

August 30, 2001

Mr. Les Boles, Director  
Office of State Budget, Budget & Control Board  
1122 Lady Street, 12<sup>th</sup> Floor  
Columbia, SC 29201

Re: 2000-2001 Accountability Report

Dear Mr. Boles:

It is a pleasure to submit the 2000-2001 Accountability Report for the 13<sup>th</sup> year of the Governor's School for Science and Mathematics (GSSM).

To maximize the benefit from every dollar we spend to educate our students, GSSM is dedicated to incorporating quality management principles into every part of our operation. We have come a long way in striving toward and reaching ever-higher standards for student achievement during the past twelve years. We are looking forward to forging additional opportunities for bright, hard-working South Carolina students when we move to our new campus, which is now under construction.

As a small agency, we at GSSM regularly use internal staff work, Board review, and customer surveys to review and refine our vision and our mission. We set goals, define metrics, and reassess programs, policies and procedures. In order to best deploy our resources to meet our goals, we use a collegial committee structure involving both internal and external organizations, public and private. GSSM designs programs based on a challenging standards-based curriculum to meet identified needs.

The quality management principles detailed in this report have led to GSSM being recognized as one of the premier schools in the nation as measured by the success of graduates of our programs, both residential and outreach. These long-term successes have arisen from annual objectives with associated performance indicators. These indicators include: test scores and other academic measures; scholarships offered and accepted; comparisons with benchmark residential schools in other states; the extremely high recruiting priority universities place on our graduates; demand for our outreach services; and the support of business and industry in helping GSSM provide advanced educational opportunities. The steady increase in stature of the school has created the need to expand into purpose-built facilities.

With this year's report, GSSM is beginning to integrate information developed in conjunction with the Education Oversight Committee (EOC). I will be happy to provide additional information and ask that if you have any questions, please call me.

Sincerely,

Dr. Murray W. Brockman  
President

## Section I – Executive Summary

### A. Major Achievements from past year

#### **Major Achievements, Status: FY 2000-2001 Accountability Report SC Governor’s School for Science & Mathematics (GSSM)**

Repeatedly recognized nationally for excellence, GSSM advances academic achievement throughout South Carolina by offering comprehensive residential and exemplary outreach programs for students and teachers.

- Demand for placement in GSSM programs far exceeds availability. For application to the two-year (11<sup>th</sup> and 12<sup>th</sup> grades) residential program just one of every three qualified applicants can be accepted. (All six of the State’s congressional districts are, however, represented in the GSSM’s annual student body.) GSSM’s acclaimed Mentored Research Program recently had over 200 students vying for 33 available positions.
- Since its founding in 1988, GSSM has led the State in the number of National Merit Semifinalists and Finalists. GSSM also continues to have the highest SAT scores in the State.
- 100% of GSSM students attend college. More than 90% attend graduate school.
- GSSM graduates are in demand from universities and colleges. One example of this demand is the almost \$7,000,000 in scholarships and grants offered to 60 GSSM graduates in the class of 2001.
- GSSM continues to infuse exceptional students into South Carolina colleges and universities, with an average of 50% of our graduates selecting in-state schools.
- All classes at GSSM are advanced or college-level. The emphasis of GSSM’s curriculum is mathematics and science; but diligence is taken to provide a completely balanced curriculum that prepares the students for becoming contributing members of the workforce and society.
- More than 3,600 students and teachers from across South Carolina have participated in GSSM Outreach Programs since 1990. For example, the School’s Summer Science Program (SSP) annually provides hands-on lab and field experience for up to 300 of the State’s 9<sup>th</sup> and 10<sup>th</sup> graders. Scientists, donated from South Carolina universities, lead these students. The in-kind value of their services alone is estimated in excess of \$414,000 annually. GSSM’s acclaimed Mentor Research Program places approximately 100 rising high school seniors to work each summer in the laboratories of leading research scientists – from both industry and universities.

- GSSM aggressively offers statewide Distance Education – providing advanced courses to students and teachers including:

Anatomy and Physiology

Introduction to Engineering

Organic Chemistry

Statistics

Cellular and Molecular Biology

Forensic Chemistry

These courses can provide students anywhere in the state access to advanced courses that help meet the requirement for increased units for graduation.

