# SCHOOL IMPROVEMENT PLAN 2006-2007



School Name: 7161 - Maritime & Science Technology Academy

Senior High School

FeederPattern: Coral Gables Senior

Region: Regional Center IV

District: 13 - Miami-Dade

Principal: Mr. Thomas Fisher II

Superintendent: Rudolph F. Crew, Ed.D.



# SCHOOL IMPROVEMENT PLAN EXECUTIVE SUMMARY

### Maritime & Science Technology Academy Senior High School

The Maritime and Science Technology Academy (MAST), a marine-theme and science technology high school in Miami-Dade County Public Schools (M-DCPS), has 550 students in grades nine through twelve. Approximately ninety percent (90%) of the school's students are transported to and from school by a combination of Metrorail and M-DCPS school buses. As a magnet school, MAST Academy recruits its students from across Miami-Dade County. MAST Academy's Educational Excellence School Advisory Council (EESAC) has reviewed the 2005-2006 School Improvement Plan along with the most recent data from the Florida Comprehensive Assessment Test (FCAT) in Reading, Mathematics, Science, and Writing, the Scholastic Aptitude Test (SAT), the Preliminary Scholastic Aptitude Test (PSAT), Advanced Placement (AP) assessments, the School Advisory Report, attendance reports for 2005-2006, and professional development records. Accordingly, the EESAC identifies the following as whole-school priorities for 2006-2007: improved performance in all areas of the FCAT; increased parent involvement; additional technology venues; expanded safety and security measures; and improved performance on tests of physical fitness.

Given instruction using the Sunshine State Standards, students will maintain or improve their FCAT Reading performance as evidenced by at least 80% of students scoring at Achievement Level 3 or higher on the 2007 FCAT Reading administration.

Given instruction using the Sunshine State Standards, students will maintain or improve the existing high standard in the FCAT mathematics performance as evidenced by 100% of students scoring at Acheivement Level 3 or higher.

Given instruction in the Sunshine State Standards, students tested will maintain or improve their performance in the 2007 FCAT Writing Plus component as evidenced by the number of students scoring 4.0 or above.

Given instruction using the Sunshine State Standards, students will maintain or increase scientific thinking skills as evidenced by 80% of students scoring at Achievement Level 3 or higher on the 2007 FCAT Science Assessment.

Given a school-wide emphasis on parent involvement and communication with parents, there will be a twenty-four percentage point increase in participation among the parents of gifted students in 2006–2007 as evidenced by Educational Plan meeting logs.

Given a school-wide emphasis on discipline and safety, there will be an increase in the overall number of initiatives employed to promote safety and security in 2006-2007 as evidenced by the student activities calendar of events.

Given instruction in the Sunshine State Standards, 75% of the students in ninth and tenth grade will access web-based FCAT preparation products as evidenced by user-frequency data.

Given instruction using the Sunshine State Standards, there will be a two percentage point increase in the 2006-2007 performance results on the Miami-Dade County Public Schools Physical Fitness Test at the Gold and Silver achievement levels as evidenced by the M-DCPS Physical Fitness Test Summary Report.

Given instruction in the Sunshine State Standards, 75% of the students in Computer Graphics will exhibit digital art work in the school's online gallery as evidenced by gradebook data and online curator logs.

Given present expenditure on Learning Express web-based FCAT preparation products, seventy percent of the students in ninth and tenth grade Language Arts courses will submit FCAT practice essays for evaluation using web-based tools as evidenced by Learning Express user-frequency data.

Given instruction in the Sunshine State Standards, MAST Academy will maintain a 100% graduation rate as evidenced by the end of the year student withdrawal code (W06) for the graduating class.

The Organizational Performance Improvement Snapshot Assessment Survey results indicate a great deal of customer satisfaction, with no component earning an average score of less than 4.2. MAST Academy will address the two lowest scoring items (both of which fall in the category of Performance or Business Results). Teachers and staff would like to see the school do a better job of removing obstacles to progress. They would also appreciate more information on the school's financial situation. Both of these areas will be addressed during faculty meetings and on Early Release days. Reviews of school budget can also be accomplished during Curriculum Council meetings. Informal conversations with teachers suggest that the issue of the School's Performance in "removing obstacles to progress" might effectively be addressed by more thoroughly apprising professional staff of district and region requirements and mandates.

#### MIAMI-DADE COUNTY PUBLIC SCHOOLS

#### **VISION**

We are committed to provide educational excellence for all.

#### **MISSION**

We provide the highest quality education so that all of our students are empowered to lead productive and fulfilling lives as lifelong learners and responsible citizens.

#### **CORE VALUES**

#### Excellence

We pursue the highest standards in academic achievement and organizational performance.

#### Integrity

We build positive relationships through honesty, respect and compassion, which enhance the self-esteem, safety, and well-being of our students, families and staff.

#### **Equity**

We foster an environment that serves all students and aspires to eliminate the achievement gap.

#### Citizenship

We honor the diversity of our community by working as a team to ensure the educational success of all of our students and recognize that our obligations go beyond our professional responsibilities to promote democratic principles.

