriculum and ensure that the curriculum is based on up-todate technology requirements and that it reflects current student needs.
- Oversee establishment and maintenance of LMITA labs, as well as incorporation of modern technology into daily instruction of students.

Dr. Mustafa E. Sahin

- Assist in implementation of LMITA's Math and IT-focused curriculum.
- Oversee establishment and maintenance of LMITA labs, as well as incorporation of modern technology into daily instruction of students.
- Assist in designing internship programs for LMITA students by developing and maintaining strong ties with local area technology companies.

Mr. Sinan Yildirim

- Serve as Treasurer of the Governing Board.
- Oversee the school's marketing plan.
- Monitor LMITA's business and management services.
- Advise the board and LMITA staff on the school's budgetary issues.
- Keep the Governing Board updated on the school's financial standing.
- 2. An explanation of how support services will be provided. These services, include, but are not limited to: 1) food services; 2) school health services;3) custodial services; 4) extracurricular activities; and 5) security services.

Food Services:

LMITA plans to work with LCPS to get food services for a fee. LMITA will offer a free and reduced cost lunch program for eligible students. LMITA will abide by all federal and state laws and regulations with regard to its food services provided at the school property. The school will work with LCPS regarding provisions of food and food services similar to food services provided by LCPS to provide access to the same level of nutrition, safe, cost effective meals as those available to students attending other LCPS schools. It is assumed that a break-even ratio for food services will be the same as every other county public school.

Health Services:

LMITA will adhere to all applicable health and safety laws and regulations, and will comply with all required or requested health and safety inspection by state

and county officials. In addition, LMITA's staff will be trained in First Aid and CPR to maintain the health and safety of students and staff.

LMITA will cooperate with LCPS and Loudoun County Health Department in order to have a full-time registered nurse or a clinic assistant at the school to provide the required health services for all students.

LMITA will have a school counselor starting from day one in order to provide students support services such as counseling, social services, mental health, and substance abuse prevention. LMITA counselors will work with families and other LMITA staff to provide a safe learning environment and assist all students in achieving their full intellectual, social, and emotional potential.

Custodial Services:

A custodian will be hired by the school to clean the facility nightly and for special projects on an as needed basis. The facilities committee of the board will develop a month-by-month checklist of inspections necessary to ensure that applicable codes and standards are continuously met.

Extracurricular Activities:

LMITA will offer a variety of extracurricular activities that will reflect the mission and purpose of the school and reinforce its academic and community goals. LMITA will offer academic and extracurricular clubs, tutoring, homework hour as after school activities. The after-school program will be offered each afternoon that school is in session, and will begin immediately following the end of the school day. All students will be encouraged to attend. Older students will have the opportunity to be tutored and mentored by volunteers, as well as to tutor and mentor younger students themselves.

Security Services:

LMITA will install security cameras inside and outside of the school building with recording capabilities, require visitors to sign in and carry visitor badges at all times, and install content filtering and firewalls in the school network.

LMITA will also implement an emergency plan that ensures the safety of its teachers, staff and students. The emergency plan will adhere to all federal, state, and local regulations. The emergency plan includes the chain of command, designation of an emergency preparedness team, designation of command posts, emergency operations, control, notifications, and checklist. The operations include securing the building, lockdown, remain-in-place, and shelter-in-place. The plan also details the procedures to be followed for specific incidents such as bomb threat, explosion, traffic accidents, fire, hazardous material, hostage, intruder, child abduction, death on campus, student demonstration, and riot on campus. The plan articulates procedures involved in

weather related emergencies such as hurricane, tornado, and flooding, designates primary and secondary staging areas, detailed procedures for special needs students. Specific emergency kits need to be maintained are also discussed in the plan.

Technology Services:

LMITA will cooperate with LCPS to determine and obtain the technologies required for the school to be compatible with all required LCPS systems, including, but not limited to, LCPS computer networks or other required systems' hardware, software, support, and maintenance. LMITA will work closely with LCPS to determine and obtain the required equipment and systems to be compatible with all required LCPS systems.

In addition to these services, LMITA will request the following services from Loudoun County Public Schools:

- LCPS Department for Personnel Services, its resources and/or personnel will support and provide assistance to LMITA for its advertising, recruitment, and other hiring procedures and protocols.
- LCPS substitute teacher pool will be made available to LMITA. Actual funding of substitute teachers will be provided by LMITA.
- Payroll and benefits services for all LMITA employee services. Actual funds are to be provided by LMITA.
- All current and future criminal background checks and other security measures taken at other LCPS public schools will be provided to LMITA.
- Surplus classroom and office furniture, and supplies from LCPS or State of Virginia will be made available to LMITA.
- Ground maintenance services, including but not limited to, mowing and snow removal, are to be provided to LMITA buildings.
- 3. An explanation of any partnerships or contractual relationships (education management organization, food services, school health services, custodial services, security services, etc.) central to the school's operations or mission, including information regarding the relationship of all contractors to the governing board of the public charter school, and information regarding how contractors and the employees of the contractors having direct contact with students will comply with the provisions of Section 22.1-296.1, of the *Code of Virginia*.

LMITA plans to negotiate with LCPS for partnership and contractual services including but not limited to food services, health services, safety, security, transportation, human resources and payroll services.

4. A detailed start-up plan, identifying tasks, timelines, and responsible individuals.

LMITA founding team will work with LCPS senior staff, local parents and businesses to accomplish the following goals according to the set timelines. Once the charter application is approved and an agreement is signed, LMITA governing board will hire an executive director and a principal to delegate the day-to-day operations and completion of the following tasks.

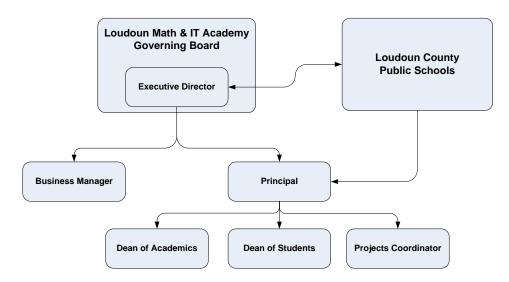
LMITA Start-up Timeline

Task Name	Duration/Time
FOUNDING BOARD	Jan'11 – Present
Identify the needs and school theme	Jan'11
Organizing Founding Board	Feb'11 – Mar'11
Establish the non-profit and tax-exemption app	Mar'11 – Aug'11
Monthly Board Meetings	every month
COMMUNITY OUTREACH	Mar'11 – Present
Identify community leaders and parents to advocate project, visits to business and education leaders	Mar'11– Present
Prepare an executive summary and project presentation	Mar'11
Collecting support letters and surveys	Mar'11– Present
DRAFTING THE PROPOSAL	Mar'11 – Dec'11
REVIEW OF PROPOSAL BY STATE AND	
LOCAL BOE	Aug'11 – Mar'12
Seek start-up funding	June'11– July'12
Submit the proposal to State Board of Education	Dec'11– Jan'12
Review of proposal by State Board of Education	Jan'12– June'12
Review of proposal by Loudoun County School Board	Jan'12 – Sep'12
SCHOOL FACILITY PREPARATION	June'11 –June'13
Defining facility needs	June'11– July'11
Design and development of facility plans	July'11– July'12
Lease and contract landlord	Sep'12– Dec'12
Construction and renovation of facilities	Dec'12 – June'13
PRE-OPENNING	Mar'13 -Aug'13
Negotiate and sign the charter contract	June'12 – Dec'12
Negotiate and sign the facility lease	June'12 – Dec'12
Renovations in the facility	Dec'12 – June'13

Recruiting school administrators	Dec'12 – March'13
Hiring school teachers	Feb'13 – June'13
Purchasing furniture and supplies	May'13 – Aug'13

5. A proposed organization chart.

The proposed organization chart of LMITA is shown below along with the description of the key personnel roles and the relationship between them.



At the core of LMITA's administration are the Executive Director and the Principal. They will be integral members of the LMITA community and will promote shared decision-making, support collaborative leadership, and require accountability from all the individuals in the school.

The Executive Director shall be an Ex-Officio member of the Governing Board and the Governing Board will oversee and support the LMITA administration and staff through the Executive Director. The Governing Board will supervise the Executive Director and ensure that the Executive Director has access to all the resources necessary to lead the school and achieve its mission. The Governing Board will also resolve appeals made by staff members, students, and parents in the cases of disputes. The Executive Director will present the requested reports to LCPS and will communicate with LCPS when the need arises. The business manager will report to the Executive Director.

The Principal will represent the school and work collaboratively with LCPS in order to provide proper delivery of the LMITA program. The Principal will lead an academic team consisting of Dean of Academics, Dean of Students, and Projects Coordinator.

The Dean of Students will be responsible for disciplinary matters and all issues related to transportation, student admissions, school safety, and food services. The school nurse, cafeteria employees, custodians, and security personnel will report to the Dean of Students.

The Dean of Academics will be responsible for handling academic issues, including the curriculum, professional development of teachers; adherence to SOLs and annual curricular plans. Teachers, Para-professionals, counselors, and the IT specialists will report to the Dean of Academics.

The Projects Coordinator will be responsible for management and coordination of science, IT and mathematics projects, fairs, competitions, tutoring, and advanced study teams. Volunteer parents and tutors will report to the Projects Coordinator. Projects Coordinator is not a standalone position. A teacher will assume this responsibility part-time.

Having some level of autonomy as a charter school, LMITA management will have additional responsibilities such as public relations, marketing, recruitment and fundraising. Increased community involvement means increased administrative overhead on LMITA's part. Financial autonomy will require the LMITA to deal with contractors and service providers on its own. These additional responsibilities necessitate additional administrative support to run the school successfully.

6. Plans for recruiting school leadership and staff.

In accordance with Guidelines for Uniform Performance Standards and Evaluation Criteria for Principals, LMITA principal will play a major role in the selection of staff. He will be a perpetual member of the hiring committee and he will make the final hiring recommendations to the board.