- As a leader in providing advanced Distance Courses, GSSM uses two-way and satellite video, computer networks, and hands-on sessions. Students anywhere in the state, who may not have the opportunity to study such high level courses, benefit markedly from this exposure to courses that are a prerequisite for entry into the professions in demand today. GSSM's network supports students in five schools classified as "impaired."
- GSSM's residential enrollment includes 29% minority students while the Summer Science Program includes an average of 27% minority students over the past four years.
- To help meet growing demand for our statewide programs, GSSM is building a new campus set to open in August of 2003. The Residential program will increase from its current 128 students up to 300 students, while outreach programs for students and teachers will expand by thousands.
- To enhance state funding, the Governor's School Foundation has embarked on A Campaign for Sustaining Excellence to raise \$8 million to establish a permanent endowment. This fund is necessary to create and maintain the "margin of excellence" which is the hallmark of GSSM programs. Thus, the Campaign is turning to corporations, foundations and individuals committed to excellence in scientific, mathematics and technological education. To date, over \$7,000,000 has been committed to the GSSM Endowment from business & industry, Foundations and individual supporters who recognize GSSM unique and effective role in quality education.

#### Other GSSM Facts:

- 95 high schools were represented in GSSM's recent class of 127 residential students.
- GSSM students achieved a 91% pass-rate on AP exams (accomplished even though GSSM has no designated AP courses).
- Average SAT scores: 1357 (highest in the State)
- In national competition, GSSM's Math Team earned 8<sup>th</sup> place in the nation.
- Over 650 Middle School students from across South Carolina will participate in GSSM Outreach programs.
- 312 9<sup>th</sup> and 10<sup>th</sup> grade students (9<sup>th</sup> and 10<sup>th</sup> graders) teamed with university scientists during GSSM's Summer Science Program.

## **B. Mission and Values**

### **Mission and Values Statement**

#### **South Carolina Governor's School for Science & Mathematics**

(Revised 6/12/2001)

The purpose of the South Carolina Governor's School for Science and Mathematics (GSSM) is to offer the most academically able students of this state a learning environment that strengthens their ability to think critically, stimulates the joy of learning, and fosters the excitement of discovery through scientific research.

GSSM broadens the horizons of the mind, expands intellectual and personal growth, and cultivates the uniqueness of each student. The School builds a strong sense of community among students, faculty and staff in a residential setting.

Emphasizing science, mathematics, and technology, the Governor's School for Science and Mathematics is an educational resource which serves the State of South Carolina as a model for academic excellence and provides a diverse range of outreach programs and partnerships.

### C. Key Strategic Goals for Present and Future Years

1. Continue and strengthen residential and outreach programs, enhancing excellence and meeting opportunities statewide
  - a. Use the new campus expansion opportunity to review and upgrade curriculum
  - b. Define enhanced math/computer science & technology offering(s)
2. Build the new campus on time and on budget
  - a. Finalize Phase 2 plans, Capital Funding and support appropriations request
  - b. Define project management metrics and processes with new project manager
  - c. Finalize Furniture, Fixtures & Equipment requirements and support appropriations request
  - d. Negotiate future facilities fees with Coker
3. Double the size of the student body and faculty while maintaining or improving quality and minority enrollment
  - a. Visit school districts – present the opportunity, hear feedback
  - b. Analyze “competition” – AP, IB, private schools, other. How are we unique?
  - c. Evaluate 10<sup>th</sup> grade admission
4. Spearhead efforts toward leadership in South Carolina science and math education via our outreach programs.
  - a. Uncover grant opportunities – especially in teacher training
  - b. Firm up summer research coordination with USC, Clemson, MUSC
5. Enhance the profile of GSSM across the state
  - a. Establish role in SC state initiatives to improve science and math education
  - b. Establish role of parents in the school vision
  - c. Create targeted communications plan for internal and professional implementation
6. Continue to focus on the development of high character and exceptional skills in our students –
  - a. Evaluate honor codes at other schools
  - b. Review handbook and emphasize principles

**D. Opportunities and barriers** that may affect the agency's success in fulfilling its mission and achieving its strategic goals (This establishes the basis for the agency's budget request).