#### Maritime & Science Technology Academy Senior High School

#### **VISION**

The stakeholders' vision for MAST Academy is that the school become a nationally recognized leader in college preparatory and marine-related career education. To accomplish these ambitious goals, teachers, staff, parents, and community partners must prepare students to work in proximity to scientists, corporate leaders, and marine industry professionals, conduct original ocean-going research, present papers at national and international conferences, demonstrate unwaveringly the values of honor and integrity, and enter the best colleges and universities in the world.

#### **MISSION**

MAST Academy provides a marine setting and nurturing environment for studies leading to academic success, career preparation, an appreciation of the sea, and environmental awareness. Stakeholders work together to instill a commitment to life-long learning and to advance and improve a challenging curriculum integrated with the sciences and technology.

#### **CORE VALUES**

- Curriculum, instructional practices, and assessments must incorporate a variety of learning activities and opportunities to enable students to achieve academic success.
- Individual student performance is increased when students are actively involved in the learning process, presented with a challenging curriculum, and provided with a variety of instructional approaches.
- A safe, attractive, comfortable, and clean environment promotes student learning.
- Students should be encouraged to be members of an academic family that sets high standards for everyone.
- Stakeholders share the responsibility for advancing the school's mission and nurturing intellectual freedom.
- A small focused center where stakeholders truly care about each other is the MAST model.

# **School Demographics**

The Maritime and Science Technology Academy (MAST) is a district-wide magnet school (School of Choice) offering a marinethemed and science technology curriculum. MAST Academy serves 550 students in grades nine through twelve and grew out of the success of the Inner City Marine Project, a 1980's marine-theme enrichment program offering exposure to maritime careers and non-traditional science instruction to minority students. MAST Academy's location supports the maritime, scientific, and hospitality dimensions of its mission. MAST Academy's three buildings sit on 11.2 acres on the picturesque island of Virginia Key, 3 miles east of mainland Miami. The two main buildings were once home to the Planet Ocean Museum. MAST opened its doors in 1991 to 248 ninth and tenth graders. In 1992-1993, MAST added an eleventh grade, and in 1993-1994 graduated its first senior class. The student to teacher ratio at MAST is 1:22. Approximately 90% of the school's students are transported to and from school by a combination of Metrorail and M-DCPS school buses. The ethnic/racial makeup of the student population is 18% Black, 48% Hispanic, 25% White, and 9% Other. The percentage of students receiving free or reduced lunch has remained relatively constant the last five years at 27%. While MAST Academy's location is an attractive match of site and mission, it is MAST's program that draws students from all over Miami-Dade County. Features unique to MAST include a college-like master schedule, curriculum majors in the areas of Marine Studies and Culture, Oceanic and Atmospheric Science Technology and Maritime Related Industries, a 29 credit requirement for graduation (five above the District level), four years of science and mathematics, and dual enrollment courses with local universities and colleges. MAST Academy is the only high school in the country that offers the United States Coast Guard JROTC program. All of the instructional staff at MAST Academy is certified and qualified. Approximately 68% of the instructional staff possess a Master's degree or higher. Additionally, 10% of the instructional staff possesses National Board certification. The ethnic/racial makeup of the instructional staff is 56% White, 15% Black, and 28% Hispanic. Through innovative programs, an exemplary instructional staff, community partner and parent involvement, leadership opportunities, and shared-decision making, MAST Academy will continue to shape students into an extraordinary community of lifelong learners.

MAST Academy presents students with a range of extended learning opportunities, including comprehensive tutorial assistance, FCAT preparation sessions before and after school and on Saturdays, and field trips to support instruction. The culmination of the academic program at MAST Academy is the senior-year internship which enables students to determine an area of career interest even before they enter college. Through Professional Growth Teams and informal return-novice teacher relationships, teacher mentoring is on-going at MAST Academy. This school offers sixteen Advanced Placement courses. In converting all ninth grade English courses to honors courses, we have taken a major step in preparing an even larger student population for the rigors of AP-level and dual enrollment instruction. The web-based tool AP Potential enabled us to identify an expanded population for Advanced Placement courses in 2006-2007. For the second year in a row, MAST Academy earned a place in Newsweek's list of the top 100 high schools in the United States on the strength and size of its Advanced Placement program. School improvement at MAST Academy incorporates the Southern Association of Colleges and Schools (SACS) standards relative to instructional and organizational effectiveness and results for student learning.

## **School Foundation**

#### Leadership:

Earning an average score of 4.4, the categories of Leadership, Customer and Market Focus, and Measurement, Analysis and Knowledge-Management tied as the three strongest areas surveyed. Stakeholders indicate a knowledge of the school's mission and believe their supervisors have created an environment conducive to learning and work. Teachers and staff feel that they receive information about MAST Academy and that the school's values guide their professional performance. While all items in the Leadership category received an average score of 4.2 or above, the lowest scoring item deals with organizational priorities.

#### District Strategic Planning Alignment:

All Strategic Planning items received an average score over 4.0. The highest ranking items address the request for ideas in the planning along with the impact of plans on teachers and staff. The lowest scoring item in this area relates to solicitation of ideas from staff in school planning.

#### Stakeholder Engagement:

Survey results suggest much satisfaction in this category. Stakeholders know their client base and feel that they are encouraged to make decisions to ensure customer satisfaction. The lowest scoring item in this category (item score of 4.2) addresses requesting information on customer satisfaction.

