# SCHOOL IMPROVEMENT PLAN 2005-2006



School Name:	7161 - Maritime & Science Technology Academy Senior High School
FeederPattern:	Coral Gables Senior
Region:	Regional Center IV
District:	13 - Miami-Dade
Principal:	Dr. Consuelo Dominguez
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 2004-2005, and professional development records. Accordingly, the EESAC identifies the following as whole-school priorities for 2005-2006: 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 tested will maintain or improve their FCAT Reading performance as evidenced by at least 83% of students scoring at Achievement Level 3 or higher on the 2006 FCAT Reading administration.

Given instruction using the Sunshine State Standards, students tested will maintain or improve the school's existing high standard in the FCAT mathematics performance as evidenced by the number 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 2006 FCAT Writing component as evidenced by the number of students scoring 3.5 or above.

Given instruction using the Sunshine State Standards, students will maintain or increase scientific thinking skills as evidenced by earning a mean scale score of 355 on the 2006 FCAT Science Assessment.

Given a school-wide emphasis on parent involvement and communication with parents, there will be a two percentage point increase in parent participation in 2005–2006 as evidenced by PTSA membership records.

Given a school-wide emphasis on discipline and safety, there will be a two percentage point increase in the overall number of activities employed to promote safety and security in 2005–2006 as evidenced by the Fire Alarm Safety Inquiry Report and assembly/symposium participation rosters.

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 2005-2006 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.

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 9-12 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 16.5% Black, 47.5% Hispanic, 27.5% White, and 8.3% Other. The percentage of students receiving free or reduced lunch has remained relatively constant the last five years at 27.9%. 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 as compared with only 44% at the District level. Additionally, 17% of the instructional staff possesses National Board certification. The ethnic/racial makeup of the instructional staff is 57% White, 16% Black, and 27% 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 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 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. This school offers eighteen Advanced Placement courses, including two new offerings in Art History and Human Geography. 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 instruction. Prior to registration in February 2006, we will use the web-based tool AP Potential to identify an expanded population for Advanced Placement courses using PSAT scores as the chief criterion. 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.

#### Leadership:

Earning an average score of 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 and that the school's values guide their professional performance. While all items in the Leadership category received an average score over 4.0, the two lowest scoring items deal with organizational priorities and input from the total staff.

#### 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 staff's ability to make determinations about progress toward plan goals.

#### 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 two lowest scoring items in this category address input from customers or clients and 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 two other categories 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 item-getting information about organizational process-still received an average score of 4.3.

#### **Education Design:**

Responses to Strategic Planning items indicate staff satisfaction. The highest scoring item--requesting input from staff as the school plans for the future--received an average score of 4.3, as did the item dealing with knowledge of school planning and the impact of the organization's plan on the respondent. Staff feels a bit less comfortable with item 2c--knowing how to tell if we are making progress toward accomplishing goals stated in the plan.

#### **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

#### Miami-Dade County Public Schools

District Strategic Plan

Ensure achievement of high academic standards by all	Develop our students so that they are able to successfully	Actively engage family and community members to become our partners in raising and	Reform business practices to ensure efficiency, effectiveness	Recruit, develop and retain 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.

#### **Needs Assessment**

Scores on the 2005 FCAT Reading component indicate that 16% of MAST Academy's ninth graders performed at Levels 1 and 2 in reading; 20% of the school's tenth graders performed at reading Levels 1 and 2 in 2005. While this information indicates that the majority of our students are doing well in reading, data suggests the need for an Intensive Reading course as a means to enhancing students' reading comprehension. Additionally, during the 2004-2005 school year, 118 students took Advanced Placement English and history courses, an increase of 15 students (12%) over the 2003-2004 school year. We would like to see this program continue to grow.

#### NCLB SUBGROUP TARGET

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

Given instruction using the Sunshine State Standards, students tested will maintain or improve their FCAT Reading performance as evidenced by at least 83% of students scoring at Achievement Level 3 or higher on the 2006 FCAT Reading administration.

	PERSONS RESPONSIBLE	TIMI	ELINE
STRATEGIES	(Identify by titles)	START	END
Offer FCAT tutoring before school, after school, and Saturday tutoring available to all MAST students.	School-site Administrators Testing Co-chairs Teachers Tutors	9/5/2005	3/31/2006
Monitor implementation of Comprehensive Research-based Reading Program.	School-site Administrators Lead Teacher Reading Contact	10/3/2005	5/24/2006
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	12/5/2005	1/31/2006
Offer CRISS training for new teachers and untrained faculty members	School-site Administrators Department Chairs	10/3/2005	5/24/2006
Require Intensive Reading class for all ninth and tenth grade students with scores at Levels 1 or 2 on the 2005 FCAT administration and eleventh grade students who did not pass the reading component of the 2005 FCAT.	School-site Administrators Reading Teachers	8/8/2005	5/24/2006

### **Action Steps**

# **Research-Based Programs**

CRISS (CReating Independence through Student-owned Strategies) Comprehensive Research-based Reading Plan AP Potential McDougal Littell text books

# **Professional Development**

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

# **Evaluation**

2006 FCAT results in reading Tutorial rosters Administrative walk through and student reading logs (CRRP) Number of students registered for Advanced Placement English and history courses for 2006-2007.