**Opportunities:**

1. Construction of GSSM's new campus and subsequent opening in August 2003.
  - a. State-of-the-art facilities for technology in education, mathematics, bioscience, computer science and engineering.
  - b. Facilities equal to quality of teachers/students in program and for greatly expanding outreach efforts in Recertification, standards-based instruction and quality research.
  - c. GSSM's new campus will provide a year-round "educational" center for South Carolina.
  - d. Increase impact of residential program from 128 to 300 students
2. Extend quality GSSM programs' reach and depth to a "critical mass" of students and teachers, both residential and outreach.
  - a. GSSM's new campus will enable up to 300 of the state's brightest and most-motivated students to participate in the intensive full immersion of our leading-edge residential program. This larger number will provide opportunity for even more students from every corner of South Carolina to participate.
  - b. Teachers from throughout South Carolina will have the opportunity to take courses at the new campus or in their local areas through GSSM's distance learning programs. Recertification and Non-standard Certification opportunities abound.
  - c. High-quality courses will be offered via interactive video link to high schools, middle schools, and elementary schools statewide.
3. Enhance quality of life throughout South Carolina by providing an enhanced supply of high-quality engineers, scientists, doctors, and other professionals who have a strong predilection to seek employment in South Carolina
4. Raise pride and awareness South Carolinian's have in their young scholars – by increasing communicating the national and world-level achievements our students are producing through challenging GSSM programs – both residential and outreach.

**Barriers:**

1. Funding. GSSM's growth plans for the new campus requires the following resources:
  - a. Transition funds to begin recruiting teachers BEFORE opening the new campus in 2003.
  - b. Phase II Construction Funds to build the quality laboratories and classrooms planned for the new campus. This facility is the "heart" of GSSM's academic programs.
  - c. Furniture, Fixture and Equipment funds to outfit the new \$27M campus.
  - d. Operating costs increases to:
    - i. Operate and maintain high tech facilities
    - ii. Increase student body size
    - iii. Increase faculty size to support increased student body
2. Hiring new faculty and staff for expansion with adequate lead time
3. Misperception that Science/Math/Technology is not a state education priority – that South Carolina's academic and economic future does not rest in providing our state's best with a challenging education.

## Section II – Business Overview

1. Number of Employees: Full-Time State: 32
2. Operations location(s)

Primary Facilities Leased from Coker College: Headquarters at 306 E. Home Ave. Hartsville, SC 29550

- Office Space
- Classrooms
- Dormitory Facilities
- Dining Facilities
- Athletic Facilities
- Shared-use Facilities (Tennis Courts, etc.)
- Library Facilities

Secondary Facilities: Leased est. 4,000 sq. feet for Outreach and Admissions Staff.

Future Facilities: Phase One of GSSM's New Campus (\$27M Construction) is under construction at 401 Railroad Ave., Hartsville, SC. Opening in August of 2003.

## Accountability Report Appropriations/Expenditures Chart Example

Use the chart for Section II Business Overview Item 3 in the accountability report.

Major Budget Categories	99-00 Actual Expenditures		00-01 Actual Expenditures		01-02 Appropriations Act	
	Total Funds	General Funds	Total Funds	General Funds	Total Funds	General Funds
Personal Service	\$1,497,935	\$ 1,458,356	\$1,744,402	\$ 1,605,216	\$1,692,234	\$ 1,637,311
Other Operating	\$1,586,122	\$1,214,406	\$1,492,137	\$ 1,218,976	\$2,056,725	\$ 1,168,976
Special Items						
Permanent Improvements	\$289,582		\$463,404		\$ 4,137,000 (est.)	
Case Services						
Distributions to Subdivisions						
Fringe Benefits	\$357,285	409,996	424,689	\$ 418,996	365,659	\$ 427,826
Non-recurring						
Total	\$3,724,924	\$3,082,758	\$4,124,632	\$3,243,188	\$8,264,818	\$3,249,232

### Other Expenditures

#### Other Expenditures

Sources of Funds	99-00 Actual Expenditures	00-01 Actual Expenditures
Supplemental Bills		
Capital Reserve Funds		