#### Faculty & Staff:

This category received the second highest average score (4.3). Faculty and staff feel that they have a safe workplace, that they are encouraged to make changes that will improve their work, and that there is an atmosphere of concern in the total organization. The lowest scoring item deals with recognition for a job well done.

#### Data/Information/Knowledge Management:

This is a strong category, tying with one other area for the highest average score. The highest scoring item deals with knowing how to analyze the quality of work to determine whether modifications are necessary. Staff feels that they use data in making decisions about their work. The lowest scoring items--related to getting information about organizational process--received an average score of 4.2.

#### **Education Design:**

Responses indicate staff satisfaction. The highest scoring item--student(or customer) satisfaction with the organization--received a score of 4.5. Items dealing with school planning received average scores of 4.0 or higher. Staff feels more comfortable this year than in 2005-2006 with item 2c--knowing how to tell if we are making progress toward accomplishing goals. The score for this item is 4.3.

#### Performance Results:

This category received an average score of 4.2. Respondents feel that the school complies with laws and regulations

and that the organization as a whole has high standards and a sterling ethical base. Staff also feel a good amount of satisfaction with their jobs and are pleased with their work products. The two lowest scoring items in the survey are in this category—items 7c and 7e. Respondents feel that the school could do a better job removing obstacles to progress. In addition, they do not always know how the school is doing financially.

#### **GOAL 1: READING**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X		X

# Miami-Dade County Public Schools District Strategic Plan

		Actively engage family and		
Ensure achievement of high	Develop our students so that	community members to become	Reform business practices to	Recruit, develop and retain
academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X		X

#### **GOAL 1 STATEMENT:**

All students at MAST Academy will read at a high level and develop the skills necessary to become life-long readers of information and for pleasure.

#### Needs Assessment

Scores on the 2006 FCAT Reading component indicate that 11% of MAST Academy's ninth graders performed at Levels 1 and 2 in reading. The content cluster with the lowest percentage of points earned was Words and Phrases at 75%. The content cluster with the highest percentage of points earned was Reference and Research at 82%. Additionally, 21% of the school's tenth graders performed at reading Levels 1 and 2 in 2006. The content cluster with the lowest percentage of points earned was Reference and Research at 75%. The content cluster with the highest percentage of points earned was Comparisons at 85%. While this information indicates that the majority of our students are doing well in reading, data suggests the need to continue the Intensive Reading course as a means to enhancing students' reading comprehension.

#### NCLB SUBGROUP TARGET

TOTAL	WHITE	BLACK	HISPANIC	ASIAN	NATIVE AMERICAN	F/R LUNCH	LEP	SWD	LEVEL I	LOWEST 25%	OTHER	GRADUATIO N RATE

Given instruction using the Sunshine State Standards, students will maintain or improve their FCAT Reading performance as evidenced by at least 80% of students scoring at Achievement Level 3 or higher on the 2007 FCAT Reading administration.

## **Action Steps**

	PERSONS RESPONSIBLE	TIME	ELINE		
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Monitor implementation of Comprehensive Research-based Reading Program.	School-site Administrators  Lead Teacher  Reading Contact	8/14/2006	5/30/2007	District-wide literacy plan	\$0.00
Use AP Potential to identify an expanded population for higher level courses (AP Potential is a web-based student identification program offered by the Advanced Placement program of the College Board).	School-site Administrators Student Services Chair Department Chairs Lead Teacher	12/1/2006	1/31/2007	Continuous Improvement Model	\$0.00
Offer CRISS training for new teachers and untrained faculty members	School-site Administrators  Department Chairs	8/14/2006	5/30/2007	District-wide	\$1000.00
Require an Intensive Reading class for all ninth and tenth grade students with scores at Levels 1 or 2 on the 2006 FCAT administration and eleventh grade students who did not pass the reading component of the 2006 FCAT.	School-site Administrators Reading Teachers	8/14/2006	5/30/2007	District Strategic Plan	\$0.00
Offer FCAT tutoring before and after school, and Saturday tutoring is available to all MAST students.	School-site Administrators  Testing Co-chairs  Teachers  Tutors	9/13/2006	2/24/2007	District-wide literacy plan	\$4000.00

## **Research-Based Programs**

McDougal Littell text books Learning Express (pending District approval) AP Potential

CRISS (CReating Independence through Student-owned Strategies)

## **Professional Development**

AP Potential Training
Reading Coach District Meetings
Advanced Placement teaching and learning conferences
Project CRISS (CReating Independence through Student-owned Strategies)

### **Evaluation**

2007 FCAT results in reading District Reading Interim Assessments Tutorial rosters

Administrative walk through and student reading logs (CRRP)

Number of students registered for Advanced Placement English and history courses for 2007-2008.

#### **GOAL 2: MATHEMATICS**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X		X

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students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X		X

#### **GOAL 2 STATEMENT:**

All students at MAST Academy will improve their mathematics skills in preparation for upper-level mathematics courses.