At LMITA, staff selection shall be based on strong academic background, professional competence, intellectual rigor, emotional maturity, enthusiastic professional attitude, knowledge of instructional practices, and the ability to contribute to the advancement of the school's educational goals. Among other factors, emphasis will be placed on the candidate's academic records and his/her previous relevant experience. Staff must demonstrate willingness and ability to provide educational support to a diverse student population at the school.

Positions at LMITA will be announced at the local newspapers, online job boards, and LCPS Department for Personnel Services. LMITA hiring team will screen the candidates based on their qualifications and select up to 3 candidates for each position based on the submitted resumes and cover letters. The hiring team will then refer these candidates to the interview committee.

The Interview Committee will be composed of administrators and selected faculty. For each refereed candidate, the committee will arrange an interview, which will consist of a discussion of the candidate's qualifications and a question/answer session. General provisions of all contracts and benefits will be provided to the candidates. The Committee will use an interview score sheet for each candidate and follow a preset question format to ensure a standardized and fair process.

Upon completion of the interview committee's report for selected candidates, the Executive Director will present his/her recommendations to the Governing Board for approval. Provided that a majority vote of the Governing Board is obtained, the Board will offer the approved candidate an employment contract.

LMITA will execute recruitment efforts in a time-sensitive manner to ensure hiring deadlines are met. For LMITA staffing plan for the first three years, please see Section XI. Subsection 6.

LMITA will collaborate with the LCPS Department for Personnel Services to utilize their standard recruiting process for school leadership and teachers. LMITA will also work with LCPS to give first consideration to eligible and interested applicants within LCPS who volunteer for re-assignment. In cases of conflict between LMITA hiring plan and procedures, and LCPS regulations and procedures, the latter will supersede.

- **XI.** *Employment Terms and Conditions:* Provide an explanation of the relationship that will exist between the proposed public charter school and its employees, including evidence that the terms and conditions of employment have been addressed with affected employees. (Sections 22.1-212.13, 22.1-296.1 and 22.1-296.2, Code of Virginia) The following components must be addressed:
 - 1. A plan that addresses the qualifications of teachers and administrators at the public charter school, including compliance with state law and regulation regarding Virginia Board of Education licensing endorsements.

LMITA will comply with the state law and regulations and licensure regulations for school personnel set forth in the "<u>Licensure Regulations for School Personnel</u>, <u>8VAC20-22-10 et. seq.</u>, State Board of Education". After selecting the best candidates, LMITA will have each candidate go through the LCPS hiring process including but not limited to fingerprinting and conduct of a background and child protective service check (Code of Virginia 22.1-296.1 or 22.1-296.2).

Teachers:

LMITA will seek individuals with the teaching expertise, interpersonal skills and personal maturity to succeed in a demanding start-up environment. LMITA wants to hire teachers who will embrace the school's math and IT focus. In the school's first year, it will hire only teachers with a minimum of two years of classroom experience.

Qualifications and Criteria for Teacher Selection:

- Holds a valid Virginia license with appropriate endorsement
- Prior teaching experience
- A bachelor's degree from a competitive college or university
- Demonstrates excellent classroom management
- Possesses in-depth subject matter knowledge
- Takes an analytical approach to student progress
- Has the maturity and personal stability to work in a start-up
- Is an individual of the highest integrity
- Is intelligent, honest, hard-working, cooperative, and has a sense of humor
- Demonstrates an interest / expertise in one of the major art areas

Executive Director:

Executive Director will coordinate the school's operations, taking into consideration the advice, comments, and suggestions of the Governing Board, School Principal, Deans, Business Manager, and other staff, as appropriate. The Executive Director will report to and serve as an ex-officio member of the

Governing Board. As the representative of the Governing Board, the Executive Director will establish and maintain regular communications with LCPS.

Qualifications and Criteria for Executive Director Selection:

- Minimum three years of school administrative or supervisory experience
- Bachelor's degree, and possibly an advanced degree
- Dynamic, pro-active, resourceful, technologically savvy, and innovative leader with strong interpersonal, organizational, communication, and project management skills.
- Demonstrated ability to specify, organize and successfully manage the timely completion of projects requiring input and effort by others.
- Strong interpersonal, and written and verbal communication skills.
- Demonstrated ability in working well with various audiences including, but not limited to, Board members, volunteers, professionals, community and school groups, parents, and business leaders.
- Comfortable with public speaking and with developing professional presentations.
- Demonstrated ability to support shared decision-making and to promote collaborative leadership.

School Principal:

As the educational leader of LMITA, the Principal is responsible for day-to-day planning, scheduling, and supervision and evaluation of staff. The Principal will supervise all teaching staff, taking into consideration the advice, comments and suggestions of the Executive Director, Deans, Projects Coordinator, Business Manager, and other staff, as appropriate. The Principal will report to the Executive Director and will be responsible for the achievement of the school's educational goals and objectives.

Qualifications and Criteria for School Principal Selection:

- Minimum three years of teaching and/or school administrative experience.
- Virginia Teacher License with endorsement in administration and supervision.
- An advanced degree from a competitive college or university
- Successful track record as a teacher
- Aware of current trends and developments in education.
- High energy and intelligence and prepared to take on a demanding position
- Possess leadership qualities.
- History of building successful relationships with adults and school-aged children

- Excellent communication skills
- Meet any additional qualifications set by LCPS.

Dean of Students:

The Dean of Students will assist the School Principal in planning and assessing the educational programs including planning of innovative disciplinary approaches, assisting teachers in implementing such efforts, encouraging a constructive, thoughtful climate for learning, and promoting fairness for students and staff from all cultural backgrounds. He or she is also responsible for enforcement of school rules, and oversees appropriate and reasonable student discipline. The Dean of Students holds parent/teacher/student conferences in regard to student and school issues.

Qualifications and Criteria for Dean of Students Selection:

- Minimum three years of teaching and/or school administrative experience.
- Virginia Teacher License with endorsement in administration and supervision.
- A bachelor's degree from a competitive college or university
- Strong instructional, classroom management and discipline skills
- Focus on a systems-oriented approach to student, classroom and school culture
- Excellent communication skills
- Experience working with students and parents on development issues to effectively analyze problems and concerns

Dean of Academics:

The Dean of Academics will oversee all academic programming and assist the School Principal in planning and assessing the educational program. He/she assists in organization of the school improvement plan with staff, parents, and community members and, helps the School Principal to design, manage, and implement processes to manage and track progress on school goals and academic excellence indicators. He/she will be an instructional leader and work with the School Principal to drive the academic program and ensure that all students are learning to their potential.

Qualifications and Criteria for Dean of Academics Selection:

 Minimum three years of teaching and/or school administrative experience, specializing in curricula.

- Virginia Teacher License with endorsement in administration and supervision.
- A bachelor's degree from a competitive college or university
- Strong instructional, classroom management and discipline skills
- Excellent communication skills

Business Manager:

The Business Manager is responsible for ensuring that the school operations run in an efficient and transparent manner. The business manager supervises the finances of the school and the operation and maintenance of the school facility. The Business Manager arranges for repairs when necessary, including the hiring of the cleaning and repair staff.

Qualifications and Criteria for Business Manager Selection:

- Bachelor's degree from a competitive college or university, preferably in business, accounting or finance.
- Clear understanding of budgets and fiscal planning and have experience with relevant software packages.
- Excellent computer skills, including Microsoft Excel, Access and QuickBooks
- Demonstrated success in monitoring budgets
- Clear understanding of Generally Accepted Accounting Principal
- Ability to manage multiple tasks and meet tight deadlines
- 2. A plan to provide high-quality professional development programs (Section 22.1-253.13:5, *Code of Virginia*).

LMITA will clearly define teacher performance standards following the *Guidelines* for Uniform Performance Standards and Evaluation Criteria for Teachers. The uniform performance standards will be used to collect and present the data to document performance based on clear expectations. The primary goal of this process will always be to support the continuous growth and development of each teacher by giving meaningful feedback based on monitoring, analyzing, and applying pertinent data.

Student academic progress will be one of the main areas that will be used in the formal classroom observation. At LMITA, teacher evaluations will be based on professional knowledge, instructional planning and delivery, assessment of student learning, management of a safe and learning conducive environment, student academic progress, and professionalism. Based on these standard rubrics, teachers will be provided guidance and professional development opportunities for their continuous growth.

During the periodic professional development programs teachers will train on the latest technologies and best practices in setting acceptable, measurable and appropriate student achievement goals based recent benchmark data. Teachers will also learn about the various features of online SIS to track student progress and adjust the assessments levels and formats based on the learning outcomes. Teachers will adjust their instruction based on the student progress and develop interim learning targets

LMITA is committed to the personalized professional growth of each staff member. Each staff member will develop a professional growth plan that will be facilitated by the lead and master teachers and the school principal. Most coordinated staff development activities will reflect the agreed-upon needs of the teachers involved. Staff development activities and models that have proven effective in fostering growth and that benefit students will be supported enthusiastically.

The crucial element of collegiality is one of the main characteristics of effective and functioning professional learning communities. Teachers at LMITA, who teach the same grade levels, will meet once a month to discuss the issues of each individual student and create academic and behavioral improvement plans for at-risk students. In these meetings, they will learn from each other and work out solutions to the commonly faced problems, which will also improve their classroom management skills.

LMITA will set up a mentorship program to accelerate the experience transfer from one teacher to another. For an entry-level teacher, sharing expertise about curriculum, pedagogy, and child development with an experienced colleague is an efficient and effective method. Mentor teachers also share knowledge about curriculum, awareness and knowledge from readings, insights about families, and what was learned from attending presentations and conferences.

LMITA faculty will have a minimum of ten professional development days throughout the year. Prior to the beginning of the school year, LMITA will make available a three- to five-day professional development program where teachers will be able to identify strategies to improve classroom management skills and prepare lesson plans for the school year (New LMITA hires will have one extra orientation before their start date).