## Section II Continued...Business Overview

### 4. Key Customers

<b>“CUSTOMER”</b>	<b>“PRODUCT” CONSUMED</b>	<b>KEY NEEDS</b>	<b>METRICS</b>
Residential Students, Grades 11-12	Advanced coursework, Full-immersion residential program	Advanced curriculum, Flexible offerings, College preparation, Faculty w. adv. degrees	College admissions, Adv. placement, Scholarship offers, Subject mastery
Distance Learning Students	Advanced coursework, specialized instruction	Advanced curriculum, broad-based offerings, capable and flexible instructors,	Number of students, number of schools served, number of disadvantaged schools served
Parents	Students’ education and character development, Student safety and well- being	Adv. Curriculum, Student Community service, security	College placement, scholarship offers, safety/security metrics
South Carolina Science and Math teachers	Non-standard certification, Recertification, content development	Advanced course content, certified courses, instruction assistance	Number of teachers served
South Carolina school principals and superintendents	DL courses, teacher Recertification	Reduced cost, alleviate teacher shortage	Cost per student served, course offerings
South Carolina colleges and universities	Advanced students	Highly prepared and able students	Attendance in SC col. and univ.
SC business community	Advanced college grads	In-state grads	Graduates employed in state
SC general public	Advanced college grads	Hi-tech industry for jobs	Quality of life

### 5. Key Suppliers:

- i. Coker College: Provides majority of leased facilities, services including food, security, data infrastructure, etc.
- ii. S.C. Universities provide GSSM with instructors, mentors, and other resources.
- iii. S.C. Schools and School Districts provide students, teachers, partnerships and support.
- iv. S.C. parents provide students and form a key partnership for success
- v. State Engineer’s office provides expertise for capital construction
- vi. State offices available to us and other state agencies, e.g. State Budget and Control Office for Management Support (procurement, capital projects), State Department of Education for personnel/finance administration, etc.

## 6. Description of major products and services

Provide advanced and challenging academic courses and experiences, with an emphasis on science, mathematics and technology, to students and teachers in South Carolina. GSSM features two distinct, yet complimentary, program areas: a full-time Residential Program for 11<sup>th</sup> and 12<sup>th</sup> graders and statewide Outreach Programs from elementary through high school.

## 7. Organizational Structure

GSSM utilizes a “tiered” organization structure, but with open communication between all levels. (See attached organizational chart. GSSM’s structure is led by our governing Board of Trustees, with a President and five vice-presidents addressing primary functional areas. Resource responsibility and authority (both personnel and financial) is placed in the hands of those closest to working with our key customers.

Externally, GSSM using a “partnership” model, designing and building programs based on identified needs and shared resources.

### **Section III – Elements of Malcolm Baldrige Award Criteria**

Category 1 – Leadership, communication...

1. How do senior leaders set, deploy and communicate:

a) Short and long term direction?

GSSM leadership takes advantage of the small size of the organization to involve all members of faculty and staff in setting long and short-term direction. The Board of Trustees and key customers, including students and parents, are also consulted.

Faculty and staff are consulted monthly via a “President’s Report”. Top administrators participate in an annual strategic planning retreat. The Board receives monthly reports in writing, and Board subcommittees take an active role in setting direction for specific areas of school administration, including Facilities, Personnel, Organizational Enhancement, and Distance Learning. Parents are consulted through GSSM’s Parents Advisory Council (PAC). The PAC provides regular updates on school issues, accomplishments, and changes. Students participate in direction-setting via monthly Student Council meetings. The Chair of the Student Council meets regularly with the President. All parents and legislators receive the annual School Report Card, which indicates strategic direction as well as reports results.

b) Performance expectations

GSSM uses both the state Employee Performance Management System (EPMS) and a specialized faculty evaluation instrument. In addition, specific expectations are set with teaching faculty regarding student achievement via one-on-one discussions with the Academic Vice President.

c) Organizational Values

Values are communicated by our Vision and Mission statements, which are reviewed annually. In addition, faculty, staff and students regularly meet in a context where values can be openly discussed.

d) Empowerment and Innovation

Because of the small size of the agency, the President and all senior administrators maintain an open door policy, encouraging the free flow of ideas and empowering all staff and students to implement ideas with minimal barriers and appropriate oversight.

e) Organizational and employee learning

All faculty members belong to at least one professional organization, and several are or have been officers of national organizations. All faculty members undertake professional development annually. Staff personnel receive training whenever new programs or technology are implemented.

f) Ethical behavior

Faculty, staff, and students participate in annual reviews of the Student Handbook. Faculty and students participate in the Honor Council. Faculty and staff participate in the Judicial Council.

