

U.S. Department of Education
2011 - Blue Ribbon Schools Program
A Public School

School Type (Public Schools):
(Check all that apply, if any)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Charter	Title 1	Magnet	Choice

Name of Principal: Dr. Jim Findley

Official School Name: Louisiana School for Math, Science, and the Arts

School Mailing Address: 715 University Parkway
Natchitoches, LA 71457-9990

County: Natchitoches State School Code Number: 302006

Telephone: (318) 357-2525 E-mail: jfindley@lsmsa.edu

Fax: (318) 357-3299 Web URL: http://www.lsmsa.edu/

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I - Eligibility Certification), and certify that to the best of my knowledge all information is accurate.

(Principal's Signature) Date _____

Name of Superintendent*: Dr. Patrick Widhalm Superintendent e-mail: pwidhalm@lsmsa.edu

District Name: Louisiana School for Math Science and the Arts District Phone: (318) 357-2501

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I - Eligibility Certification), and certify that to the best of my knowledge it is accurate.

(Superintendent's Signature) Date _____

Name of School Board President/Chairperson: Mrs. Sharon Gahagan

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I - Eligibility Certification), and certify that to the best of my knowledge it is accurate.

(School Board President's/Chairperson's Signature) Date _____

**Private Schools: If the information requested is not applicable, write N/A in the space.*

The original signed cover sheet only should be converted to a PDF file and emailed to Aba Kumi, Blue Ribbon Schools Project Manager (aba.kumi@ed.gov) or mailed by expedited mail or a courier mail service (such as Express Mail, FedEx or UPS) to Aba Kumi, Director, Blue Ribbon Schools Program, Office of Communications and Outreach, U.S. Department of Education, 400 Maryland Ave., SW, Room 5E103, Washington, DC 20202-8173.

PART I - ELIGIBILITY CERTIFICATION

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The signatures on the first page of this application certify that each of the statements below concerning the school's eligibility and compliance with U.S. Department of Education, Office for Civil Rights (OCR) requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even K-12 schools, must apply as an entire school.)
2. The school has made adequate yearly progress each year for the past two years and has not been identified by the state as "persistently dangerous" within the last two years.
3. To meet final eligibility, the school must meet the state's Adequate Yearly Progress (AYP) requirement in the 2010-2011 school year. AYP must be certified by the state and all appeals resolved at least two weeks before the awards ceremony for the school to receive the award.
4. If the school includes grades 7 or higher, the school must have foreign language as a part of its curriculum and a significant number of students in grades 7 and higher must take the course.
5. The school has been in existence for five full years, that is, from at least September 2005.
6. The nominated school has not received the Blue Ribbon Schools award in the past five years: 2006, 2007, 2008, 2009 or 2010.
7. The nominated school or district is not refusing OCR access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.
8. OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.
9. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
10. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

PART II - DEMOGRAPHIC DATA

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All data are the most recent year available.

DISTRICT

1. Number of schools in the district: 0 Elementary schools
(per district designation) 0 Middle/Junior high schools
1 High schools
0 K-12 schools
1 Total schools in district
2. District per-pupil expenditure: 12139

SCHOOL (To be completed by all schools)

3. Category that best describes the area where the school is located: Rural
4. Number of years the principal has been in her/his position at this school: 8
5. Number of students as of October 1, 2010 enrolled at each grade level or its equivalent in applying school:

Grade	# of Males	# of Females	Grade Total			# of Males	# of Females	Grade Total
PreK	0	0	0		6	0	0	0
K	0	0	0		7	0	0	0
1	0	0	0		8	0	0	0
2	0	0	0		9	0	0	0
3	0	0	0		10	24	44	68
4	0	0	0		11	55	85	140
5	0	0	0		12	46	68	114
Total in Applying School:								322

6. Racial/ethnic composition of the school: 1 % American Indian or Alaska Native
16 % Asian
11 % Black or African American
3 % Hispanic or Latino
1 % Native Hawaiian or Other Pacific Islander
68 % White
0 % Two or more races
100 % Total

Only the seven standard categories should be used in reporting the racial/ethnic composition of your school. The final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic data to the U.S. Department of Education published in the October 19, 2007 *Federal Register* provides definitions for each of the seven categories.

7. Student turnover, or mobility rate, during the 2009-2010 school year: 7%

This rate is calculated using the grid below. The answer to (6) is the mobility rate.

(1)	Number of students who transferred to the school after October 1, 2009 until the end of the school year.	1
(2)	Number of students who transferred from the school after October 1, 2009 until the end of the school year.	21
(3)	Total of all transferred students [sum of rows (1) and (2)].	22
(4)	Total number of students in the school as of October 1, 2009	338
(5)	Total transferred students in row (3) divided by total students in row (4).	0.07
(6)	Amount in row (5) multiplied by 100.	7

8. Percent limited English proficient students in the school: 4%
Total number of limited English proficient students in the school: 13
Number of languages represented, not including English: 9
Specify languages:

Arabic, Chinese, German, Gujarati, Hindi, Korean Choso-o, Nepali, Russian, Spanish

9. Percent of students eligible for free/reduced-priced meals:

11%

Total number of students who qualify:

37

If this method does not produce an accurate estimate of the percentage of students from low-income families, or the school does not participate in the free and reduced-priced school meals program, supply an accurate estimate and explain how the school calculated this estimate.