#### Needs Assessment

Analysis of the 2006 FCAT Mathematics data indicates that 96% of the ninth grade students scored at or above Level 3. The content cluster with the lowest percentage of points earned was Measurement at 71%. The content cluster with the highest percentage of points earned was Algebraic Thinking at 80%. Additionally, 98% of the tenth grade students scored at or above Level 3. The content cluster with the lowest percentage of points earned was Measurement at 60%. The content cluster with the highest percentage of points earned was Number Sense at 82%. The school's effort should therefore be to move the lowest scoring students into higher performance levels and to increase the percentage of students scoring at Level 3 into higher performance levels.

#### NCLB SUBGROUP TARGET

TOTAL	WHITE	BLACK	HISPANIC	ASIAN	NATIVE AMERICAN	F/R LUNCH	LEP	SWD	LEVEL I	LOWEST 25%	OTHER	GRADUATIO N RATE

Given instruction using the Sunshine State Standards, students will maintain or improve the existing high standard in the FCAT mathematics performance as evidenced by 100% of students scoring at Acheivement Level 3 or higher.

## **Action Steps**

	PERSONS RESPONSIBLE	TIME	LINE		
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Administer and evaluate district practice	School-Site Administrators	8/14/2006	5/30/2007	District Strategic	\$0.00
assessments.	Mathematics Teachers			Plan	
Use AP Potential to identify an expanded	School-site Administrators	12/1/2006	1/31/2007	Continuous	\$0.00
population for higher level courses (AP	Student Services Chair			Improvement Model	
Potential is a web-based student identification	Department Chairs				
program offered by the Advanced Placement	Lead Teacher				
program of the College Board).					
Schedule in-school tutorial sessions (pull-	School-Site Administrators	8/14/2006	5/30/2007	Continuous	\$0.00
outs) for the ninth and tenth grade students	Testing Co-chairs			Improvement Model	
identified as having the greatest need.	Mathematics Department Chair				
Enlist the assistance of school partners	School-Site Administrators	8/14/2006	5/30/2007	Community	\$0.00
whenever possible to provide tutors to ninth	Career Specialist			Partnerships	
through twelfth grade students.					
Provide tutoring opportunities before and	School-Site Administrators	10/03/2006	2/24/2007	Continuous	\$4000.00
after school, during lunch, and during	Testing Co-chairs			Improvement Model	
Wednesday Activities periods to ninth	Teachers				
through twelfth grade students.	Tutors				
Use FCAT Explorer and RiverDeep web-	School-Site Administrators	8/14/2006	2/24/2007	Continuous	\$0.00
based programs.	Mathematics Department Chair			Improvement Model	

## **Research-Based Programs**

Prentice Hall series McDougal Little series Glencoe series Holt series

# **Professional Development**

Attend FCAT related workshops

## **Evaluation**

2007 FCAT results in mathematics District Mathematics Interim Assessments Tutorial rosters

#### **GOAL 3: WRITING**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X		X

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academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X		X

#### **GOAL 3 STATEMENT:**

All students at MAST Academy will write successfully in a variety of modes.

#### Needs Assessment

While 100% of students met high standards in expository writing, 1% of students did not meet high standards in persuasive writing. We will continue to focus on teaching rhetorical skills and providing practice in writing both expository and persuasive essays.

#### NCLB SUBGROUP TARGET

TOTAL	WHITE	BLACK	HISPANIC	ASIAN	NATIVE AMERICAN	F/R LUNCH	LEP	SWD	LEVEL I	LOWEST 25%	OTHER	GRADUATIO N RATE

Given instruction in the Sunshine State Standards, students tested will maintain or improve their performance in the 2007 FCAT Writing Plus component as evidenced by the number of students scoring 4.0 or above.

## **Action Steps**

	PERSONS RESPONSIBLE	TIME	LINE		
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Administer District Pre-Test and Post-Test	School-Site Administrators  English Teachers	8/14/2006	5/30/2007	District Strategic	\$0.00
Provide Project CRISS training	School-Site Administrators  Department Chairs	8/14/2006	5/30/2007	Continuous Improvement Model	\$1000.00
Administer Learning Express practice tests to ninth and tenth grade students	School-Site Administrators  English Teachers	8/14/2006	5/30/2007	Continuous Improvement Model	\$17000.00
Offer Advanced Placement practice sessions to Advanced Placement students in all grade levels	School-Site Administrators Advanced Placement Teachers	8/14/2006	5/30/2007	Continuous Improvement Model	\$0.00
Require writing across the curriculum	School-Site Administrators  Department Chairs	8/14/2006	5/30/2007	District-wide	\$0.00

## **Research-Based Programs**

Prentice Hall, McDougall Littell, Holt, Reinhart, Harcourt Brace, WW Norton writing and literature series Learning Express (pending District approval) Project CRISS

## **Professional Development**

Project CRISS Training Advanced Placement Workshops

# **Evaluation**

2007 FCAT Writing Plus Scores District Writing Pre-Test and Post-Test Learning Express results

#### **GOAL 4: SCIENCE**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X		X

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students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X		X

#### **GOAL 4 STATEMENT:**

All MAST Academy students will undertake a rigorous course of study in the sciences.

#### Needs Assessment

An analysis of the 2006 FCAT Science data indicates that the mean score of 351 far exceeds both the District and the State mean scale scores. Furthermore, 78% of eleventh grade students scored at or above Level 3. The content cluster with the lowest percentage of points earned was Physical and Chemical at 69%. The content cluster with the highest percentage of points earned was Scientific Thinking at 75%.