2. How do senior leaders establish and promote a focus on customers?

Gauging satisfaction for customers involves demand for GSSM programs and achievements during their participation. Examples include scholarships offered, continued academic participation and success measurements. For teachers, development of and participation in programs, and use of improved skills and knowledge in the classroom to enhance student achievement measure satisfaction.

3. What key performance measures are regularly reviewed by your senior leaders?

Performance metrics are listed in section 7.

4. How do senior leaders use organizational performance review findings and employee feedback to improve their own leadership effectiveness and the effectiveness of management throughout the organization?

The small size of the agency permits regular informal and formal feedback at and around all levels of the organization. Students fill out feedback forms at the end of each semester, and classes are regularly audited.

5. How does the organization address the current and potential impact of its products, programs, services, facilities, and operations, including associated risks?

We survey parents and students annually.

6. How does senior leadership set and communicate key organizational priorities for improvement?

Priorities for improvement are part of short-range direction included in 1.1.a) above.

7. How does senior leadership and the agency actively support and strengthen the community?

Senior staff are all members of key civic organizations, and regularly interact with local elected officials. Students must each provide 83 hours of work service annually, of which about 25% is outside the school in the community.

## Category 2 – Strategic Planning

Strategic Planning at GSSM is an on-going process with formal committee structures created within and between divisions (and Boards) and informal discussions and recommendations solicited and welcomed at any time. A formal end-of-year review and planning session for the upcoming year is conducted in June.

### Category 3 – Customer Focus

GSSM key “customers” are the students and teachers of South Carolina – and our partners in education and industry. GSSM concentrates on “raising the bar” of academic achievement: challenging and motivating students to take advanced courses and put in the hard work necessary to successfully complete the curriculum. There is no grade inflation, but merit based on achievement. We believe South Carolina’s future economic prosperity requires students well versed in science and mathematics supported by an excellent foundation in the humanities. These are the courses necessary for entry and success into higher education, as a prerequisite for professional success. GSSM is a leader in both setting achievement standards and integrating “education standards” into modules for students and teachers.

### Category 4 – Information and Analysis

1. How do you decide which operations, processes and systems to measure?

The decision on which operations, processes and systems to measure comes from internal and external review and recommendations. Internally, GSSM tracks student achievement on many levels including scholarships earned and recruitment by colleges and universities. Externally, GSSM works with educational organizations setting “report card” standards and other criteria.

2. How do you ensure data quality, reliability, completeness and availability for decision-making?

GSSM reviews and assesses the validity of both data collection devices (standardized tests, internal tests) and the results based on comparisons with other states and comparative measurements (such as classwork, class test results vs. standardized tests, etc.).

3. How do you use data/information analysis to provide effective support for decision-making?

In addition to the required statewide reporting under educational accountability (report cards), GSSM uses an internal data collection form, our GSSM by-the-numbers to both identify possible measurements and to collect the data. GSSM also collects and compares data with similar specialized residential high schools in other states.

4. How do you select and use comparative data and information?

Internal discussions on the type, source, and applicability of data lead to selection, rejection or process to collect additional data or change methodology of collection.

Budget decisions are based on directing appropriate resources to priority areas.

Category 5 – Human Resource Focus

1. How do you and your managers/supervisors encourage and motivate employees (formally and/or informally) to develop and utilize their full potential?

GSSM implements a collegial process of high expectations for employees, bolstered by on-going communications both formal (assigned committees on topics, evaluations) and informal meetings.

2. How do you identify and address key developmental and training needs, including job skills training, performance excellence training, diversity training, management/leadership development, new employee orientation and safety training?

GSSM supports continuing education for employees and has implemented a budget line-item for Professional Staff Training and Development.

3. How does your employee performance management system, including feedback to and from employees, support high performance?

GSSM utilizes EPMS and teacher evaluation systems to formalize communications and both identify priority work issues and also clarify results and expectations.

4. What formal and/or informal assessment methods and measures do you use to determine employee well being, satisfaction and motivation?

Being a small agency with open lines of communication, GSSM staff is in constant communication with one another, so problems are quickly identified. Formally, we also use EPMS and teacher evaluations, plus turnover rates which have been low compared to similar schools by position.

5. How do you maintain a safe and healthy work environment?

Constant communication and formal reviews as required. GSSM has a faculty member designated as safety officer.