LSMSA does not participate in the free and reduced-priced school meals program, but the school does ask parents if their child qualifies for free and reduced lunch. Our data is self-reported by the parents, and the administration feels that the number is lower than what it might be if they were truly filling out a free and reduced lunch application.

10. Percent of students receiving special education services:

0%

Total number of students served:

0

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional categories.

<u>0</u> Autism	<u>0</u> Orthopedic Impairment
<u>0</u> Deafness	<u>0</u> Other Health Impaired
<u>0</u> Deaf-Blindness	<u>0</u> Specific Learning Disability
<u>0</u> Emotional Disturbance	<u>0</u> Speech or Language Impairment
<u>0</u> Hearing Impairment	<u>0</u> Traumatic Brain Injury
<u>0</u> Mental Retardation	<u>0</u> Visual Impairment Including Blindness
<u>0</u> Multiple Disabilities	<u>0</u> Developmentally Delayed

11. Indicate number of full-time and part-time staff members in each of the categories below:

	Number of Staff	
	<u>Full-Time</u>	<u>Part-Time</u>
Administrator(s)	<u>7</u>	<u>0</u>
Classroom teachers	<u>39</u>	<u>3</u>
Special resource teachers/specialists	<u>3</u>	<u>1</u>
Paraprofessionals	<u>0</u>	<u>0</u>
Support staff	<u>39</u>	<u>0</u>
Total number	<u>88</u>	<u>4</u>

12. Average school student-classroom teacher ratio, that is, the number of students in the school divided by the Full Time Equivalent of classroom teachers, e.g., 22:1:

8:1

13. Show the attendance patterns of teachers and students as a percentage. Only high schools need to supply graduation rates. Briefly explain in the Notes section any student or teacher attendance rates under 95% and teacher turnover rates over 12% and fluctuations in graduation rates.

	2009-2010	2008-2009	2007-2008	2006-2007	2005-2006
Daily student attendance	99%	99%	98%	98%	98%
Daily teacher attendance	98%	98%	98%	98%	97%
Teacher turnover rate	12%	3%	7%	5%	9%
High school graduation rate	100%	100%	100%	100%	100%

If these data are not available, explain and provide reasonable estimates.

14. For schools ending in grade 12 (high schools): Show what the students who graduated in Spring 2010 are doing as of Fall 2010.

Graduating class size:	<u>134</u>
Enrolled in a 4-year college or university	<u>99%</u>
Enrolled in a community college	<u>0%</u>
Enrolled in vocational training	<u>0%</u>
Found employment	<u>0%</u>
Military service	<u>0%</u>
Other	<u>1%</u>
Total	<u>100%</u>

PART III - SUMMARY

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Vision: The Louisiana School for Math, Science, and the Arts will provide leadership in offering a world-class education to Louisiana's high-achieving, highly-motivated students.

Philosophy: The Louisiana School for Math, Science, and the Arts holds an institutional belief in the importance of a free and appropriate public education. The school serves students in ways appropriate to their talents and abilities, empowering those students to meet the high expectations set by themselves, their families, the school, and the state. The institution is responsive to the ever-changing needs of students and provides an environment that is conducive to lifelong learning.

Mission: The Louisiana School for Math, Science, and the Arts (LSMSA), a preeminent state-supported residential high school with competitive admissions for high-achieving, highly-motivated students, fosters in young scholars lifelong growth toward reaching individual potentials and finding places of work and service in a global society through the examination and exchange of ideas in a community of learners.

LSMSA was established by the state's legislature in 1983 as the nation's second public residential school for high school juniors and seniors; a model designed to serve the educational and social needs of students whose capacities and ambitions for learning could not be met in traditional, local high schools. Its early formative values are still at the heart of the school's success.

- Faculty members are content specialists who develop a college-level curriculum that engages bright students in learning. Additionally, faculty members serve as advisors/ mentors for students.
- Students accelerate through curricula based on abilities and interests, guided by the state's graduation requirements but with few limitations. Independent studies, mentored research, and self-directed inquiry are standard.
- In addition to the extensive math and science curricula, the humanities offer a rich array of courses in English and history; the arts provide introductory to performance level courses in music, theatre, dance, and visual arts; foreign languages include multiple levels of Latin, Spanish, French, German, and Russian, with some Greek and Italian.
- All of this is in the context of a residential program that not only provides for socialization and extended learning opportunities, but also for students to learn about personal choices, to gain important self-management skills, and to develop leadership skills.

LSMSA has a statewide impact, enrolling students from at least 75% of the state's parishes (counties) each year. Students are selected from rural schools, urban schools, magnet programs, parochial schools, and recently, several students from the home school movement have been selected to complete their high school training at LSMSA. Because LSMSA is a public school, supported by state funds, there is no tuition to attend; this allows students from all socio-economic backgrounds to enroll. In 2010 Newsweek named LSMSA, for the third time, one of the 21 "Public Elite High Schools" in the nation.