Given instruction using the Sunshine State Standards, students will maintain or increase scientific thinking skills as evidenced by 80% of students scoring at Achievement Level 3 or higher on the 2007 FCAT Science Assessment.

## **Action Steps**

	PERSONS RESPONSIBLE	TIME	ELINE		
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Schedule all ninth and tenth grade students into either Earth Space Science or Biology classes.	School-Site Administrators Student Services Chair	8/14/2006	5/30/2007	District Strategic Plan	\$0.00
Administer practice tests for all Advanced Placement science courses.	School-Site Administrators Science Department Chair Science Teachers	8/14/2006	5/30/2007	Continuous Improvement Model	\$0.00
Incorporate writing activities into teacher created assessments and student activities for all ninth through twelfth grade students.	School-Site Administrators  Activities Director  Testing Co-chairs  Science Department Chair	8/14/2006	5/30/2007	Continuous Improvement Model	\$0.00
Enlist the assistance of school partners whenever possible to provide tutors and supplementary activities to all ninth through twelfth grade students.	School-Site Administrators  Career Specialist  Science Department Chair	8/14/2006	5/30/2007	Community Partnerships	\$0.00
Encourage ninth and tenth grade students to conduct independent scientific research projects which incorporate writing and laboratory activities using inquiry-based thinking skills for all science classes.	School-Site Administrators Science Department Chair Science Fair Coordinator	8/14/2006	5/30/2007	Continuous Improvement Model	\$0.00
Provide time for science teachers to share best practices and review student performance as related to the FCAT Science Assessment.	School-Site Administrators Science Department Chair	8/14/2006	2/28/2007	Mentoring Opportunities	\$1000.00

## **Research-Based Programs**

Prentice Hall series
Holt series
Houghton Mifflin series
Benjamin Cummings series
Merrill series
Glencoe series

## **Professional Development**

Data analysis Attend science-related workshops

## **Evaluation**

2007 FCAT Science results
Percentage of students who complete four years of science study

#### **GOAL 5: PARENTAL INVOLVEMENT**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

١	Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
	X	X	X		X	X

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		achievement.		
X	X	X		X

#### **GOAL 5 STATEMENT:**

Increase school-wide parent/family involvement and home communications.

#### Needs Assessment

The parents of gifted students at MAST Academy have only recently been introduced to services available through the consultative model because, without a site-based gifted program in place, the school has since 1991 exited incoming students from the gifted program. Beginning in 2006-2007, however, incoming gifted students and students already at MAST will be re-entered into the gifted program. As part of the process of developing an Educational Plan (EP) for each gifted student, the school's gifted coordinator is meeting with parents to explain the consultative model and the range of services available to their children. To date, 95 parents of gifted students (or 36% of the eligible group) have met with school staff to discuss their child's EP. By May 2007, our goal is to have met with 60% of these parents.

Given a school-wide emphasis on parent involvement and communication with parents, there will be a twenty-four percentage point increase in participation among the parents of gifted students in 2006–2007 as evidenced by Educational Plan meeting logs.

### **Action Steps**

	PERSONS RESPONSIBLE	TIME	ELINE		
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Conduct a gifted parent needs survey to	School-Site Administrators	11/7/2006	1/31/2007	Continuous	\$0.00
determine ways to improve services.	Gifted Coordinator			Improvement Model	
Utilize the automated telephone calling	School-Site Administrators	8/15/2006	5/24/2007	Transition and	\$0.00
service to inform parents of specific gifted issues.	Gifted Coordinator			Articulation Programs	
Promote the use of the Professional	School-Site Administrators	8/15/2006	5/24/2007	District Strategic	\$0.00
Library/Parent Resource Center.	Gifted Coordinator			Plan	
Contact parents of gifted students by mail and	Gifted Coordinator	8/15/2006	5/24/2007	Transition and	\$0.00
phone to set up Educational Plan meetings.	School-Site Administrators			Articulation Programs	
Prepare information packets on school	School-Site Administrators	10/3/2006	5/24/2007	Transition and	\$0.00
services for gifted students.	Gifted Coordinator			Articulation	
				Programs	

#### **Research-Based Programs**

Our parent involvement initiative is aligned with the National Standards for Parental Involvement and Family Involvement.

## **Professional Development**

Parents/families will be offered information on the following:

Student performance monitoring strategies

Tutorial services

College preparation and college advisement services

PSAT/SAT/ACT

**Bright Futures** 

Study skills and time management

Advanced Placement and Dual Enrollment opportunities

# **Evaluation**

Educational Plan meeting logs Post-meeting feedback survey

#### **GOAL 6: DISCIPLINE & SAFETY**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
		X	X		X

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students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
			X	

#### **GOAL 6 STATEMENT:**

We strive to keep our campus a safe, clean, healthy learning environment for our students, staff, and community.

#### Needs Assessment

Our major areas of desired change and our priorities for action are as follows: student safety awareness activities/forums, staff training in CPR/AED and Crisis Response Planning, and Campus Safety Assessments.

Given a school-wide emphasis on discipline and safety, there will be an increase in the overall number of initiatives employed to promote safety and security in 2006-2007 as evidenced by the student activities calendar of events.