6. What is the extent of your involvement in the community?

GSSM provides and manages student work service throughout the Hartsville community. In addition, staff is active in charity, church and service organizations. Formally, GSSM works with local schools including a grant-designed Elementary education program serving four local schools. GSSM is active in the local government (both city and county) and chamber of commerce (local and state).

### **Category 6 – Process Management**

1. Key Design and delivery processes for product/services, and how do you incorporate new technology, changing customer and mission-related requirements, into these design and delivery processes and systems?

The nature of our product is the inherent human trait of students and teachers to want to know more about the world around them, and develop this natural inquisitiveness into academic and scientific rigor. Our products and services, from classroom to residential, outreach to expectations, are designed to encourage disciplined exploration and discovery, while incorporating skills of communications and citizenship. This creates a learning community, which challenges individuals but rewards participation and results.

The “process” is based on teaming an “expert” with content knowledge and communication expertise in a specific area (discipline) with students in an environment where expectations are high. Technology is sought to enhance communication, feedback, streamline repetitive tasks and offer alternative learning methods. Novel advances in technology are themselves subject to inclusion in the curriculum and are regularly sought out by faculty members in consultation with our industry and university partners.

2. How does your day-to-day operations of key production/delivery processes ensure meeting key performance requirements?

Daily interaction allows review of short and long-term goal accomplishment (or delays). We keep class and dormitory attendance roles and quickly follow-up any absences by students.

3. What are your key support processes, and how do you improve and update these processes to achieve better performance?

Informal and formal (committee) communications processes. In addition to EOC report card information, GSSM uses an internal “GSSM by-the-numbers” document to capture data pertaining to programs. Data is collected and analyzed annually, as part of our accountability report process.

Strategic planning, as discussed above, results in GSSM focusing programmatic dollars and time (personnel) resources to accomplish specific results. For example, GSSM has set Gifted and Talented research and impact/influence of best practices as a focus.

A line item has been created for “professional development” and our teachers and staff will apply these funds to support Gifted and Talented research. Our focus on the “wellness model” for student support services – a comprehensive approach to allocate departmental and institutional resources - was developed through our strategic planning processes. The same holds true for middle school initiatives and our research and development of new campus plans for GSSM and what resources are needed to properly serve the students and teachers throughout South Carolina.

GSSM’s state budget requests and private fund-raising activities are based on strategic goals, measurement of current programs and customer demand.

4. How do you manage and support your key supplier/contractor/partner interactions and processes to improve performance?

Weekly, sometimes daily, meetings are held with key suppliers (Coker College) and partners (receiving school sites, partner agencies). Annual reviews are conducted.

### **Category 7 – Business Results**

1. What are your performance levels and trends for the key measures of customer satisfaction?

#### **Two sides of One Coin: GSSM’s Residential and Outreach Programs.**

GSSM designs and operates all programs to support one another and offer “steps” of greater involvement and learning appropriate to the individual student or organization. All staff and faculty at GSSM participate in and support both the residential and outreach programs of the school.

It is difficult to differentiate our “residential” program from outreach when acceptance as a residential student is a source of pride and feedback to the home school the student originally attended. The availability of GSSM programs encourages students, teachers and schools to participate in and develop challenging courses.

The GSSM residential program, for report purposes, can be subdivided into two equally supportive branches: academic and student development. Both areas are critical to success at GSSM and are therefore interdependent.

## Key Performance Measurements:

A primary measure of GSSM customer satisfaction is reflected in the school's Report Card rating = **Excellent**. This measurement captures a wide-range of data and comparatives and was designed in conjunction with the Education Oversight Committee.

### SC GSSM Report Card Data

#### PERFORMANCE

(1) Advanced Placement (AP) Pass Rate (Score of 3 or higher.)	91%	July 2001 data
(2) Graduates' College Freshman GPA (Attending in-state colleges)	3.57	
(3) SAT Average (High verbal/high math)	1357	

#### AP Test Score Distribution

Score	5	4	3	2	1
# Students(%)	52 (27%)	68 (35%)	59(30%)	15/(8%)	2 (1%)

#### College Freshman GPA

GPA	3.5+	3.3	3.1	2.9	<2.9	Total
# Students(%)	13 (65%)	5 (25%)	1 (5%)	0 (0%)	1 (5%)	20 (100%)