Teachers will be given the opportunity to regularly attend seminars and workshops given by educational experts to improve their teaching methodologies. Faculty and staff development days will be planned based on the outcomes of these meetings. LMITA understands that LCPS may mandate the school staff to attend certain trainings related to legal mandates and special

education. A projected timeline for LMITA's professional development activities during a school year is outlined below:

Activity	Timeline
Staff Orientation	5 days before school starts
Departmental Meetings	First Wednesday of each Month (after class)
Grade Level Meetings	Third Wednesday of each Month (after class)
Professional Development Days	One day every other month
Year End Meetings	2 days after student dismissal
Conferences/workshops	As needed

TABLE: Professional Development Activities

3. Provisions for the evaluation of staff at regular intervals and in accordance with state law and regulation.

At LMITA, the teachers will be evaluated at regular intervals based on the performance standards stated in the Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers and Principals document.

Accordingly, the teachers will be evaluated based on their:

- professional knowledge in their subject
- ability to perform instructional planning
- efficiency in performing instructional delivery
- ability of assessing student learning
- success in founding a healthy learning environment
- adherence to professionalism
- ability to lead to student academic progress

Formal evaluation will be overseen by the LMITA Principal. A summative evaluation will be written by the principal near the end of the school year.

Peer evaluation is another principle which LMITA will be taken into consideration in its professional development program. School administration will be asking every teacher voluntarily to announce at least one period of his or her teaching during a school year as open class for other administrators or teachers to come and observe. This will give opportunity to teachers to ask questions, share ideas through observing others' teaching techniques, and give both positive and negative feedback so that the teacher being observed can grow. A variety of incentives will be considered to increase the "open class" participation.

4. Provisions for a human resource policy for the public charter school that is consistent with state and federal law.

LMITA will implement a non-discriminatory employee relations procedure, which will be in compliance with the LMITA Bylaws (see Appendix A) and the Loudoun

County School Board personnel policies and practices. Some of the highlights of the procedures are outlined below:

- LMITA will not discriminate on the basis of race, gender, color, or ethnic religious background.
- LMITA will practice non-sectarian employment practices.
- All personnel at LMITA will become employees of LCPS and its school board, as stated in the Code of Virginia.
- The Governing Board of LMITA will create and/or approve all position descriptions, qualifications, and responsibilities.
- The Governing Board of LMITA will recruit and disseminate job announcements through, but not limited to, the ways which the LCPS Department for Personnel Services utilizes.
- The Governing Board of LMITA or its designee(s) will conduct all job interviews, verify the licensing requirements, and refer all eligible candidates to the LCPS Department for Personnel Services for contract negotiation.
- LMITA will require fingerprints, and background checks of its employees as required by the applicable law to ensure the safety of school and all students.
- LMITA Governing Board will perform the annual formative and summative evaluation of the principal and administrators through a personnel evaluation procedure.

All administrators and the teachers of the school will possess the necessary knowledge, skills, and personal characteristics required by and consistent with the vision and philosophies of the school. The school will promote and look for opportunities, including the commitment and willingness from all employees to work as a team to implement the school's goals.

The school agrees to disclose the qualifications of its teachers by providing parents with short biographies of its full time teachers, including degrees attained, colleges/programs they attended, certifications or special competencies earned, and years of educational experience documented. An informational pamphlet with this information will be published or posted online to the parents and the public.

5. Notification to all school employees of the terms and conditions of employment.

LMITA will notify all school employees of the terms and conditions of employment prior to their employment acceptance. LMITA will also make an "employee handbook" available to all employees (print and online versions). The

"employee handbook" will include employment practices, general policies and procedures and any other employment related terms and conditions.

6. A staffing chart for the school's first year and a staffing plan for the term of the contract.

LMITA staffing plan for the first three years is laid out in the table below:

Position	Year 1	Year 2	Year 3
Executive Director	1	1	1
Principal	1	1	1
Dean of Students	0.5	0.5	1
Dean of Academics	0.5	0.5	1
Business Manager	1	1	1
Subject Area Teachers	10	17	22
Special Education Teacher	1	1	2
Guidance Counselor	0.5	0.5	1
Nurse	1	1	1
Secretary	1	2	2
Custodian	1	1	1
Librarian	1	1	1
Pupil/Teacher Ratio	16.7	15.6	15.4

Our projection for the first year is to operate with 8 full-time and 4 part-time [.5 FTE] teachers, one full-time special education teacher and one half-time Counselor; 4 administrative staff (Executive Director, School Principal, Business Manager, dean of students [.5 FTE], and dean of academics [.5 FTE]); and four other full-time personnel (a nurse, a custodian, a librarian and a secretary). In the second year, 6 FTE additional faculty will be added to the existing staff. In the subsequent years, more full-time faculty will be hired to teach core subject areas and part time faculty to teach elective courses. Upon full enrollment, LMITA will have 39 FTE teachers. The number of special education teachers, counselors, and nurses will be increased as the student population grows.

LMITA will follow 8VAC20-81-40 for special education (caseload) staffing requirements. LMITA will comply with FAPE requirements as stated in 8VAC20-81-100. (34 CFR 300.209) Children with disabilities who attend LMITA shall be served by LCPS in the same manner as children with disabilities in its other schools, including the provision of supplementary and related services on site at LMITA to the same extent to which LCPS provides such services on the site to its other public schools.

- **XII.** *Liability and Insurance:* Describe the agreement between the parties regarding their respective legal liability and applicable insurance coverage. (Section 22.1-212.16, Code of Virginia) The following components must be addressed:
 - 1. The types of insurance for the public charter school, its property, its employees, the charter school management committee, and the board and the levels of coverage sought. Types of insurance include, but are not limited to: a) general liability; b) health; and c) property.

LMITA agrees to hold harmless and indemnify the Loudoun County School Board, its officials, employees, agents and representative, for all liabilities, debts, obligations, and other matters arising out of the operation of the charter school.

Insurance plans

Per section Section 22.1-212.16, Code of Virginia, upon approval of its application, LMITA will secure liability insurance and other coverage as follows:

•	Property and Casualty insurance	\$500,000
•	Directors and Officers insurance	\$1,000,000
•	General Liability insurance	\$1,000,000

The insurance for the directors and officers will start upon the approval of the charter application by the Loudoun County Public School Board. The property and liability insurance will take effect on or before signing a lease agreement with the Landlord. LMITA will pay for Workers' Compensation coverage, but we are requesting to be included in the same policy as other LCPS schools.

2. A justification for each type of insurance coverage sought.

As employees of the LCPS, LMITA staff will have the same health insurance and workers compensation coverage. Fringe costs for all staff are included in the proposed budget. LMITA will also carry liability and property insurance with a plan comparable to a similar size and type of business. Estimates for these insurances are based on quotes received from various insurance companies.

3. A description of any plans of the public charter school to provide indemnity for the local school division.

The Loudoun County School Board will be defended, held harmless and indemnified against any claim, action, loss, damage, injury, liability, cost or expense of any kind as a result of the operation of the charter school or actions by its agents, employees, invitees or contractors. LMITA shall be immune from liability to the same extent as all other public schools in the Commonwealth, and the employees and volunteers in the LMITA are immune from liability to the same extent as the employees and volunteers in a public school.

- **XIII.** *Transportation:* Describe how the public charter school plans to meet the transportation needs of its pupils. The following components must be addressed:
 - 1. A description of how the transportation of students will be provided: a) by the local school division; b) by the public charter school; c) by the parent(s); or d) through a combination of these options.
 - LMITA will work with Loudoun County Public Schools in order to provide the best transportation option to its students.
 - 2. If transportation services will be provided by the public charter school, explain whether the school will contract for transportation with the local education agency or with another entity or have its own means of transportation and indicate whether transportation will be provided to all students attending the school.
 - LMITA will work with LCPS Department of Pupil Transportation to meet the transportation requirements in 8VAC20-70-10. For students who cannot commute with LCPS buses, LMITA will contract with a local bus company to provide transportation. This practice has been utilized for transportation at the model charter school CSP in Maryland since its opening.
 - 3. A description of transportation services for students with disabilities in compliance with <u>Section 22.1-221</u> of the *Code of Virginia* and the Board's <u>Regulations Governing Special Education Programs for Children with Disabilities in Virginia</u>.

LMITA will comply with Section 22.1-221 of the *Code of Virginia on* Transportation of children with disabilities attending public or private special education programs.

- **XIV.** *Residential Charter School:* If the application is for a residential charter school for atrisk students, the following components must be addressed:
 - A description of the residential program to include: a) the educational program;
 b) a facilities description to include grounds, dormitories, and staffing; c) a
 program for parental education and involvement; d) a description of after-care
 initiatives; e) the funding the residential facility and other services provided;
 f) any counseling and other social services to be provided and their coordination
 with current state and local initiatives; and g) a description of enrichment
 activities available to students.

N/A

2. A description of how the facility will be maintained including, but not limited to: a) janitorial and regular maintenance services and b) security services to ensure the safety of students and staff.

N/A

- **XV.** *Disclosures:* Disclose ownership or financial interest in the public charter school by the charter applicant and the governing body, administrators, and other personnel of the proposed public charter school, and require that the applicant and the governing body, administrators, and other personnel of the public charter school shall have a continuing duty to disclose such interests during the term of the charter. The following components must be addressed:
 - 1. A description of how the applicant and members of the management committee will disclose any ownership or financial interest.
 - LMITA Governing Board will follow the LCPS Policy and complete and sign the disclosure forms and statements required to disclose any ownership or financial interest related to business of LMITA.
 - 2. Information regarding the frequency by which such disclosures will be made during the term of the charter (Section <u>2.2-3114</u>, *Code of Virginia*).

Disclosure statements of financial interest and ownership will be filed annually.

A description of ownership or financial interest of the applicant and/or members
of the management committee in the proposed charter school. This includes any
relationships that parties may have with vendors performing services at the
school.

There is no current ownership or financial interest between the applicant and members of the management committee with vendors performing services at the school. In case of such relationship, a disclosure statement will be filed accordingly, and the related member will exclude him/herself from any decision regarding to that service.