## **Action Steps**

	PERSONS RESPONSIBLE	TIMELINE			
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Conduct a Safe School Symposium, which	School-Site Administrators	8/14/2006	05/30/2007	Community	\$0.00
will include the following components; peer	Activities Director			Partnerships	
mediation, conflict resolution, school	Student Services Chairperson				
violence prevention, substance awareness,					
bias, prejudice, harassment and safe driving.					
Conduct random seatbelt checks as students	School-Site Administrators	8/14/2006	5/30/2007	Continuous	\$0.00
enter and depart campus. Improve Parking	Activities Director			Improvement Model	
Lot Safety through the installation of on-	SADD Sponsor				
campus traffic signs.	Head Custodian				
	Zone Mechanic				

## **Research-Based Programs**

Florida Department of Education: Safe and Healthy Schools

Florida Department of Education: Best Practices - Safety and Security

## **Professional Development**

District Critical Incident Response Plan Manual
District Student Services Department Safe Schools Crises Management In-service
Custodial Deep Cleaning Procedures

# **Evaluation**

Student Activities calendar of events report school based initivies related to campus/student safety.

#### **GOAL 7: TECHNOLOGY**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

-1	Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
	X	X	X		X	

# Miami-Dade County Public Schools District Strategic Plan

		Actively engage family and		
Ensure achievement of high	Develop our students so that	community members to become	Reform business practices to	Recruit, develop and retain
academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X			

#### **GOAL 7 STATEMENT:**

Equip all students with technological skills to maximize their effectiveness in high school, college, and the marketplace.

#### Needs Assessment

Technology survey results show that approximately 87% of MAST Academy students feel proficient in accessing web-based study, problem-solving, and project tools. One hundred percent of these students, however, will need to be proficient in these online skills. Web-based FCAT preparation programs Learning Express and FCAT Explorer offer a way for students to become more proficient in accessing online study tools. While 100% of students met high standards in expository writing, 1% did not meet high standards in persuasive writing. Using web-based FCAT preparation programs, we will continue to focus on teaching rhetorical skills and providing practice in writing both expository and persuasive essays.

Given instruction in the Sunshine State Standards, 75% of the students in ninth and tenth grade will access web-based FCAT preparation products as evidenced by user-frequency data.

## **Action Steps**

	PERSONS RESPONSIBLE	TIMELINE			D.V.D. (2.700)
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Require writing across the curriculum in grades nine and ten.	School-Site Administrators	8/14/2006	5/25/2007	Continuous Improvement Model	\$0.00
Require submission of FCAT practice essays using web-based tools.	School-Site Administrators  Language Arts Teachers	10/3/2006	2/23/2007	Communities of Practice	\$0.00
Require students to complete District practice tests.	School-Site Administrators  Language Arts Teachers	9/18/2006	3/30/2007	District Strategic	\$0.00
Encourage additional CRISS training.	School-Site Administrators  Department Chairs	10/3/2006	5/24/2007	Continuous Improvement Model	\$1000.00
Implement Advanced Placement Vertical Teaming.	School-Site Administrators  Language Arts Department Chair	10/3/2006	5/25/2007	Continuous Improvement Model	\$1000.00

## **Research-Based Programs**

Learning Express

## **Professional Development**

FCAT Explorer training Learning Express training

## **Evaluation**

User frequency and completion data from the Learning Express.

User frequency and completion data from FCAT Explorer online programs.

#### **GOAL 8: HEALTH & PHYSICAL FITNESS**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X		X

# Miami-Dade County Public Schools District Strategic Plan

		Actively engage family and		
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academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X		X

#### **GOAL 8 STATEMENT:**

MAST students will improve their physical fitness skills and undertake healthy lifestyle activities on a regular basis.

#### Needs Assessment

An analysis of the 2005-2006 Physical Fitness Test Summary indicates that 76% of the students tested were recognized at the Gold or Silver achievement levels.

Given instruction using the Sunshine State Standards, there will be a two percentage point increase in the 2006-2007 performance results on the Miami-Dade County Public Schools Physical Fitness Test at the Gold and Silver achievement levels as evidenced by the M-DCPS Physical Fitness Test Summary Report.

### **Action Steps**

	PERSONS RESPONSIBLE	TIMELINE			
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Implement motivation through awareness of Gold and Silver Star recognition.	School-Site Administrators Health Teacher Physical Fitness Teachers	8/14/2006	5/30/2007	Communities of Practice	\$0.00
Access school's fitness trail as part of a diversified physical training plan.	School-Site Administrators Health Teacher Physical Fitness Teachers	8/14/2006	5/30/2007	Continuous Improvement Model	\$0.00
Award students that improve scores on the Physical Education Test.	School-Site Administrators Health Teacher Physical Fitness Teachers	8/14/2006	5/30/2007	Communities of Practice	\$2000.00
Emphasize relationships between physical fitness, health, and mental acuity through the use of Student Fitness Logs.	School-Site Administrators Health Teacher Physical Fitness Teachers Culinary Operations Teachers	8/14/2006	5/30/2007	Communities of Practice	\$0.00
Increase awareness of diet and its effect on general health through Student Fitness Logs.	School-Site Administrators Health Teacher Physical Fitness Teachers Culinary Operations Teachers	8/14/2006	5/30/2007	Continuous Improvement Model	\$0.00

## **Research-Based Programs**

Not applicable.