#### SAT Scores

	Middle 50%		Range	
SAT Verbal	650	720	550	800
SAT Math	640	715	570	790

#### INDICATORS OF SCHOOL PERFORMANCE

##### Students

% National Merit Semifinalists	23.3%
% National Achievement Semifinalists	83.3%
% Seniors Completing Science Research Project	100%
Community Service-hr./student	83
Average Daily Attendance Rate	97.7%
% Graduates Attending College	100%
% Seniors Eligible for LIFE Scholarship	100%
Total Scholarship \$ Offered	\$6,825,000
# Seniors	60

##### Faculty

% Teachers with Advanced Degrees	100%
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% Teachers with Doctorates	57%
% Teacher Average Daily Attendance	98.2%
Years Teaching Experience-Middle 50%	7 to 27
% Teachers Returning from Last Year	93%

School

Student-Teacher Ratio	10 to 1
Professional Development Days/Teacher	6

SCHOOL FACTS

Students

# Students in Residence (Male-Female)	127
# Student Clubs and Organizations	32
% Students Active in Clubs/Organizations	100%
# Varsity Sports Teams	7
% Students Participating in Varsity Sports	68%
% Students Returning to Home HS	5.5%

School

% Parent/Teacher Conferences	54.5%
President's Years at School	0
# University/Industrial Partners in Research Mentor Program	22
# Mentors in Research Program	85
Outreach to Other Schools:	
# HS units By Distance Learning	85
# HS participating in DL	20
# MS Students in Saturday Academies	531
# Students in Summer Science Program (SSP)	294
# University Partners in SSP	11
# Six-Week Mentorships Other HS	30

2. What are your performance levels and trends for the key measures of mission accomplishment?

In addition to the above Report Card information, several breakout areas reflect GSSM performance:

**Academic Residential School:**

Quality of Academic Program: •Average SAT score for class of 2000 = **1357**. Trend over time – consistent (1999=1340). (Benchmark Comparison: State HS Average, Higher Education Freshman SAT averages.)

Program Demand: •Qualified applicants continue to outnumber openings in the range of **3** applications for every **1** opening.

GSSM Graduates Attending In-State/Out-of-State Colleges & Universities. GSSM encourages students to attend in-state universities by promoting campus visits, conducting visits to in-state major educational institutions and inviting/encouraging seminars, classes and courses taught by in-state university faculty members. We are encouraged at the efforts in-state schools are making to recruit our graduates. Trend over time - about 50/50, some fluctuations.

<u>Year</u>	<u>In-State%</u>	<u>Out-of-State%: Benchmark: exceeds similar school's in-state rate.</u>
2000-2001	50	50
1999-2000	39	61
1998-99	55	45
1997-98	55	45
1996-97	41	59
1995-96	47	53

### **Performance Indicators Outreach: Research Intern Program (Mentored Research)**

- Demand By Students: 298 student (non-GSSM) inquiries, with over 130 applying for one of the 34 available summer positions. Trend over time - fluctuates, rising depending on funding availability.
- Quality: Academic Honors: At both the S.C. Junior Academy of Science Annual Conference and professional national conferences such as the American Association of Chemical Engineers, participants in Mentored Research Program continue to win honors and recognition for their research - including publication in professional journals. Trend over time - growing recognition. (Benchmark comparison: Off-the-scale at this level of involvement - we're still searching for a comparison.)
- Number of Participants - 97. Trend over time – consistent: has been level between 90 - 110. Will increase as additional funding and contributors come on-line.
- Mentor Partners: Eighty-three scientists from S.C. higher education and industry participated this year, at 31 sites. GSSM has identified 276 Ph.D. scientists at over 50 sites available to mentor at this high level. Business partners include DuPont, Michelin, Roche Carolina, Westvaco, and Sonoco. Trend over time - growing, participation depends largely on student scholarship availability. (Benchmark comparison: Higher Education's Performance Indicators IV B and VIII C.)

### **Performance Indicators Outreach: Summer Science Program:**

Attendance: 312 9<sup>th</sup> and 10<sup>th</sup> graders, up from 294 last year. Trend over time: Consistent in Range of 270 to 300. MAXIMUM capacity of facility is 300 students over the three weeks.