Part C: Assurances

Assurances in the *Code of Virginia*: The assurances in the *Code of Virginia* represent the policies and procedures that must be developed and addressed in the application by the public charter school to carry out the provisions of the law. By signing and submitting this application for a public charter school, the applicant expressly assures the Board that:

- 1. No tuition will be charged to students attending the public charter school.
- 2. The school will be nonreligious in its admission policies, employment practices, instruction, and all other operations.
- 3. The public charter school policies and procedures will comply with the federal *Family Educational Rights* and *Privacy Act* (FERPA) and the records retention schedules for public schools, and that such policies and schedules will be acceptable to the local education agency.
- 4. The public charter school programs, services, and activities will operate in accordance with all applicable federal and state laws and regulations, including the federal *Americans with Disabilities Act* (ADA), the federal *Individuals with Disabilities Education Improvement Act* (IDEA), Section 504 of the federal *Rehabilitation Act of 1973*, and the Virginia *Freedom of Information Act*.
- 5. The applicant has knowledge of and will comply with the *Virginia Conflict of Interest Act* and the *Virginia Public Procurement Act*.
- 6. Transportation will be provided consistent with state law and regulation. (Sections 22.1-176, 22.1-182, 22.1-186, 22.1-191, 22.1-221, 22.1-216, 22.1-218, Code of Virginia and the Virginia Board of Education's Regulation Governing Pupil Transportation)
- 7. The applicant will provide information regarding the proposed term of its contract with a local school board and notification of closure, should the charter be revoked or fail to be renewed. (Section 22.1-212.12, Code of Virginia)

<u>Assurances approved by the Virginia Board of Education</u>: By signing and submitting this application for a public charter school, the applicant expressly assures the Board that:

- 1. If the application is approved by the local school board, the applicant will take all actions necessary to enter into a contract with the local school board not later than nine months prior to the opening date of the public charter school.
- 2. If the application is approved by a local school board, the school leadership of the public charter school will be retained on contract no later than 60 days prior to the opening date of the school.
- 3. If the application is approved by a local school board, all requests for waivers from the Virginia Board of Education will be made by the local school board, on behalf of the applicant, no later than six months prior to the opening date of the school. (This does not preclude a public charter school from working with the local school board to request additional waivers once the school is operational.)
- 4. Facilities information will be provided, including but not limited to:
 - a. Suitable instructional space;
 - b. Provisions for library services;
 - c. Provisions for the safe administration and storage of student records and student medications:

- d. Information regarding compliance with building and fire codes and compliance with the federal *Americans with Disabilities Act* (ADA);
- e. General information on emergency evacuation plans;
- f. Information regarding site location and preparation;
- g. The structure of operation and maintenance services; and
- h. Financial arrangements for facilities, including any lease arrangements with school divisions or other entities and whether debt will be incurred.
- 5. The public charter school will comply with all provisions of the Virginia Board of Education's <u>Regulations Governing Special Education Programs For Children With Disabilities in Virginia.</u>
- 6. The applicant will provide a model Student Code of Conduct policy that addresses student behavior, discipline, and participation in school activities. The plan should identify the role of teachers and administrators in discipline and mentoring and must demonstrate compliance with the code of conduct policy of the applicable school board.

Pursuant to the requirements, I herby certify that to the best of my knowledge the information in this application is correct, and that the applicant has addressed all application elements that pertain to the proposed public charter school, and that the applicant understands and will comply with the assurances listed above.

Name of Authorized Official: <u>Dr. Ali Gokce</u>	Title: <u>President</u>
Signature of Authorized Official:	Date: <u>1/30/2012</u>

Loudoun Math & IT Academy

Pre-Operational Budget

Amount	Specific Source
\$150,000.00	
\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$150,000.00	
	\$150,000.00 \$0.00 \$0.00 \$0.00 \$0.00

BUDGET PLAN IF FEDERAL GRANT NOT AWARDED

\$550,000 loan will be received in the first year to be paid in 5-year term starting in the third year with %9 interest rate. (\$137,005 of annual payments).

- "		
Expenditures	Amount	Assumptions
		(e.g., 40 hours of consulting at \$100/hour)
Legal Fees	\$15,000.00	75 hours of legal services at \$200/hour Legal advise for
		irent and charter contract
Accounting and Consultation	\$12,000,00	120 hours of accounting and consultation services at
Fees	Ψ12,000.00	\$100/hour CPA and financial consulatation
Marketing (including postage,	£15 000 00	7500 fiers of \$0.00 and in the line is the
printing)	ψ15,000.00	7500 fliers at \$2.00 each including printing and postage
Recruitment-Students	\$5,000.00	5 open house \$1,000 each including rent,
	\$5,000.00	advertisement, and refreshments
Recruitment-Staff	\$5,000.00	5 newspaper and online advertisement \$1,000 each
Curriculum Development		IT based school model and curriculum development
Staff/Board Development	\$4,000.00	
	Ψ1,000.00	[weimbership and conference fees for the founding group
Staff Stipends	\$30,000.00	Executive Director and Administrative Assistant part time
		Office Furniture for the Function Director and
Equipment and Supplies	\$10,000.00	Administrative Assistant
Information T. J. J.		Porsonal computers projecter and printers for the
Information Technology	\$6,000.00	Executive Director and Administrative Assistant
Rent	\$15,000,00	Office for executive director pre-opening rent, 3-5
Tent	\$15,000.00	months
Capital	\$0.00	
Utilities	\$2,000.00	Utilities for the school facility, 3-5 months
Telephone/Fax		Telephone and internet access, 3-5 months
Travel	\$3,000.00	Travel expenses for open houses, conferences,
	Ψ3,000.00	meetings, etc.
Other (specify)	\$0.00	
Total Revenues	\$150,000.00	

Loudoun Math & IT Academy Classroom and Lab Setup

Classroom Furniture

	U	nit Cost	T	otal Cost	Reference
Smart Board	\$	999.00	\$	999.00	http://www.projectorcentral.com/portable-computer-projectors.htm
Teacher Laptop/Ta	\$	999.00	\$	999.00	http://shopper.cnet.com/buy-laptops/
Speakers	\$	99.99	\$	99.99	http://www.bestbuy.com/site/olspage.jsp?skuld=7933686&type=product&id=1151657980013
Student Desks	\$	108.95	\$	2,723.75	http://www.hertzfurniture.com/Student-Chair-DesksJumbo-Top-Combo-Chair-Desk1020pr.html
Teacher Desk	\$	395.00	\$	395.00	http://www.hertzfumiture.com/Teacher-Desks-Steel-Single-Pedestal-Teachers-Desk4424mo.html
Teacher Chair	\$	76.95	\$	76.95	http://www.hertzfurniture.com/Teacher-ChairsPadded-Swivel-Chair6684mo.html
White Board	\$	247.00	\$	494.00	http://www.hertzfurniture.com/WhiteboardsMarkerboardsSteel-Whiteboard-with-Aluminum-Frame1703mo.html
Cork Boards	\$	89.00	\$	267.00	http://www.hertzfurniture.com/Bulletin-Tack-BoardsWood-Frame-Cork-Board-1040mo.html
Bookcase	\$	479.00	\$	479.00	http://www.hertzfurniture.com/Storage-CabinetsMobile-Cabinet-Full-Height934-mo.html
Filing Cabinets	\$	149.00	\$	149.00	http://www.hertzfurniture.com/Filing-Cabinets2-Drawer-Letter- Standard-File1647mo.html
Trash bins	\$	6.99	\$	13.98	http://www.staples.com/office/supplies/p1_Rubbermaid-Plastic- Wastebaskets-Beige-7-
Cart	\$	76.00	\$	76.00	http://www.nertziumiture.com/Av-CartsOpen-Sneii-Tuily-Cart1917- -mo.html
TOTAL			\$	6,772.67	total cost for one regular classroom

Computer Labs

Item	U	nit Cost	1	otal Cost	Reference
Smart Board	\$	999.00	\$	999.00	http://www.projectorcentral.com/portable-computer-projectors.htm
Computers	\$	699.00	\$		http://shopper.cnet.com/buy-desktop-computers/
Computer Tables	\$	397.00	\$	5,161.00	http://www.hertzfurniture.com/Computer-TablesFlip-Top-Computer-Workstation-Fixed-Height4727mo.html
Computer Chairs	\$	42.95	\$	1 072 75	IIIIII //MMM DAIIZIIIIIIIII COM/SILIONI Chaire 120 Sarias Daly Chair
TOTAL			\$		total cost for one computer lab

Science Labs

	ι	nit Cost	7	otal Cost	Reference
Smart Board	\$	999.00	\$	999.00	http://www.projectorcentral.com/portable-computer-projectors.htm
Student Stools	\$	32.00	\$	800.00	http://www.hertzfurniture.com/Non-Swivel-Stools6000-Series- Upholstered-Stools1305pr.html
Teacher Station	\$	1,329.00	\$	1,329.00	http://www.hertzfurniture.com/Science-Lab-Tables-Mobile- Instructors-Desk-2664-mo.html
Student Stations	\$	3,699.00	\$	22,194.00	http://www.hertzfurniture.com/Science-Lab-TablesLabView-4-Station-Service-Center2680-mo.html
Safety Cabinet	\$	959.00	\$	959.00	http://www.hertzfurniture.com/Flammable-Liquid-Cabinets Freestanding-Cabinet-with-2-Shelves-60-Gal-Cap2656mo.html
Shower Eye Wash	\$	1,639.00	\$	1,639.00	http://www.hertzfurniture.com/Laboratory-Stations-Shower-Eye-Wash-StationWheelchair-Accessible9150mo.html
TOTAL			\$	26,921.00	total cost for one science lab

Server Systems

	Т	otal Cost	Components	Reference
Initial Setup	\$	4,353.00		
Expansion Setup	\$		servels,swhene s,wireless	

Health Room

	To	otal Cost	Components	Reference
Initial Setup	\$	2,500.00	and Patient	
Expansion Setup	\$	1,000.00	Miscellaneous	