A four week summer program that began in 2003 has been successful in helping to prepare students from under-resourced schools for LSMSA. The Excel Program now enrolls thirty students each summer, approximately 20% of the incoming class, to prepare them for the challenge of LSMSA. Of these Excel students, 40-50% are from families that qualify for Free or Reduced Lunch.

LSMSA believes that excellence can be attained by relying on research-based knowledge and analyzing the results from quality assessments. In measuring the outcome of an LSMSA education, the school monitors several indicators. Every member of each graduating class is admitted to at least one university; on average this represents more than 60 institutions in at least 25 states. Each graduate qualifies for the state's performance-based tuition free program (TOPS). Additional merit-based scholarships average \$10 million for 130 graduates. (In 2010, 51% of graduates reported that they will be the first member of their family to attend college.) In the annual ACT report, LSMSA students earn the highest composite for the

state and outpace the national statistics for “college readiness.” In the state’s report from the Department of Education tracking first year college students, LSMSA graduates are not placed in remedial college courses and LSMSA has the highest average of students who complete the year in good standing, 97% - 100%. LSMSA constantly measures academic performance to ensure that the school attains and maintains high academic goals.

In addition to its primary mission, LSMSA has served as an educational resource for the state’s school systems since 1986 by offering instruction in the Tele-Learning Program. In 1998, the Department of Education partnered with LSMSA to create the Louisiana Virtual School, enrolling students in a wide variety of courses from a web-based platform. Four to six thousand “seats” are provided to schools that cannot hire a teacher for the courses offered. In many districts, this is the only way that Advanced Placement courses or courses that qualify a student for the state’s tuition opportunity program (TOPS) can be offered.

1. Assessment Results:

Louisiana ranks its schools as 1-5 stars. The Louisiana School for Math, Science, and the Arts, because of its achievement of AYP and its graduation rate, earned the state's highest Performance Label of 5 stars. The state average in 2009-2010 was 2 stars. One-hundred percent of LSMSA's students who took the state's Graduate Exit Exam in English and Math in 2009-10 scored Basic, Mastery, or Advanced with 72% of them scoring in the top two categories in English and 85% of them scoring in the top two categories in math.

The Graduate Exit Exam (GEE) has 5 different achievement levels—Unsatisfactory, Approaching Basic, Basic, Mastery, and Advanced. Students who score at the Basic level “have demonstrated only the fundamental knowledge and skills needed for the next level of schooling.” Students who have scored either Mastery or Advanced are “considered well prepared for the next level of schooling.” Information regarding Louisiana assessment results may be found at http://www.louisianaschools.net/data/school_report_cards.aspx

For the GEE in English Language Arts for 05-06 and 06-07, there is no achievement gap of 10 or more percentage points between test scores of all students and the test scores of the African American and Asian subgroups. There are also no achievement gaps of 10 or more percentage points between the scores of all students and the test scores of the identified free and reduced price meals sub-group. For the GEE in English for 07-08 and for 08-09, there were no sub-groups consisting of 10 or more members, so no comparisons can be made. In 09-10 the Asian subgroup and the all student group had very similar scores and no gap of 10 or more percentage points existed.

For the GEE in Mathematics for 05-06, there are two ethnic sub-groups with reported scores: African American students and Asian students. There are no achievement gaps of 10 or more points between the scores of all students and the test scores of the African American students and the Asian students for 2005-2006, but in 2006-2007, there were 12% more Asian students who scored Advanced than the percentage who scored Advanced in all students tested. 100% of the Asian students at the school scored Advanced as compared to 88% for all students who scored Advanced in Math. In 2007-2008 and in 2008-2009, there were no sub-groups with more than 10 members so no comparisons can be made. In 09-10 the Asian subgroup and the all student group had very similar scores and no gap of 10 or more percentage points existed.

Most students at LSMSA apply for admission to the school as sophomores or juniors. Seniors can also apply. Incoming students with relatively low ACT scores (19), but high grades often come from under-resourced schools and often qualify for free and reduced lunch. The EXCEL program was created to help these students succeed academically at LSMSA. The EXCEL students arrive with academic gaps that need to be addressed. As a condition of their admission, they have to attend a rigorous summer academic bridge program. They are closely monitored throughout the school year and provided extra support as needed. When the EXCEL students graduate, their ACT scores (senior class average composite ACT score in 2010 was 28) are similar to their peers' scores. The attrition rate for the EXCEL students is less than the rate for the rest of the school population. They work hard, they attain, and they succeed. They are rarely sent home for academic failure. The success of this program is being shared with other schools so that they, too, can help identify often overlooked students for inclusion in rigorous coursework like AP, gifted and talented programs, or Dual Enrollment courses.

2. Using Assessment Results:

The analysis of assessment results is critical in ensuring that LSMSA is fulfilling its mission to provide students the opportunity to achieve academic and personal excellence through the provision of

meaningful instruction, mentoring, and support services. Assessment results are shared with all stakeholders within the LSMSA community—students, parents, faculty, administrators, and even prospective students. Analysis occurs on several different levels by several different groups. Individual student data is reviewed by administrators to make sure that all students score at the state-expected performance levels. In the rare instance that a student performs below state-level expectations, administrators work with that student’s academic advisors and a core group of faculty to develop a program of study focused on bringing the student’s performance up to state-level expectations.