## **Professional Development**

Training in physical fitness instructional techniques One Physical Fitness teacher is in the process of National Board Certification.

# **Evaluation**

Evaluation will be based on the 2006-2007 report of the Miami-Dade County Public Schools Physical Fitness Test.

## **GOAL 9: ELECTIVES & SPECIAL AREAS**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at al levels, including increased hig school graduation and readines for postsecondary education	h Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X	X	X

# Miami-Dade County Public Schools District Strategic Plan

		Actively engage family and		
Ensure achievement of high	Develop our students so that	community members to become	Reform business practices to	Recruit, develop and retain
academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X		X

#### **GOAL 9 STATEMENT:**

All MAST Academy students will create digital portfolios.

#### Needs Assessment

All students in Computer Graphics classes produce digital art products, but in 2005-2006, only 66% of the students enrolled in the course posted their work to the school website in the online gallery space. The gallery must also be expanded and redesigned to accommodate gallery notes that contextualize online images and products.

Given instruction in the Sunshine State Standards, 75% of the students in Computer Graphics will exhibit digital art work in the school's online gallery as evidenced by gradebook data and online curator logs.

## **Action Steps**

	PERSONS RESPONSIBLE	TIME	ELINE		
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Announce launch of gallery site to families and school partners.	School-Site Administrators  Art Teacher  Webmaster	10/3/2005	4/28/2006	Community Partnerships	\$0.00
Create cross-disciplinary activity for AP Art History and Computer Graphics students to conduct joint study of art classics.	School-Site Administrators  Art Teacher  Webmaster	10/3/2006	4/27/2007	Expanding arts opportunities	\$0.00
Train teacher in online posting techniques and criteria for online gallery exhibits.	School-Site Administrators  Art Teacher  Webmaster	10/3/2006	4/27/2007	Continuous Improvement Model	\$0.00
Require Computer Graphics students to generate gallery notes for all online postings.	School-Site Administrators  Art Teacher  Webmaster	10/3/2006	4/27/2007	Expanding arts opportunities	\$0.00
Require Computer Graphics students to create and maintain digital portfolios.	School-Site Administrators Art Teacher Webmaster	10/3/2006	4/27/2007	Expanding arts opportunities	\$0.00

## **Research-Based Programs**

Not applicable.

**Professional Development** 

Technology training

**Evaluation** 

Gradebook data
Online curator logs

#### **GOAL 10: RETURN ON INVESTMENT**

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at al levels, including increased hig school graduation and readines for postsecondary education	h Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X	X	X

# Miami-Dade County Public Schools District Strategic Plan

		Actively engage family and		
Ensure achievement of high	Develop our students so that	community members to become	Reform business practices to	Recruit, develop and retain
academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X	X	X

#### **GOAL 10 STATEMENT:**

All MAST Academy students will write successfully in a variety of rhetorical modes.

#### Needs Assessment

While 100% of students met high standards in expository writing, 1% did not meet high standards in persuasive writing. We will continue to focus on teaching writing skills across the rhetorical models using practice tests provided by the District and online submission options provided by Learning Express.

Given present expenditure on Learning Express web-based FCAT preparation products, seventy percent of the students in ninth and tenth grade Language Arts courses will submit FCAT practice essays for evaluation using web-based tools as evidenced by Learning Express user-frequency data.

### **Action Steps**

	PERSONS RESPONSIBLE	TIMELINE			
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Require submission of FCAT practice essays	School-Site Administrators	10/3/2006	2/28/2007	Continuous	\$0.00
using web-based tools.	Language Arts Teachers			Improvement Model	
Require students to complete District practice	School-Site Administrators	9/18/2006	3/30/2007	District Strategic	\$0.00
tests.	Language Arts Teachers			Plan	
Require writing across the curriculum in	School-Site Administrators	8/14/2006	5/25/2007	District Strategic	\$0.00
grades nine and ten.				Plan	
Implement Advanced Placement Vertical	School-Site Administrators	10/3/2006	5/25/2007	Continuous	\$1000.00
Teaming.	Language Arts Department Chair			Improvement Model	
Encourage additional CRISS training.	School-Site Administrators	10/3/2006	5/25/2007	Continuous	\$1000.00
	Department Chairs			Improvement Model	

## **Research-Based Programs**

Prentice Hall, McDougall Litell, Holt, Reinhart, Harcourt Brace Learning Express Project CRISS

## **Professional Development**

Learning Express Training
Zelda Glazer Writing Institute
CRISS Training

## **Evaluation**

Learning Express results User frequency data

## GOAL 11: GRADUATION (HIGH SCHOOLS ONLY)

#### Alignment of Objective to the Florida Department of Education and the District Strategic Plan

Florida Education Priorities (1000.3(5)(a)-(f), F.S.)

Learning and completion at all levels, including increased high school graduation and readiness for postsecondary education	Student Performance	Alignment of Standards and Resources	Educational Leadership	Workforce Education	Parental, Student, Family, Educational Institution, and Community Involvement
X	X	X	X	X	X

# Miami-Dade County Public Schools District Strategic Plan

		Actively engage family and		
Ensure achievement of high	Develop our students so that	community members to become	Reform business practices to	Recruit, develop and retain
academic standards by all	they are able to successfully	our partners in raising and	ensure efficiency, effectiveness	high-performing, diverse, and
students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
		achievement.		
X	X	X	X	X

#### **GOAL 11 STATEMENT:**

To maintain a 100% graduation rate at the MAST Academy.