1/23/2012

Loudoun Math & IT Academy Lab Setup

Physics Lab

Room	Item	Quantity	I	Jnit Cost	т	otal Cost
Room	Cabinets	6	\$	1,100.00	\$	6,600.00
	Student Work Stations	6	\$	2,500.00		15,000.00
	Teach Work Station	1	\$	2,500.00	\$	2,500.00
	Student Chair	24	\$	50.00	\$	1,200.00
	Teacher Chair	1	\$	75.00	\$	75.00
	Storage Shelving	1	\$	2,000.00	\$	2,000.00
	Smartboard	1	\$	1,500.00	\$	1,500.00
	White Board	3	\$	200.00	\$	600.00
	Tag Board	3	\$	125.00	\$	375.00
Force and Motion	Physics Workshop Bundle	6	\$	850.00	\$	5,100.00
	Economy Air Track w/ air source	6	\$	498.00	\$	2,988.00
	Go Motion Sensor	6	\$	99.00	\$	594.00
	Air Powered Projetile Classroom Set	1	\$	489.00	\$	489.00
	Digital Strobe	1	\$	349.00	\$	349.00
	Complete Push Pull Spring Scale Set	6	\$	58.00	\$	348.00
	Constant Velocity Cars	12	\$	8.00	\$	96.00
	Human Dynamics Cart	1	\$	159.00	\$	159.00
	Vertical Acceleration Demonstrator	1	\$	24.00	\$	24.00
	Force Table	6	\$	175.00	\$	1,050.00
	Velocity Radar Gun	1	\$	125.00	\$	125.00
	Flying Pig	1	\$	9.00	\$	9.00
	Rotational Inertia Demonstrator	1	\$	109.00	\$	109.00
	Deluxe Bicycle Wheel Gyroscope	1	\$	89.00	\$	89.00
	Dynamics Cart	6	\$	47.00	\$	282.00
	Liquid Accelerometer	6	\$	45.00	\$	270.00
Light and Color	Laser Ray Box and Lenses	6	\$	99.00	\$	594.00
	Laser Viewing Tank	1	\$	85.00	\$	85.00
	Violet Laser	1	\$	79.00	\$	79.00
	Green Laser	1	\$	79.00	\$	79.00
	Laser Tripod	1	\$	15.00	\$	15.00
	Spectrum Ananlysis Set	1	\$	489.00	\$	489.00
	Quanatative Spectroscopes	12	\$	10.00	\$	120.00
	Handheld Color Mixing Demo	1	\$	36.00	\$	36.00
	Color & Spectrum Discovery Pack	1	\$	99.00	\$	99.00
· · · · · · · · · · · · · · · · · · ·	Reflection & Refraction Discovery Pack	1	\$	129.00	\$	129.00
	Mega Mirrors	1	\$	275.00	\$	275.00
	Reflect-View	6	\$	5.00	\$	30.00
	Laser Pointer Education Kit	1	\$	69.00	\$	69.00
	Concave Convex Mirror Set	6	\$	17.00	\$	102.00
-	Lens Set	6	\$	19.00	\$	114.00
	Mirage	1	\$	37.00	\$	37.00
<u> </u>	Diffraction Grating Glasses Classroom Set	1	\$	70.00	\$	70.00
	Spectroscope Calibration Light Source	1	\$	45.00	\$	45.00
Sound & Waves	Ripple Tanks	6	\$	249.00	\$	1,494.00
	Standing Wave Kit (10pack)	1	\$	55.00	\$	55.00
	Sympathetic Tuning Fork Set	1	\$	135.00	\$	135.00
	Helical Spring	6	\$	16.00	\$	96.00

	Giant Slinky	6	\$	9.90	\$	59.40
	Sound & Waves Discovery Pack	1	\$	9.90	\$	99.00
	Sound Pipes	6	\$	2.95	\$	17.70
	Sound and Waves Interference Kit	1	\$	159.00	\$	159.00
	Tuning Fork Set	1	\$	75.00	\$	75.00
	3D Standing Wave Machine	1	\$	39.00	\$	
Electrostatics	Van de Graaff Generator	1	\$	550.00	_	39.00
Electiostatics	Discharge Electrode	1	_		\$	550.00
	Wimhurst Machine		\$	49.00	\$	49.00
	Friction Rod Kit	1	\$	89.00	\$	89.00
		6	\$	16.00	\$	96.00
	Fun Fly Stick	1	\$	19.95	\$	19.95
	Electroscope, Flask Form	6	\$	12.00	\$	72.00
	Static Charge Indicator	1	\$	39.95	\$	39.95
	Dissectible Leyden Jar	6	\$	14.00	\$	84.00
	Hand Held Tesla Coil	1	\$	189.00	\$	189.00
	Plasma Globe	1	\$	49.00	\$	49.00
Electricity	Genecon Experiment Pack	6	\$	279.00	\$	1,674.00
	Visual Electricity Demonstrator	1	\$	119.00	\$	119.00
	St Louis Motor	1	\$	99.00	\$	99.00
	Ohm's Law Experiment Kit	6	\$	60.00	\$	360.00
	Dual Voltmeter/Ammeter	6	\$	22.00	\$	132.00
	Digital Multimeter	6	\$	29.00	\$	174.00
	Electricity & Magnatism Discovery Pack	1	\$	99.00	\$	99.00
Magnetism	Magnetic Field Observation Box	1	\$	120.00	\$	120.00
	Steel Bar Magnets	6	\$	8.90	\$	53.40
	Strobe Revolution	1	\$	17.00	\$	17.00
	Magnetism Discovery Pack	11	\$	99.00	\$	99.00
	Solenoid Air Core	11	\$	95.00	\$	95.00
Pressure & Fluids		6	\$	99.00	\$	594.00
	Gas Laws Discovery Pack	1	\$	99.00	\$	99.00
	Fire Syringe	1	\$	19.00	\$	19.00
	Elasticity of Gasses Demo	6	\$	13.00	\$	78.00
	Bell Jar	1	\$	101.00	\$	101.00
	Electric Vacuum Pump	1	\$	275.00	\$	275.00
-	Reversible Thermoelectric Demonstrator	1	\$	39.00	\$	39.00
Energy	Energy Discovery Pack	_ 1	\$	119.00	\$	119.00
	Ice Melting Blocks	6	\$	17.00	\$	102.00
	UV Meter	1	\$	19.00	\$	19.00
	Ball and Ring	6	\$	9.75	\$	58.50
	Renewable Energy Education Set	1	\$	249.00	\$	249.00
	Colliding Steel Spheres	1	\$	29.95	\$	29.95
Miscellaneous	Multi Lab Support Kit	6	\$	79.00	\$	474.00
	Portable Micro Burner	6	\$	48.00	\$	288.00
i			1	12.50	\$	75.00
	Beaker Stand for Burner	6	\$	12.50		
		6	\$	79.00	\$	474.00
	Beaker Stand for Burner				-	474.00 1,200.00
	Beaker Stand for Burner Basic Lab Supply Kit	6	\$	79.00	\$	
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set	6	\$ \$	79.00 1,200.00	\$ \$	1,200.00
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set Genius DVD Set	6 1 1	\$ \$ \$	79.00 1,200.00 49.95	\$ \$ \$	1,200.00 49.95 31.90
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set Genius DVD Set MeterSticks 6pack	6 1 1 2	\$ \$ \$ \$	79.00 1,200.00 49.95 15.95 9.95	\$ \$ \$	1,200.00 49.95 31.90 59.70
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set Genius DVD Set MeterSticks 6pack Digital Timer TI Solar Calculator	6 1 1 2 6	\$ \$ \$ \$ \$	79.00 1,200.00 49.95 15.95 9.95 20.50	\$ \$ \$ \$	1,200.00 49.95 31.90 59.70 123.00
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set Genius DVD Set MeterSticks 6pack Digital Timer	6 1 1 2 6 6	\$ \$ \$ \$ \$ \$	79.00 1,200.00 49.95 15.95 9.95 20.50 99.00	\$ \$ \$ \$ \$	1,200.00 49.95 31.90 59.70 123.00 99.00
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set Genius DVD Set MeterSticks 6pack Digital Timer TI Solar Calculator USB Digital Microscope Periodic Chart of the Elements	6 1 1 2 6 6 1	\$ \$ \$ \$ \$ \$	79.00 1,200.00 49.95 15.95 9.95 20.50 99.00 12.50	\$ \$ \$ \$ \$	1,200.00 49.95 31.90 59.70 123.00 99.00 12.50
	Beaker Stand for Burner Basic Lab Supply Kit Conceptual Physics Alive DVD Set Genius DVD Set MeterSticks 6pack Digital Timer TI Solar Calculator USB Digital Microscope	6 1 1 2 6 6	\$ \$ \$ \$ \$ \$	79.00 1,200.00 49.95 15.95 9.95 20.50 99.00	\$ \$ \$ \$ \$	1,200.00 49.95 31.90 59.70 123.00 99.00

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Additional Items	Electronic Balance	6	\$ 235.00	\$ 1,410.00
	Spark Timer	6	\$ 154.00	\$ 924.00
	Flex Cam	1	\$ 395.00	\$ 395.00
	Assorted Physics Ball Set	6	\$ 87.95	\$ 527.70
	Physics Circuit Board	1	\$ 99.00	\$ 99.00
	Analog Triple Output DC Power Supply	1	\$ 199.00	\$ 199.00
TOTAL				\$ 60,660.60

Chemistry Lab

Loudoun Math &IT Academy-

Projected Revenues

	2013-2014 Fiscal Year		2015-2016 Fiscal Year	2016-2017 Fiscal Year	2017-2018 Fiscal Year	2018-2019 Fiscal Year
Major Assumptions						
Student Enrollment	192	288	384	480	576	672
Facility Size for Rent Estimat	20000	30000	40000	50000	60000	70000
Average Teacher Salary	\$59,000	\$60,770	\$62,593	\$64,471	\$66,405	\$68,397
Student/Teacher Ratio	16.7	15.6	15.4	15.5	15.6	15.3