Aggregate student data is reviewed by both administrators and faculty. The initial review of aggregate data focuses on reviewing the percentage of students who meet state-level expectations on the various content standards of each assessment. For example, some of content standards for the English Language Arts portion of the Graduate Exit Exam (GEE) include the ability to write competently and to read, analyze, and respond to literature. Content standards data that is lower than expected is reviewed at the departmental level and changes in both course content and instructional methods may occur. Louisiana is phasing out the GEE and moving to End of Course examinations in high school. During the pilot phase of the End Of Course (EOC) testing, LSMSA faculty have worked to review and incorporate material from assessment and comprehensive curriculum guidelines published by the Louisiana Department of Education. Both of the English II and English III course equivalents have been updated and revamped to ensure that all students are well prepared for EOC exams. The professional development network also analyzed assessment results to determine what types of professional development opportunities should be offered to faculty. For example, EOC exams are computer-based exams and there are many facets of alignment to the tests that the school needs to understand. Thus, a professional development day will be spent on understanding curricular alignment with EOC state assessments.

3. Communicating Assessment Results:

LSMSA posts “Measures of Academic Rigor” on its website, www.lsmsa.edu. During the past 30 days, the school’s website received 9,247 unique visitors, the majority of those visitors are current and prospective parents and students, alumni, teachers, and interested community members. Data is provided on the website on ACT scores and the senior class’ ACT college readiness scores. Comparative data is included for the state and the nation. LSMSA’s class average entering and graduating ACT scores are posted for the last seven years with the percentage of improvement in the ACT also reported. The graduating ACT score for LSMSA seniors are also compared with the graduating ACT score of seniors at “special sister schools” in 7 other states. The Louisiana Department of Education publishes a “1st Time Freshmen Report.” Data in that report indicates the percentage of LSMSA students who show they are prepared to succeed at college in a variety of content areas. ACT comparative data for LSMSA, the state, and the nation is posted for the last seven years in English Composition, Social Sciences, Algebra, and Biology. Also, the “1st Time Freshmen Report” indicates the percentage of LSMSA graduates enrolled in remedial coursework at the university level, the percentage of LSMSA graduates who complete their freshman year in college in good standing, and the percentage of LSMSA graduates who qualify for the state’s free college tuition scholarship, TOPS.

Annually, LSMSA also publishes a brochure entitled the “College Admission Profile.” It, too, is posted on the school website (<http://www.lsmsa.edu/content.cfm?id=51>). In it the mean scores for the graduating class on the SAT in Critical Reading, Mathematics, and Writing are posted and compared to the state and national mean. For the ACT, the mean scores in English, mathematics, reading, science, and the composite are reported with a state and national comparison as well. This document is distributed to prospective students and parents at informational meetings around the state and is part of mail-outs to districts. College recruiters are given copies of this document as it also reports the current course offerings, the fact that all courses are taught at the college-level with college textbooks, and that 70% of the faculty hold Ph.D.’s or M.F.A.’s in the areas in which they teach. LSMSA’s report card is posted on the Louisiana DOE website (dropdown menu: “Other schools”)

http://www.louisianaschools.net/data/school_accountability_reports_0809.aspx The school’s report card and assessment data are mailed to each student’s parents and posted on www.lsmsa.edu

4. Sharing Lessons Learned:

The Louisiana School for Math, Science, and the Arts (LSMSA) is a founding member of the National Consortium for Specialized Schools for Science, Mathematics, and Technology (NCSSSMT), and attends annual meetings to share successful strategies with other specialized schools.

LSMSA is also active in the National Association for Gifted Children (NAGC) and has applied to co-present an ACTION LAB on its Early College Model for NAGC's Conference in New Orleans in 2011 and has submitted 14 proposals to present. In the past 5 years, LSMSA's faculty and administrators have presented at a variety of national and state conferences: NAGC, NCSSSMT, American Arachnological Society, Louisiana Music Teachers Association, Mathematical Association of America, Louisiana Association of Teachers of Mathematics, American Literature Association, State Task Force for Arts Integration, National Chemical Engineering Society, Conference on Louisiana Studies, American Physical Science Society, American Astronomical Society, and the Louisiana Art Teachers Conference.

Four faculty members have served on Task Forces to construct End of Course tests in specific content areas at the state DOE. One faculty member works with the Louisiana Virtual School to train online science teachers in the use of virtual labs.

LSMSA has reached out to other public schools in the state and offered a program called "LSMSA On the Go." Any GT classroom teacher in the state can request a visit from an expert in a content area and LSMSA will send one of their faculty members to that site. Dr. Rodney Allen, an English faculty member with over 28 years of experience at LSMSA, recently went to a gifted English class at a magnet high school in Shreveport to help them with literary interpretation. LSMSA's theatre teacher traveled to St. Landry Parish to do an in-service for Talented Arts teachers on script writing. Over the past year, an LSMSA physics/astronomy teacher collaborated with a local university on a LASip grant to provide hands-on training for middle and high school teachers in 18 schools.