#### Needs Assessment

MAST Academy will maintain the historical pattern of all seniors having passed the FCAT before the completion of their eleventh grade school year.

Given instruction in the Sunshine State Standards, MAST Academy will maintain a 100% graduation rate as evidenced by the end of the year student withdrawal code (W06) for the graduating class.

## **Action Steps**

	PERSONS RESPONSIBLE	TIMELINE			
STRATEGIES	(Identify by titles)	START	END	ALIGNMENT	BUDGET
Require completion of an annual internship or	School-Site Administrators	8/14/06	5/13/07	Career Development	\$0.00
ethics and leadership class before graduation.	Guidance Counselors			Programs	
	Outreach Coordinator				
Review student progress towards completion	School-Site Administrators	10/02/06	2/28/07	Transition and	\$0.00
of an academic major and conduct bi-annual	Guidance Counselors			Articulation	
review of student history.				Programs	
Conduct individual and group consultation	School-Site Administrators,	9/07/2006	5/30/07	Mentoring	\$0.00
for post-secondary college plans: College	Career Counselor, CAP Advisor,			Opportunities	
Night, College Visits, and Financial Aid	and PTSA				
Workshop					
Coordinate annual Florida Bright Futures	School-Site Administrators	1/8/07	5/30/07	Transition and	\$0.00
registration and eligibility evaluation.	CAP Advisor			Articulation	
	Guidance Counselors			Programs	
Continue the comprehensive subject area	School-Site Administrators	9/7/2006	5/18/07	Continuous	\$4000.00
tutorial program.	Teachers			Improvement Model	
	University of Miami Tutors				
Conduct outreach activities including: Back-	School-Site Administrators	9/07/06	5/30/07	Community	\$1000.00
to-School Night, Academic Symposium,	Guidance Counselors			Partnerships	
Captain's Calls (monthly class meetings with					
Principal and Student Services					
representatives).					

## **Research-Based Programs**

Not applicable

## **Professional Development**

College Board training programs for guidance counselors ACT / SAT  $\,$ 

State University System Annual Workshop

Annual Melissa Institute Against Violence Workshop

Student Services updates and training institute

College Assistance Program monthly meetings, financial aid workshop, college admission process, and college fair

### **Evaluation**

Adequate Yearly Progress Report (FCAT passing rate)
Internship completion
90% completion of an academic major
100% graduation rate with student withdrawal code of W06 via ITS data

# EESAC Compliance

YES	NO	
X		The majority of the Board of Directors/EESAC members are not employed by the school. The Board of Directors SAC is composed of the principal, and an appropriately balanced number of teachers, education support employees, students (for middle, junior high and high school only), parents, and other business and community citizens who are representative of the ethnic, racial, and economic community served by the school.

#### **Budget:**

EESAC members participate in year round budget discussions.

#### Training:

EESAC reviewed teacher and staff training needs relative to the 2006-2007 SIP.

#### **Instructional Materials:**

EESAC reviewed and discussed the instructional materials specified in the 2006-2007 SIP at the September 21, 2006 meeting.

#### Technology:

EESAC members participate in year round technology discussions. Technology targets in the 2006-2007 SIP were reviewed at the September 21, 2006 meeting.

#### Staffing:

EESAC reviewed and discussed the staffing needs at the September 21, 2006 meeting.

#### Student Support Services:

EESAC received input from the Guidance Department.

#### Other Matters of Resource Allocation:

EESAC members addressed the allocation of resources at the September 21, 2006 EESAC meeting.

#### Benchmarking:

EESAC members reviewed benchmark data at the September 21, 2006 meeting.

## School Safety & Discipline:

EESAC reviewed the school safety objective at the September 21, 2006 meeting.

# **Budget Summary**

BY GOAL	TOTAL BUDGET
Goal 1: Reading	\$5,000.00
Goal 2: Mathematics	\$4,000.00
Goal 3: Writing	\$18,000.00
Goal 4: Science	\$1,000.00
Goal 5: Parental Involvement	\$0.00
Goal 6: Discipline & Safety	\$0.00
Goal 7: Technology	\$2,000.00
Goal 8: Health & Physical Fitness	\$2,000.00
Goal 9: Electives & Special Areas	\$0.00
Goal 10: Return On Investment	\$2,000.00
Goal 11: Graduation (High Schools Only)	\$5,000.00
Total:	\$39,000.00

This School Improvement Plan has been developed cooperatively by administrators, teachers, parents, students, and business/community representatives.

The original signature page, including signatures of all persons listed below, is on file at the Region Office.

Required Signat	ures:
Driveinal	
Principal	
EESAC Cha	ir
UTD Stewar	<i>d</i>
EESAC Parent Repr	esentative
EESAC Business/Communit	y Representative
EESAC Student Representat	ive, as applicable

Additionally, the signature of the Region Superintendent/District Administrator certifies that this plan has been reviewed by appropriate personnel to ensure compliance with state and district rules.

Region Superintendent	