Revenues	The same	Cole Wa	WARD FO	T. P. 98	BOAT OF	G VIEW IN
Revenue From Local Source	No.					
Per Pupil Tuition	\$2,127,936	\$3,287,661	\$4,515,055	\$5,813,133	\$7,185,032	\$8,634,014
Fundraising	\$10,000	\$20,000	\$30,000	\$30,000	\$30,000	\$30,000
Revenue From Federal Sour	ces					
Special Ed,ELL,FRM, funds	\$212,794	\$328,766	\$451,505	\$581,313	\$718,503	\$863,401
Charter School Startup Grant	\$200,000	\$200,000	\$0	\$0	\$0	\$0
Total Revenues	\$2,550,730	\$3,836,427	\$4,996,560	\$6,424,446	\$7,933,535	\$9,527,415

Loudoun Math & IT Academy

Expenditure Assumptions - of 2

FY / Grades	# Classes	2013-2014	2014-2015	2015-2016	2016-2017	2018-2019	2019-2020
	Per Grade Leve	Fiscal Year					
6	4	96	96	96	96	96	96
7	4	96	96	96	96	96	96
8	4		96	96	96	96	96
9	4			96	96	96	96
10	4				96	96	96
11	4					96	96
12	4						96
Enrollment		192	288	384	480	576	672
Special Ed.	10%	19.2	28.8	38.4	48	57.6	67.2

# Teachers		10	17	22	28	33	39	WABEII PG37
	Avg. Salary	\$ 59,000.00	\$ 60,770.00	\$ 62,593.10	\$ 64,470.89	\$ 66,405.02	\$ 68,397.17	Page 312 LCPS FY12 Teachers' Salary Scale
# Special Ed.		1	1	2	2	3	3	
	Avg. Salary	\$ 65,000.00	\$ 66,950.00	\$ 68,958.50	\$ 71,027.26	\$ 73,158.07	\$ 75,352.81	Page 314 LCPS FY12 Special Ed Counselor Scale
# ST Counselor		0.5	0.5	1	1	1	2	
	Avg. Salary	\$ 72,000.00	\$ 74,160.00	\$ 76,384.80	\$ 78,676.34	\$ 81,036.63	\$ 83,467.73	Page 314 LCPS FY12 Psychologist / Counselor Scale
# Instructional Stafi	f (FTE)	11.5	18.5	25	31	37	44	, ,
		16.7	15.6	15.4	15.5	15.6	15.3	T)
# Custodian		1	1	1	1	1	1	
	Avg. Salary	\$ 30,000.00	\$ 30,900.00	\$ 31,827.00	\$ 32,781.81	\$ 33,765.26	\$ 34,778.22	Page 316 LCPS FY12 Custodian (Level 5) Scale
# LPN		1	1	1	2	2	2	
	Avg. Salary	\$ 48,000.00	\$ 49,440.00	\$ 50,923.20	\$ 52,450.90	\$ 54,024.42	\$ 55,645.16	Page 317 LCPS FY12 School Nurse (Level 16) Scale
# Secretary		1	2	2	2	3	3	
	Avg. Salary	\$ 40,000.00	\$ 41,200.00	\$ 42,436.00	\$ 43,709.08	\$ 45,020.35	\$ 46,370.96	Page 317 LCPS FY12 Secretary III (Level 13) Scale
# Librarian		1	1	1	1	1	1	
	Avg. Salary	\$ 40,000.00	\$ 41,200.00	\$ 42,436.00	\$ 43,709.08	\$ 45,020.35	\$ 46,370.96	Page 316 LCPS FY12 Librarian (Level 9) Scale
Business Manager		1	1	1	1	1	1	(2,2
	Avg. Salary	\$ 65,000.00	\$ 66,950.00	\$ 68,958.50	\$ 71,027.26	\$ 73,158.07	\$ 75,352.81	Page 317 LCPS FY12 Financial Analyst (Level 16)
# Deans		1	1	2	2	2	2	
	Avg. Salary	\$ 83,000.00	\$ 85,490.00	\$ 88,054.70	\$ 90,696.34	\$ 93,417.23	\$ 96,219.75	Page 323 LCPS FY12 Administrator Salary (Level 2)
Frincipal		1	1	1	1	1	1	Control of the cont
	Avg. Salary	\$ 95,000.00	\$ 97,850.00	\$ 100,785.50	\$ 103,809.07	\$ 106,923.34	\$ 110,131.04	Page 323 LCPS FY12 Administrator Salary (Level 5)

# Executive Director	1	1	1	1	1		1
Avg. Salary	\$ 97,000.00	\$ 99,910.00	\$ 102,907.30	\$ 105,994.52	\$ 109,174.35	\$	112,449.59
# Adminstration (FTE)	8	9	10	11	12	Г	12
Student / Staff Ratio	9.85	10.47	10.97	11.43	11.76		12.00
Per Pupil Amount	\$ 11,083.00	\$ 11,415.49	\$ 11,757.95	\$ 12,110.69	\$ 12,474.01	\$	12,848.23
Special Ed. Per Pupil	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-

10% Special Ed, ELL, FMR is assumed per the current LCSP demographics

Estimated Per Pupil Cost Based on FY12 Budget Instruction \$8,615 Operation & Maintenance \$999 Pupil Transportation \$788 Administration \$242 Technology \$260 Attendance & Health \$137 **Facilities** \$42 FY12 Estimated Cost Per \$11,083

1/23/2012

Loudoun Math & IT Academy

Appendix F (4 of 6)

Expenditure Assumptions - 2

			of 2
Student/Teacher Ratio	-	16	
Student/Classroom Ratio		22	
AVERAGE Health Insurance		15.00%	2
Social security + Life Benefits (FICA, Life)		7.93%	P
Retirement Benefits (Virginia Retirement System VRS)		12.76%	P
W/C		0.50%	P
Annual sick leave days		10	P
Substitute pay per day	\$	100.00	1
Textbooks per student	\$	300.00	
Supply per student	\$	100.00	
Rent per squarefoot	\$	10.00	

2011 WABE Report Page 46
Page 331 on LCPS – FY12 Budget
Page 331 on LCPS – FY12 Budget
Page 331 on LCPS – FY12 Budget
Per LCPS Personnel Leave Benefits

Salaries and Wages - School Directo	Executive Director			
Salaries and Wages - Supervisors	Principal, Assistant Principal, Financials and Records Manager			
Salaries and Wages - Clerical Staff	Administrative Assistant, Secretary			
Fringe Benefits - Health Insurance	18% of base salary per WABE Report 2011			
Fringe Benefits - Social Security	(7.65+0.28)% Fica+Life			
Fringe Benefits - Retirement Benefits	(7.76+5.00)% Virginia Retirement System (VRS)			
Workers Compensation	0.50%			
Office Supplies	Stationary, \$500.00 per month			
Equipment and Furniture	Included in the start-up budget			

Information Technology	Computer hardware and software licenses
Purchased Management Services	Professional Development Services
Salaries and Wages - FT Teachers	\$59,000.00 average salary with 16 student/teacher ratio
Salaries and Wages - PT Teachers	None
Salaries and Wages - Substitutes	10 days per teacher per day, \$100.00/day substitute salary
Fringe Benefits - Health Insurance	18% of base salary per WABE Report 2011
Fringe Benefits - Retirement Benefit	(7.65+0.28)% FICA+Life
Workers Compensation	0.50%
Consultants	12 hours/month, \$100.00/hour consultation cost
Purchased Management Services	\$100.00 per student
Professional Development	\$1,000.00/department; Math, Science, Technology, Social Sudies, Language Arts
Special Education	The same amount as the estimated federal entitlement
Student Assessment/Testing	Purchased testing services
Supplies/Materials - Instructional	\$100.00 per student
Classroom Furniture	As computed in classroom and lab setup worksheet
Textbooks	\$300.00 per student
Information Technology	As computed in classroom and lab setup worksheet
Computer Supplies and Repairs	Computer Software License and Maintenance
Library	\$50 per student for online subscription fee

Retirement: Virginia Retirement System (VRS) - All full-time employees are covered. The school system will pay 7.76% of the

base salary for all full-time instructional/professional personnel and 7.77% of the base salary for all non-prof covered

employees. The employees' 5.00% share is also paid by the school system.

Social Security: The school system pays 7.65% of all taxable wages for each covered employee per calendar year.

Group Life Insurance: Each employee covered under the Virginia Retirement System receives life insurance protection equal to twice his or

her annual salary with double indemnity provision. The school system will pay 0.28% of the base salary for all covered employees

Group Health Insurance: All full-time employees are eligible to participate in the Point-of-Service (POS) plan. This single plan offers all

employees the flexibility of using in-plan options (HMO) or out-of-plan options (INDEMNITY).

Tort Liability Insurance protects all employees and School Board members against losses and expenses that occur

when claims or suits are brought against them for a wrongful act based on an error or omission, negligence, breach of duty, misstatement, or misleading statement.

Workers' Compensation: All employees are provided workers' compensation benefits for bodily injury by accident or bodily injury by disease

that are caused or aggravated by conditions of employment. Payments will be made to or on behalf of employees for medical expenses and for lost wages.

Vacation and/or sick leave are provided each full-time employee in accordance with the current personnel policies.