- Number of SSP Sections Offered - 24. Trend over time – consistent (1999=22).
- Number of S.C. Higher Education Partners, offering Ph.D. instructors: 20. Trend over time - consistent.
- Grants/In-Kind. Value of donated time of Ph.D. instructors estimated at over \$40,000 (1999=\$34,000). Trend: growing slightly each year as facilities are currently “maxed” out. \$28,500 Junior Scholar grant obtained. Trend over time - consistent.

**Program Name: GEAR UP: Gaining Early Awareness for Undergraduate Programs.**

A partnership of Higher Education (CHE), GSSM, Businesses (Chamber), SDE, ETV and Schools

Program Objectives: Involve 500 low-income middle school students annually throughout South Carolina to provide skills and encouragement so they will continue their education through college.

- Deliver hands-on science, math and technology instructional modules.
- GSSM Students mentor and teach 7<sup>th</sup> graders
- Conduct Saturday Academies for participants on GSSM campus.

-Number of GearUP 7<sup>th</sup> grade participants studying at GSSM: 534. Trend: consistent, growing slightly.

-Scholarships for Gear-up Student to attend GSSM's Summer Science Program: \$7,500 – trend growing.

**Support Services and Administration Performance Indicators:**

**Maintain Quality of Program: See Program area Indicators including:**

- Faculty Qualifications: Replaced retiring faculty member with PH.D in Mathematics.
- Demand for Participation in GSSM Programs
- Manage budget reductions while maintaining programs and quality.

•New Campus Development: Construction is underway on Phase One of GSSM's new campus – opening in August of 2003. State funding of \$20,000,000 for Phase One construction of new campus has been obtained. An additional \$6.5 (estimated) is required to finish construction (includes Academic/Science Center), plus an addition \$4M estimate in Furniture, Fixtures and Equipment, and operating increases beginning in 2002-2003 for faculty/staff and operations at the new campus.

Private funds of over \$7,000,000 toward \$8,000,000 private endowment goal completed. 17 acres of downtown land, adjacent to current campus, has been donated.

GSSM's new campus, scheduled for total completion in August, 2003, will more than double the residential student population (up to 300) and allow exponential increases in the number of students and teachers who will benefit from these statewide services.

3. What are your performance levels and trends for the key measures of employee satisfaction, involvement and development?

Staff turnover rates. While all employees at GSSM serve critical functions, teacher turnover rates are particularly telling – because faculty are the key to quality academic results and there is a general teacher shortage both in South Carolina and in the nation. GSSM had two faculty position changes following the school year – one retirement and the other who left for family reasons to move to another state. GSSM was able to locate and recruit replacements and, in one instance, hire a PhD. in mathematics replacing a Master’s credential. In other position categories, GSSM meets or exceeds turnover rates at similar residential specialized schools.

Zero workplace injuries reported and no worker’s compensation claims.

4. What are your performance levels and trends for the key measures of supplier/contractor/partners performance?

Maintenance incidents and reports are measured. They have remained consistent from previous years numbers. Negative Dining (food) Hall response from students has declined.

5. What are your performance levels and trends for the key measures of regulatory/legal compliance and citizenship?

-No lawsuits against agency (ever).

-State Audit Report: No Exceptions on audit review. Trend, consistent - 10<sup>th</sup> year in a row with no exceptions.

-GSSM works with and meets EOC reporting requirements (Report Card, EIA).

6. What are your current levels and trends of financial performance?

State funding has been reduced due to overall state budget shortfalls, and grant support remains consistent. A private endowment drive – designed to support GSSM’s margin of excellence in our programs - drive has over \$7,000,000 committed in pledges.

With state budget cuts occurring mid-year, GSSM has been able to maintain all functional areas without cutting critical services as reflected in our performance statistics.

Partnerships with Business and Industry has dramatically increased: GSSM, through its Foundation, has recruited 315 “Business Advisory Council” partners to support the school both financially and with program support such as communication enhancement, research sites and providing mentor opportunities. This increase reflects the awareness that the results GSSM is achieving in advanced education directly impact the economic competitiveness of South Carolina. Trend over time: growing.

The trend for increased state funding is for lower overall funding levels. This is a particular concern because of commitments required to not just construct but staff and operate GSSM’s new campus in August 2003. New Campus obligations require state government to re-focus our commitment to properly fund both the construction and operating expenses to expand these successful academic programs for other students and teachers throughout South Carolina.