Whenever the school hires professional development presenters, it is LSMSA's practice to invite other area educators. LSMSA received a block grant to improve high school literacy, specifically in the area of vocabulary, and hired an expert presenter. Natchitoches Parish Schools sent their ELA coordinator, an administrator, and a teacher. LSMSA is applying for a Readiness and Emergency Management Grant for 2011-12 and will share their Professional Development activities with all area private and public schools.

1. Curriculum:

LSMSA offers a comprehensive college level curriculum in Math and Computer Science, Science, Humanities, Foreign Language, and the Arts. LSMSA is a public, residential high school for highly motivated and high achieving sophomores, juniors, and seniors. Courses are taught at the college-level by college-level faculty using college textbooks. Students' schedules resemble their college counterparts' schedules in that courses meet either Mondays, Wednesdays, and Fridays for 50 minutes or Tuesdays and Thursdays for 75 minutes. The majority of LSMSA courses articulate for college credit at in-state public universities and one out-of-state university. Students who earn mostly A's and B's can earn up to 54 hours of credit via articulation. 70% of our faculty hold PhD's or terminal degrees, the rest have Master's degrees, allowing students to engage with teachers and peers at a level of rigor often unmatched by the schools from which they transferred. Once students meet the state graduation requirements, they are able to choose from a variety of specialized electives.

Our Mathematics and Computer Science Department offers a diverse curriculum to accommodate a variety of student interests. Students receive rigorous instruction in a supportive learning environment. The faculty places an emphasis on conceptual understanding, analytical skills, problem solving, application, and appropriate use of technology. Course content ranges from introductory level courses like College Algebra and Computer Applications to upper-level electives like Differential Equations, Topology, Data Structures, and Computer Networking. This year, LSMSA was able to offer 15 distinct courses in mathematics which allows the school to tailor its program to meet the needs of any individual student admitted.

The Science Department seeks to educate and inspire all students in an energized science environment that recognizes individual student needs and interests while teaching a college-level curriculum. LSMSA provides all students access to modern laboratories with the help of a recent \$800,000 renovation and equipment acquisition. In Biology, students are able to use an extensive fossil collection, a microscopy camera, and a state-of-the-art microbiology lab. The school recently constructed a greenhouse for use by botany students. In Chemistry, weekly labs and individual research is aided by Gas Chromatography equipment, an Electrochemical Analyzer (on loan from NASA), and Visible Spectrophotometers. In Physics, students have access to two labs equipped with PASCO Science Workshop 750 computer interfaces and a telescope for Astro-photography. LSMSA's Science department is able to offer content ranging from introductory level courses to upper-level electives. All of the school's required science courses (Biology, Chemistry, Physics sequences) include a separate, required laboratory component which allows students an opportunity for hands-on learning and allows them to interpret and analyze scientific data while developing significant problem-solving skills. LSMSA was able to offer 21 distinct science course offerings ranging from Introductory Biology to Thermodynamics, Observational Astronomy and Photography, and Applied Chemistry and Engineering.

The mission of the Humanities department is to prepare students for the intellectual demands of the university experience; to foster and encourage students to become better writers and readers; and to instill awareness of the complexities of history and literature. While meeting the requirements for a high school diploma, students are able to explore topics of great breadth and depth with teachers who are experts in their fields. Upper-level electives include European Intellectual History, Post World War II America, Film Studies, and Kurt Vonnegut.

LSMSA firmly believes that the successful study of foreign languages can not only expand a student's own individual potential, it can better equip them for college entrance, prepare them for unique job opportunities, and outfit them with an important tool in a global society. LSMSA is able to offer introductory to advanced learning opportunities in five languages: Latin, French, Spanish, German, and Russian. All students must meet the state requirement in Foreign Language—2 units (and 2 levels) of the same language. Students are encouraged to enroll in at least 3 years of a Foreign Language. Students can

also take introductory courses in Greek and Italian.

LSMSA's Creative and Performing Arts Department allows students to develop an appreciation for the creative and performing arts; fosters and encourages creative exploration and development; facilitates a cooperative learning environment; teaches the value of our cultural heritage; and instills a sense of creative discipline. Students enrolled at LSMSA have opportunities to study and perform in Music, Dance, Theatre, Visual Arts, and Creative Writing.

LSMSA understands that students working in such a rigorous academic environment need a physical outlet for their sometimes stressful lives. The Health and Physical Education department's motto is "healthy minds thrive in healthy bodies". Students are given opportunities to learn or refine skills in lifelong sports like tennis, team sports, or karate. The state-required course in health and wellness contains both physical and academic rigor while providing a solid base from which students learn to make good decisions about nutrition, exercise, and wellness.