Loudoun Math & IT Academy - Operating Budget

Appendix F (5 of 6)

Projected Expenditures–1
of 3

	2013-2014 Fiscal Year	2014-2015 Fiscal Year	2015-2016 Fiscal Year	2016-2017 Fiscal Year
Expenditures				
School Administration				
Salaries and Wages - School Director	\$97,000.00	\$99,910.00	\$102,907.30	\$105,994.52
Salaries and Wages - Supervisors	\$243,000.00	\$250,290.00	\$345,853.40	\$356,229.00
Salaries and Wages - Clerical Staff	\$158,000.00	\$203,940.00	\$210,058.20	\$268,810.84
Fringe Benefits - Health Insurance	\$74,700.00	\$83,121.00	\$98,822.84	\$109,655.15
Fringe Benefits - Social Security + Life Benefits	\$39,491.40	\$43,943.30	\$52,244.34	\$57,971.02
Fringe Benefits - Retirement Benefits	\$63,544.80	\$70,708.26	\$84,065.29	\$93,279.98
Unemployment/Workers Compensation	\$2,490.00	\$2,770.70	\$3,294.09	\$3,655.17
Office Supplies	\$6,000.00	\$6,180.00	\$6,365.40	\$6,556.36
Information Technology	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73
Subtotal - School Administration	\$685,226.20	\$761,893.27	\$904,671.76	\$1,003,244.79
Instructional Staff				
Salaries and Wages - Full-Time Teachers	\$691,000.00	\$1,137,120.00	\$1,591,350.00	\$2,025,915.86
Salaries and Wages - Part-Time or Substitutes	\$10,000.00	\$17,510.00	\$22,660.00	\$28,840.00
Fringe Benefits - Health Insurance	\$105,150.00	\$173,194.50	\$242,101.50	\$308,213.38
Fringe Benefits - Social Security + Life Benefits	\$55,589.30	\$91,562.16	\$127,990.99	\$162,942.14
Fringe Benefits - Retirement Benefits	\$89,447.60	\$147,330.79	\$205,947.68	\$262,186.85
Unemployment/Workers Compensation	\$3,505.00	\$5,773.15	\$8,070.05	\$10,273.78
Subtotal - Instructional Staff	\$954,691.90	\$1,572,490.60	\$2,198,120.22	\$2,798,372.00
Instructional				
Special Ed, ELL, FRM	\$212,793.60	\$328,766.11	\$451,505.46	\$581,313.28
Purchased Educational Services	\$19,200.00	\$29,664.00	\$39,552.00	\$49,440.00
Professional Development	\$5,000.00	\$8,500.00	\$11,000.00	\$14,000.00
Student Assessment/Testing	\$2,112.00	\$3,168.00	\$4,224.00	\$5,280.00
Supplies/Materials - Instructional	\$19,200.00	\$29,664.00	\$39,552.00	\$49,440.00
Computer and Science Lab Setup	\$50,630.75	\$50,630.75	\$76,129.75	\$131,660.60
Classroom Setup	\$54,181.36	\$27,090.68	\$27,090.68	\$27,090.68
Textbooks (Traditional or Tablet/Ebook)	\$57,600.00	\$28,800.00	\$28,800.00	\$28,800.00
Information Technology (Server)	\$4,353.00	\$4,353.00	\$0.00	\$0.00
Information Technology (Wiring-Network, Phor	\$30,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Computer Supplies and Repairs	\$5,000.00	\$7,500.00	\$10,000.00	\$15,000.00
Library	\$9,600.00	\$14,400.00	\$19,200.00	\$24,000.00
Subtotal - Instructional	\$469,670.71	\$537,536.54	\$712,053.89	\$931,024.56

Loudoun Math & IT Academy - Operating Budget

Projected Expenditures-2

	2013-2014 2014-2015 Fiscal Year Fiscal Year		2015-2016	2016-2017		
	Fiscal Year	Fiscal Year \$2,871,920.41	Fiscal Year	Fiscal Year		
Expenditures, continued	φ2,109,500.01	φ <u>2,07</u> 1,920.41	\$3,814,845.87	\$4,732,641.35		
Business Services						
Accounting	\$10,800.00	\$11,124.00	\$11,457.72	\$11,801.45		
Advertising (Enrollment, Outreach)	\$5,000.00	\$5,150.00	\$5,304.50	\$5,463.64		
Public Relations/Marketing	\$5,000.00	\$5,150.00	\$5,304.50	\$5,463.64		
Insurance - General Liability	\$10,200.00	\$10,506.00	\$10,821.18	\$11,145.82		
Office Expenses	\$3,000.00	\$3,090.00	\$3,182.70	\$3,278.18		
Fees, Licensing, Dues, and Memberships	, , , , , , ,	73,000.00	40,102.10	<u> </u>		
(Quickbooks, educational magazine, school reach, etc)	\$3,000.00	\$3,090.00	\$3,182.70	\$3,278.18		
Purchased Management Services	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73		
Postage and Shipping	\$3,000.00	\$4,635.00	\$6,365.40	\$8,195.45		
Printing	\$10,000.00	\$15,450.00	\$21,218.00	\$27,318.18		
Telephone	\$6,000.00	\$6,180.00	\$6,365.40	\$6,556.36		
Travel	\$1,200.00	\$1,236.00	\$1,273.08	\$1,311.27		
Subtotal - Business Services	\$58,200.00	\$66,641.00	\$75,536.08	\$84,904.89		
Operations and Maintenance						
Contact Labor - Non-Instructional	\$6,000.00	\$6,180.00	\$10,000.00	\$10,300.00		
Custodial Services	\$10,000.00	\$15,000.00	\$20,000.00	\$25,000.00		
Supplies/Materials - Maintenance	\$3,000.00	\$4,500.00	\$6,000.00	\$7,500.00		
Subtotal - Operations and Maintenance	\$19,000.00	\$25,680.00	\$36,000.00	\$42,800.00		
Physical Plant						
Rent	\$200,000.00	\$300,000.00	\$400,000.00	\$500,000.00		
Utilities	\$20,000.00	\$30,900.00	\$31,827.00	\$40,977.26		
Subtotal - Physical Plant	\$220,000.00	\$330,900.00	\$431,827.00	\$540,977.26		
Student Services						
Health (school nurse included in staffing)	\$2,500.00	\$1,000.00	\$1,030.00	\$1,060.90		
Transportation	\$96,000.00	\$115,200.00	\$153,600.00	\$192,000.00		
Food	\$0.00	\$0.00	\$0.00	\$0.00		
Subtotal - Student Services	\$98,500.00	\$116,200.00	\$154,630.00	\$193,060.90		

Loudoun Math & IT Academy - Operating Budget Projected Expenditures 3

				or 3
	2013-2014	2014-2015	2015-2016	2016-2017
	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
	\$2,505,288.81	\$3,411,341.41	\$4,512,838.95	\$5,594,384.40
Expenditures, continued		AND AND THE		
Miscellaneous				
Audit	\$0.00	\$10,000.00	\$8,500.00	\$8,755.00
Advertising (Recruitment)	\$2,000.00	\$2,060.00	\$2,121.80	\$2,185.45
Dues and Subscriptions (Inspection fee, Landscape etc)	\$2,000.00	\$2,060.00	\$2,121.80	\$2,185.45
Workshops and Conferences	\$3,000.00	\$3,090.00	\$3,182.70	\$3,278.18
Legal	\$6,000.00	\$6,180.00	\$6,365.40	\$6,556.36
Loan Payment (in case grant not awarded)	\$0.00	\$0.00	\$137,005.00	\$137,005.00
Contingency Fund (3%)*	\$75,548.66	\$103,041.94	\$136,053.92	\$168,520.35
Subtotal - Miscellaneous	\$88,548.66	\$126,431.94	\$295,350.62	\$328,485.80
Total Expenditures	\$2,593,837.47	\$3,537,773.35	\$4,808,189.57	\$5,922,870.20
Beginning Balance	\$0.00	(\$43,107.87)	\$255,546.01	\$443,916.51
Net Surplus / Deficit	(\$43,107.87)	\$298,653.88	\$188,370.50	\$501,575.89
Ending Balance	(\$43,107.87)	\$255,546.01	\$443,916.51	\$945,492.39

1/23/2012 Appendix F (6of 6) Loudoun Math & IT Academy - Cash Flow Projections Cashflow FY 14 Jul'13 Aug'13 Sept'13 Oct'13 Nov'13 Dec'13 Jan'14 Feb'14 Mar'14 Apr'14 Beginning Cash Balances \$710 \$4,057 \$7,403 \$10,750 \$14,097 \$17,443 \$20,790 \$24,136 \$27,483 \$34,176 Revenues Revenue From Local Source Per Pupil Tuition \$2,127,936.00 \$177,328.00 \$177,328,00 \$177,328,00 \$177,328.00 \$177,328.00 \$177,328.00 \$177,328.00 \$177,328.00 \$177,328.00 \$177,328,00 \$177,328.00 \$177,328.00 Fundraising \$10,000.00 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 Revenue From Federal Sources Federal Entitlements (Special Ed, ELL, FRM) \$212,793.60 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732,80 \$17,732.80 \$17,732.80 Federal Grants (Charter School Startup Grant) \$200,000.00 \$16,666.67 \$16,666,67 \$16,666,67 \$16,666.67 \$16,666.67 \$16,666.67 \$16,666.67 \$16,666.67 \$16,666.67 \$16,666.67 \$16,666.67 \$16,666.67 Total Revenues \$2,550,729.60 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 \$212,560.80 Expenditures School Administration Salaries and Wages - School Director \$97,000.00 \$8,083,33 \$8,083,33 \$8,083.33 \$8,083.33 \$8,083,33 \$8,083.33 \$8,083.33 \$8,083,33 \$8,083,33 \$8,083,33 \$8,083,33 \$8,083,33 Salaries and Wages - Supervisors \$243,000.00 \$20,250,00 \$20,250,00 \$20,250,00 \$20,250.00 \$20,250,00 \$20,250,00 \$20,250.00 \$20,250.00 \$20,250.00 \$20,250.00 \$20,250.00 \$20,250.00 Salaries and Wages - Clerical Staff \$158,000.00 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166.67 \$13,166,67 \$13,166,67 \$13,166,67 Fringe Benefits - Health Insurance \$74,700.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 \$6,225.00 Fringe Benefits - Social Security + Life Benefits \$3,290.95 \$39,491.40 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290.95 \$3,290,95 \$3,290.95 Fringe Benefits - Retirement Benefits \$63,544.80 \$5,295,40 \$5,295,40 \$5,295,40 \$5,295,40 \$5,295,40 \$5,295,40 \$5,295,40 \$5,295.40 \$5,295.40 \$5,295.40 \$5,295.40 \$5,295.40 Unemployment/Workers Compensation \$2,490.00 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 \$207.50 Office Supplies \$6,000.00 \$2,000.00 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 \$363.64 Information Technology \$1,000.00 \$1,000.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$56,882,49 \$56.882.49 Subtotal - School Administration \$685,226,20 \$59,518.85 \$56,882,49 \$56,882.49 \$56,882,49 \$56,882,49 \$56,882,49 \$56,882,49 \$56,882,49 \$56,882,49 \$56,882,49 Instructional Staff Salaries and Wages - Full-Time Teachers \$691,000.00 \$57,583,33 \$57,583,33 \$57,583,33 \$57,583,33 \$57.583.33 \$57,583,33 \$57.583.33 \$57,583,33 \$57,583,33 \$57,583,33 \$57,583,33 \$57,583,33 Salaries and Wages - Part-Time or Substitutes \$10,000.00 \$833,33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 \$833.33 Fringe Benefits - Health Insurance \$105,150.00 \$8,762,50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 \$8,762.50 Fringe Benefits - Social Security + Life Benefits \$55,589,30 \$4,632,44 \$4,632,44 \$4,632,44 \$4,632,44 \$4,632,44 \$4,632,44 \$4,632,44 \$4,632,44 \$4,632.44 \$4,632,44 \$4,632,44 \$4,632.44 Fringe Benefits - Retirement Benefits \$89,447.60 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 \$7,453.97 Unemployment/Workers Compensation \$3,505.00 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 \$292.08 Subtotal - Instructional Staff \$954,691.90 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 \$79,557.66 Instructional Special Ed, ELL, FRM \$212,793.60 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 \$17,732.80 Purchased Educational Services \$19,200.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$416.67 Professional Development \$5,000.00 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 Student Assessment/Testing \$2,112.00 \$176.00 \$176,00 \$176.00 \$176.00 \$176.00 \$176.00 \$176.00 \$176.00 \$176.00 \$176.00 \$176.00 \$176.00 Supplies/Materials - Instructional \$19,200.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600.00 \$1,600,00 \$1,600.00 Classroom Furniture \$54,181,36 \$4.515.11 \$4,515,11 \$4.515.11 \$4,515,11 \$4.515.11 \$4,515,11 \$4.515.11 \$4,515,11 \$4,515,11 \$4,515,11 \$4,515,11 \$4.515.11 \$4,800.00 \$4,800.00 Textbooks (Traditional or Tablet/Ebook) \$57,600.00 \$4,800.00 \$4,800.00 \$4,800.00 \$4,800.00 \$4,800.00 \$4,800,00 \$4,800.00 \$4,800.00 \$4,800.00 \$4,800.00 Information Technology \$4,353.00 \$362,75 \$362.75 \$362,75 \$362.75 \$362.75 \$362.75 \$362.75 \$362.75 \$362.75 \$362.75 \$362.75 \$362.75 Computer Supplies and Repairs \$5,000.00 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 Library \$9,600,00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$800.00 \$32,420.00 Subtotal - Instructional \$389,039.96 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 \$32,420.00 Business Services Accounting \$10,800.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 \$900.00 Advertising \$5,000.00 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67 \$416.67