2. Reading/English:

The English Department at LSMSA has six members, all with Ph.D.'s in literature. The sophomores and juniors must take a year-long composition course centered on writing argumentative non-fiction essays. Juniors must also write a research paper from a casebook consisting of a novel or poems and a section of literary criticism published by professional scholars. These courses give students the chance to improve the grammatical, organizational, and stylistic components of their writing. Students are encouraged to bring rough drafts of their essays to writing conferences with their teachers. At least ten essays are submitted by each student over the course of the academic year.

When students transfer to LSMSA from their home high schools, the faculty finds considerable differences in their writing skills. Because of those differences, the English faculty has developed a very individualized writing curriculum that allows for one-on-one writing conferences to occur during guided study or faculty office hours. Students are encouraged to come by their teacher's office and bring a rough draft of their paper so that their teacher can show them areas that need improvement. The faculty has acknowledged that some differences in the ability to write are caused by learning disabilities, and faculty members work closely with the school's 504 committee to develop interventions that allow the students to use technology, have extended time on tests, or use teacher-provided study guides. Some students arrive at LSMSA with no experience in academic writing, and for those students, the rigorous writing curriculum provides the necessary foundation for them to become good writers. Students with weak backgrounds in English usually have underdeveloped vocabularies, so a new vocabulary course was added, one that teaches students the Greek and Latin roots of many English words. If successful, this grant-funded course could be expanded to become part of the year-long composition courses that are taught to sophomores and juniors. This increased emphasis on vocabulary building is expected to have a positive impact on students' performance in upper-level elective courses, such as Shakespeare, Irish Poets, British Fantasy, and Southern Literature. Encouraging life-long reading and engagement in the literary arts is one of the English Department's top priorities at LSMSA.

3. Mathematics:

The Mathematics curriculum at LSMSA includes Geometry (delivered online by Louisiana Virtual School), College Algebra (yearlong), Accelerated College Algebra (same material as in Acc. College Algebra but in one semester) and the following one semester courses: Trigonometry, Precalculus, Probability and Statistics, Discrete Mathematics, Calculus I, II, and III, Chaos Theory, Linear Algebra, Modern Algebra, Topology, and Differential Equations. All students must take 4 units of mathematics, some of which they bring from their home school. Students are placed into math courses using transcripts, standardized test scores, and placement test scores.

Many students take far more than the minimum requirements in math and some take as many as 10 math courses at LSMSA. All math teachers schedule at least 10 hours per week where they are available to tutor and provide additional instruction. In addition, math teachers hold evening office hours so that

students needing help can find teachers available every evening Monday through Thursday, and all students are welcome. LSMSA provides summer school where students may remediate or get ahead in Trigonometry and Calculus, and a program called EXCEL where at-risk students are bridged into the school in a month-long program in June. Both summer school and EXCEL students tend to be very successful at the school.

LSMSA students regularly compete in the MAA regional competition for colleges in Louisiana and Mississippi. LSMSA is the only high school that competes against LSU (often against our alumni), Louisiana Tech, Tulane, Ole Miss, Mississippi State, and others, and LSMSA's students do very well. They routinely win the Integration Bee and in 2003 won the overall competition. LSMSA students also participate and do very well in the AMC10 and AMC12 competitions.

4. Additional Curriculum Area:

The LSMSA Science Department seeks to educate and inspire students in an energized science environment that recognizes individual needs and interests while teaching a college-level curriculum. Currently, LSMSA offers two levels of Biology and Chemistry and three levels of Physics to meet the individual needs of students. All of these courses have a weekly laboratory component that provides hands-on experience. Students in these courses are evaluated by a standardized exam in the appropriate discipline in the second semester to measure yearly performance. Instructors are available for ten office hours per week to help students struggling with coursework. Three of the ten office hours are designated as Guided Study, a time when students can work with their instructor in a relaxed setting. Several Science Department instructors offer Guided Study after the regular school day so students have greater access to support activities. Every year, members of the Science Department teach in the summer Excel program, which is designed to assist students in making the transition to LSMSA coursework. For students who are seeking a career in the sciences, the Science Department also offers electives in each of the three disciplines. There are currently seven electives offered in Biology including Human Anatomy and Physiology and Ecology, four of these with labs. Of the four electives in Chemistry, Organic and Analytical include labs. There are five electives in Physics - Astronomy and Astrophotography include labs. These electives allow students to expand their knowledge base well beyond that of the typical high school student. Two team-taught courses are offered to LSMSA students, Science Research Methods and Science Seminar, to promote science writing and presentation skills. Instructors are also willing to work with students with specific interests not covered in the curriculum by sponsoring the student in an independent study. The Science Department offers a wealth of co-curricular and extracurricular activities for students with an interest in Science. Among others, these activities include the Future Scientist Program, Science Club, Science Quiz Bowl, Medical Explorers, and Envirothon. Students with an interest in research have the opportunity to work with the science faculty to find a position for summer work at a university or to pursue a research project at LSMSA. These students often compete in national research competitions such as the Siemens Competition, Intel Science Talent Search, and Intel ISEF.

5. Instructional Methods:

As a public, residential high school for high achieving students across the state, emphasis is placed on preparing students for success at LSMSA by understanding individual differences even before students officially set foot on campus. Throughout the admissions process, data on students' academic performance is gathered and reviewed in an effort to anticipate student needs upon enrollment. For example, students with high GPAs but low standardized test scores are offered admission through LSMSA's summer bridge program, EXCEL. The goal of the EXCEL program is to give students from under-resourced schools the knowledge and skills necessary to be successful at LSMSA. Students admitted through EXCEL attend a four week summer academic program that emphasizes critical reading, writing, and problem-solving skills.

Once new students arrive on campus, LSMSA encourages differentiated instruction and individualized learning at both the institutional level and the individual level. As a residential school, LSMSA is able to offer unique opportunities for students to interact with instructors on a one-on-one basis outside of class. All faculty members are in their offices seven office hours per week to assist individual students and all

faculty have three hours of guided study per week. Students may utilize office hours to get additional help on homework, prep for quizzes or tests, or to review a new or confusing concept initially covered in class. Three hours a week during guided, all faculty are available between 1-2 pm to offer study sessions, test reviews, etc. Faculty and student tutors are available during evening study hours to again assist with academic work on an individualized basis.

LSMSA's faculty also provides differentiation for students who experience academic difficulty due to physical or learning disabilities. The 504 committee recommends appropriate accommodations to ensure that these students are able to access the curriculum. Examples of individualized accommodations include extended time on exams; the use of assistive devices like voice recorders and laptops for note-taking; audio text books; text to speech software; peer tutors; designated note takers; oral testing; homework or project modifications; graphic organizer software; repeated directions; special courses in study skills, note-taking; advising to take courses to strengthen a student's academic background; social or emotional counseling. The counseling staff offers programs to help students and their families understand the college application process. . Many students at LSMSA are first generation college attendees and need help understanding FAFSA, the need for college visits, and the scholarship process.

6. Professional Development:

LSMSA sets aside 4 professional development days annually for faculty and staff. In years past, professional development was discussed at administrative meetings and chosen by the administrative team. A year ago, the school implemented a new structure where decision-making abilities were passed to six newly created networks. One of them, the Professional Development Network, is made up of faculty members and administrators who chose to serve on that network. They meet approximately every two months and look at data on student performance and other pertinent data to determine what professional development needs to be offered. In 2009-10, the 504 committee recommended that the faculty be inserviced on differences in how students learned, and a professional development session was scheduled on the different learning styles exhibited by students and what those learning styles required of the teacher. This year they studied student performance on End of Course testing and saw a need to schedule professional development training dealing with LSMSA's curricular alignment to national and state standards.

The professional development network also identified a need to look at the LSMSA curriculum and evaluate it for rigor, relevance, and interdisciplinary learning. This PD was recommended to the network by the school's economics teacher. The network scheduled a PD on "Inventiveness in the Curriculum" that will enable faculty to develop coursework requiring students to work at a high level of engagement. While LSMSA students are often immersed in content, the current curriculum often avoids requiring the students to synthesize that content and apply the knowledge to unpredictable situations. Furthermore, aside from arts courses, students are rarely given the opportunity to freely create and expand their knowledge through invention. This PD will train the faculty on the importance of connecting content between disciplines with real world applications. It is the hope of the network that this PD will shift the conversation from pure content coverage to student learning and achievement, and the results will impact student performance.

7. School Leadership:

The Louisiana School for Math, Science, and the Arts was created by statute to be independent of the state's Board of Elementary and Secondary Education, and to be governed by a Board of Directors that includes both gubernatorial appointees and ex officio members. The Board of Directors hires and evaluates the Executive Director (Superintendent) to lead and manage the school. On the Executive Director's staff are two directors that are charged with oversight of the academic and the residential program. The Director of Academic Affairs operates in most ways as a school principal. He is responsible for academic policies, scheduling, course development, teacher evaluation, professional development, the work of the college counselors, assessing students' academic performance, and when necessary, enforcing discipline. The Director of Student Affairs plays an equally important role in the administration of the school. Because LSMSA is a residential school, the descriptive phrase is applied that it is a "Living /

Learning Environment.” While her primary responsibilities are in the procedures and programs of the residence halls, it is when these residential and academic sides work as one that significant opportunities occur for student growth. There is also a Director of Fiscal Affairs, a Director of Admissions and Outreach, and a Director of External Affairs (communications and grant writing).

Four years ago, a New Student Orientation program was developed in order to help incoming students better understand what is necessary for success at LSMSA. This program continues to evolve, and prove its importance as part of an overall improvement in student satisfaction. An advising program has also been expanded so that each teacher works from a common set of guidelines and expectations, and this year teachers and students read and incorporated a common study skills text. A peer-mentor program now provides senior students as tutors for undergraduates and is very successful in encouraging students to learn from each other. The school also has a system that recognizes a student’s struggle or success. If grades fall or teachers report that homework isn’t being turned in, the student loses personal control over his or her time and is on academic probation until turning things around.

The “Living / Learning Environment” is a key part of LSMSA. Graduates report that, in addition to the college preparation they received in the classrooms, the importance of the lessons learned about self management was key in their college success.