1/23/2012

Appendix F (6of 6)

Loudoun Math & IT Academy - Cash Flow Projections

Cashflow

Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00	Jul'13 \$416.67 \$850.00 \$250.00 \$250.00 \$83.33 \$250.00 \$833.33	\$250.00 \$250.00 \$83.33		Oct'13 \$416.67 \$850.00 \$250.00	Nov'13 \$416.67 \$850.00	Dec'13 \$416.67	Jan'14 \$416.67	Feb'14	Mar'14	Apr'14	24	
Public Relations/Marketing	\$416.67 \$850.00 \$250.00 \$250.00 \$83.33 \$250.00 \$83.33	\$416.67 \$850.00 \$250.00 \$250.00 \$83.33	\$416.67 \$850.00 \$250.00 \$250.00	\$416.67 \$850.00 \$250.00	\$416.67 \$850.00	\$416.67			Mar'14	Aprild	3.4 14.4	
Insurance - General Liability	\$850.00 \$250.00 \$250.00 \$83.33 \$250.00 \$83.33 \$500.00	\$850.00 \$250.00 \$250.00 \$83.33	\$850.00 \$250.00 \$250.00	\$850.00 \$250.00	\$850.00		\$416.67			Apr 14	May'14	Jun'14
Office Expenses \$3,000.00 Fees, Licensing, Dues, and Memberships \$3,000.00 Purchased Management Services \$1,000.00 Postage and Shipping \$3,000.00 Printing \$10,000.00 Telephone \$6,000.00 Travel \$1,200.00 Subtotal - Business Services \$58,200.00 Operations and Maintenance \$6,000.00 Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$19,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Subtotal - Physical Plant \$220,000.00 Student Services \$96,000.00 Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00	\$250.00 \$250.00 \$83.33 \$250.00 \$833.33 \$500.00	\$250.00 \$250.00 \$83.33	\$250.00 \$250.00	\$250.00			JPT 1 U.U /	\$416.67	\$416.67	\$416.67	\$416.67	\$416.6
Fees, Licensing, Dues, and Memberships \$3,000.00 Purchased Management Services \$1,000.00 Postage and Shipping \$3,000.00 Printing \$10,000.00 Telephone \$6,000.00 Travel \$1,200.00 Subtotal - Business Services \$58,200.00 Operations and Maintenance \$6,000.00 Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$19,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$250.00 \$83.33 \$250.00 \$833.33 \$500.00	\$250.00 \$83.33	\$250.00			\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.00	\$850.0
Purchased Management Services \$1,000.00 Postage and Shipping \$3,000.00 Printing \$10,000.00 Telephone \$6,000.00 Travel \$1,200.00 Subtotal - Business Services \$58,200.00 Operations and Maintenance Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$10,000.00 Supplies/Materials - Maintenance \$19,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Subtotal - Student Services \$98,500.00 Miscellaneous Addertising \$2,000.00 Dues and Subscriptions \$2,000.00 Dues and Subscriptio	\$83.33 \$250.00 \$833.33 \$500.00	\$83.33		60.50.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.0
Postage and Shipping	\$250.00 \$833.33 \$500.00		663 33	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.0
Printing \$10,000.00 Telephone \$6,000.00 Travel \$1,200.00 Subtotal - Business Services \$58,200.00 Operations and Maintenance \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Audit \$0.00 Dues and Subscriptions \$2,000.00	\$833.33 \$500.00	\$250.00	1 202.33	\$83.33	\$83.33	\$83.33	\$83.33	\$83.33	\$83.33	\$83.33	\$83.33	\$83.3
Telephone \$6,000.00 Travel \$1,200.00 Subtotal - Business Services \$58,200.00 Operations and Maintenance \$6,000.00 Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Dues and Subscriptions \$2,000.00	\$500.00		\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250,00	\$250.0
Travel \$1,200.00 Subtotal - Business Services \$58,200.00 Operations and Maintenance \$6,000.00 Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Subtotal - Physical Plant \$220,000.00 Student Services \$2,500.00 Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Dues and Subscriptions \$2,000.00		\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.3
Subtotal - Business Services \$58,200.00 Operations and Maintenance \$6,000.00 Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$100.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.0
Operations and Maintenance Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00		\$100.00	\$100.00	\$100.00	\$100.00	\$100,00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.0
Contact Labor - Non-Instructional \$6,000.00 Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.00	\$4,850.0
Custodial Services \$10,000.00 Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00						State Williams					- 1,000,000	41,05010
Supplies/Materials - Maintenance \$3,000.00 Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500,00	\$500.00	\$500.00	\$500,00	\$500.00	\$500.00	\$500.0
Subtotal - Operations and Maintenance \$19,000.00 Physical Plant \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833.33	\$833,33	\$833.33	\$833,33	\$833.33	\$833.33	\$833.3
Physical Plant \$200,000.00 Rent \$20,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services *** Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.0
Rent \$200,000.00 Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services *** Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$1,583.33	\$1,583.33	\$1,583.33	\$1,583.33	\$1,583.33	\$1,583.33	\$1,583.33	\$1,583.33	\$1,583,33	\$1,583.33	\$1,583.33	\$1,583.33
Utilities \$20,000.00 Subtotal - Physical Plant \$220,000.00 Student Services *** Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00												01,000,00
Subtotal - Physical Plant \$220,000.00 Student Services *** Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$16,666.67	\$16,666.67	\$16,666.67	\$16,666.67	\$16,666.67	\$16,666.67	\$16,666.67	\$16,666.67	\$16,666,67	\$16,666.67	\$16,666,67	\$16,666.67
Student Services Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666.67	\$1,666,67	\$1,666.67	\$1,666.67
Health (nurse included in staffing) \$2,500.00 Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33	\$18,333.33
Transportation \$96,000.00 Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00												
Food \$0.00 Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33	\$208.33
Subtotal - Student Services \$98,500.00 Miscellaneous Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$8,000,00	\$8,000,00	\$8,000.00	\$8,000.00
Miscellaneous \$0.00 Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Audit \$0.00 Advertising \$2,000.00 Dues and Subscriptions \$2,000.00	\$8,208.33	\$8,208.33	\$8,208.33	\$8,208.33	\$8,208.33	\$8,208.33	\$8,208.33	\$8,208.33	\$8,208,33	\$8,208.33	\$8,208,33	\$8,208,33
Advertising \$2,000.00 Dues and Subscriptions \$2,000.00												
Dues and Subscriptions \$2,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
42,000.00	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166,67	\$166.67	\$166.67	\$166.67	\$166.67
Workshops and Conferences \$3,000,00	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67	\$166.67
45,000.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
Legal \$6,000.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
Loan Payment (in case grant not awarded) \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Contingency Fund (3%) \$75,548.66	ΨV.00]	\$6,295.72	\$6,295.72	\$6,295,72	\$6,295.72	\$6,295.72	\$6,295,72	\$6,295.72	\$6,295,72	\$6,295.72	\$6,295.72	\$6,295.72
Subtotal - Miscellaneous \$88,548.66	\$6,295.72	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06	\$7,379.06
Total Expenditures \$2,513,206.72		\$209,214,20	\$209,214,20	\$209,214.20	\$209,214.20	\$209,214,20	\$209,214.20	\$209,214,20	\$209,214.20	\$209,214,20	\$209,214.20	\$209,214.20