PART VII - ASSESSMENT RESULTS

STATE CRITERION-REFERENCED TESTS

Subject: Mathematics

Grade: 10 Test: LA Graduation Exit Exam

Edition/Publication Year: 2006-2010 editions Publisher: State of LA

	2009-2010	2008-2009	2007-2008	2006-2007	2005-2006
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.	100	100	100	100	99
In LA, this term includes the scores for Mastery plus Advanced.	85	80	100	88	92
Number of students tested	67	42	34	111	154
Percent of total students tested	100	100	100	100	100
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free/Reduced-Price Meals/Socio-economic Disadvantaged Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In La, this term includes the scores for Mastery plus Advanced.				83	92
Number of students tested				18	36
2. African American Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In La, this term includes the scores for Mastery plus Advanced.				75	100
Number of students tested				12	20
3. Hispanic or Latino Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In La, this term includes the scores for Mastery plus Advanced.					
Number of students tested					
4. Special Education Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In La, this term includes the scores for Mastery plus Advanced.					
Number of students tested					
5. English Language Learner Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In La, this term includes the scores for Mastery plus Advanced.					
Number of students tested					
6. Asian					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.	100			100	100

In La, this term includes the scores for Mastery plus Advanced.	92			100	100
Number of students tested	12			14	16
NOTES: Data for the 2005-2006 and the 2006-2007 GEE in English and Math was compiled from the cumulative folders of students who transferred into LSMSA as juniors from across the state. In 2007-2008, LSMSA began accepting sophomores.					

11LA1

STATE CRITERION-REFERENCED TESTS

Subject: Reading

Grade: 10 Test: English Language Arts

Edition/Publication Year: LA Graduate Exit Examination/2005-2010

Publisher: State of LA

	2009-2010	2008-2009	2007-2008	2006-2007	2005-2006
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.	100	100	97	100	100
In LA this term includes the scores for Mastery and Advanced scores.	72	76	82	80	90
Number of students tested	67	42	34	111	154
Percent of total students tested	100	100	100	100	100
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free/Reduced-Price Meals/Socio-economic Disadvantaged Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In LA this term includes the scores for Mastery and Advanced scores.				78	92
Number of students tested				18	36
2. African American Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In LA this term includes the scores for Mastery and Advanced scores.				75	100
Number of students tested				12	20
3. Hispanic or Latino Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In LA this term includes the scores for Mastery and Advanced scores.					
Number of students tested					
4. Special Education Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In LA this term includes the scores for Mastery and Advanced scores.					
Number of students tested					
5. English Language Learner Students					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In LA this term includes the scores for Mastery and Advanced scores.					
Number of students tested					
6. Asian					
In LA this term includes the scores for Basic,	100			100	100

Mastery, and Advanced scores.					
In LA this term includes the scores for Mastery and Advanced scores.	75			79	81
Number of students tested	12			14	16
NOTES: Data for the 2005-2006 and the 2006-2007 GEE in English and Math was compiled from the cumulative folders of students who transferred into LSMSA as juniors from across the state. In 2007-2008, LSMSA began accepting sophomores.					

11LA1

STATE CRITERION-REFERENCED TESTS

Subject: Mathematics

Grade: 0

	2009-2010	2008-2009	2007-2008	2006-2007	2005-2006
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.	100	100	100	100	99
In LA, this term includes the scores for Mastery and Advanced scores.	85	80	100	88	92
Number of students tested	67	42	34	111	154
Percent of total students tested	100	100	100	100	100
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free/Reduced-Price Meals/Socio-economic Disadvantaged Students					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In LA, this term includes the scores for Mastery and Advanced scores.				83	92
Number of students tested				18	36
2. African American Students					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In LA, this term includes the scores for Mastery and Advanced scores.				83	92
Number of students tested				18	36
3. Hispanic or Latino Students					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.				100	100
In LA, this term includes the scores for Mastery and Advanced scores.				75	100
Number of students tested				12	20
4. Special Education Students					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.					
In LA, this term includes the scores for Mastery and Advanced scores.					
Number of students tested					
5. English Language Learner Students					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.					
In LA, this term includes the scores for Mastery and Advanced scores.					
Number of students tested					
6. Asian					
In LA, this term includes the scores for Basic, Mastery, and Advanced scores.	100			100	100
In LA, this term includes the scores for Mastery and Advanced scores.	92			100	100

Number of students tested	12			14	16
NOTES: Data for the 2005-2006 and the 2006-2007 GEE in English and Math was compiled from the cumulative folders of students who transferred into LSMSA as juniors from across the state. In 2007-2008, LSMSA began accepting sophomores.					

11LA1

STATE CRITERION-REFERENCED TESTS

Subject: Reading

Grade: 0

	2009-2010	2008-2009	2007-2008	2006-2007	2005-2006
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
In LA this term includes the scores for Basic, Mastery, and Advanced scores.	100	100	97	100	100
In La, this term includes the scores for Mastery and Advanced scores	72	76	82	80	90
Number of students tested	67	42	34	111	154
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Number of students tested					
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In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
In La, this term includes the scores for Mastery and Advanced scores					
Number of students tested					
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In LA this term includes the scores for Basic, Mastery, and Advanced scores.					
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