### **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

#### Miami-Dade County Public Schools

District Strategic Plan

Ensure achievement of high academic standards by all	Develop our students so that they are able to successfully	Actively engage family and community members to become our partners in raising and	Reform business practices to ensure efficiency, effectiveness	Recruit, develop and retain 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		

### 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 2005 FCAT Mathematics data indicates that 96% of the ninth grade students and 96% of the tenth grade students scored at or above Level 3. 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	F/R LUNCH	LEP	SWD	LEVEL I	LOWEST 25%	OTHER	GRADUATIO N RATE

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

	PERSONS RESPONSIBLE	TIM	ELINE
STRATEGIES	(Identify by titles)	START	END
Enlist the assistance of school partners whenever possible to provide tutors.	School-Site Administrators Career Specialist	8/8/2005	5/24/2006
Provide tutoring opportunities before and after school, during lunch, and during Wednesday Activities periods.	School-Site Administrators Testing Co-chairs Teachers Tutors	8/8/2005	5/24/2006
Schedule in-school tutorial sessions (pull-outs) for the students identified as having the greatest need.	School-Site Administrators Testing Co-chairs Mathematics Department Chair	8/8/2005	5/24/2006
Use FCAT Explorer, and RiverDeep web-based programs.	School-Site Administrators Mathematics Department Chair	8/8/2005	2/28/2006
Administer and evaluate district practice assessments.	School-Site Administrators Mathematics Teachers	8/8/2005	2/28/2006
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	12/5/2005	2/1/2006

### **Action Steps**

# **Research-Based Programs**

Prentice Hall series McDougal Little series Glencoe series

# **Professional Development**

Attend the Florida Council of Mathematics Teachers annual meeting in Palm Beach, October 20, 2005 Attend FCAT related workshops

# Evaluation

Scores on the 2006 FCAT Mathematics administration.

### 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
	Х				

#### Miami-Dade County Public Schools

#### District Strategic Plan

	Ensure achievement of high academic standards by all	Develop our students so that they are able to successfully	Actively engage family and community members to become our partners in raising and	Reform business practices to ensure efficiency, effectiveness	Recruit, develop and retain high-performing, diverse, and
I	students.	compete in the global economy.	maintaining high student	and high ethical standards.	motivated faculty and staff.
			achievement.		
	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 persuasive writing, 4% of students did not meet high standards in expository 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	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 2006 FCAT Writing component as evidenced by the number of students scoring 3.5 or above.

	PERSONS RESPONSIBLE	TIMELINE		
STRATEGIES	(Identify by titles)	START	END	
Require Writing across the curriculum	School-Site Administrators Department Chairs	8/8/2005	5/24/2006	
Administer Learning Express practice tests	School-Site Administrators English Teachers	8/8/2005	5/24/2006	
Provide CRISS training	School-Site Administrators Department Chairs	8/8/2005	5/24/2006	
Administer District practice tests	School-Site Administrators English Teachers	8/8/2005	5/24/2006	
Offer Advanced Placement practice sessions	School-Site Administrators Advanced Placement Teachers	8/8/2005	5/24/2006	

### **Action Steps**

# **Research-Based Programs**

CRISS

Prentice Hall, McDougall Littell, Holt, Reinhart, Harcourt Brace, WW Norton writing and literature series Learning Express

# **Professional Development**

Zelda Glazer Writing Institute CRISS Training Advanced Placement Workshops

### **Evaluation**

2006 FCAT Writing Scores

# 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

#### Miami-Dade County Public Schools

#### District Strategic Plan

Ensure achievement of high academic standards by all students.	Develop our students so that they are able to successfully compete in the global economy.	Actively engage family and community members to become our partners in raising and maintaining high student	Reform business practices to ensure efficiency, effectiveness and high ethical standards.	Recruit, develop and retain high-performing, diverse, and motivated faculty and staff.
		achievement.		
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 2005 FCAT Science data indicates that the mean score of 355 far exceeds both the District and State mean scale scores.

Given instruction using the Sunshine State Standards, students will maintain or increase scientific thinking skills as evidenced by earning a mean scale score of 355 on the 2006 FCAT Science Assessment.

	PERSONS RESPONSIBLE	TIM	ELINE
STRATEGIES	(Identify by titles)	START	END
Schedule all ninth and tenth grade students into	School-Site Administrators	8/8/2005	4/24/2006
either Earth Space Science or Biology classes.	Student Services Chair		
Provide time for science teachers to share best	School-Site Administrators	8/8/2005	2/28/2006
practices and review student performance as it	Science Department Chair		
relates to the FCAT Science Assessment.			
Schedule initiatives to reinforce skills for students	School-Site Administrators	8/8/2005	2/28/2006
needing additional assistance based on teacher	Activities Director		
observation and benchmark performance results.	Testing Co-chairs		
	Science Department Chair		
Incorporate writing activities into teacher created	School-Site Administrators	8/8/2005	2/28/2006
assessments and student activities.	Activities Director		
	Testing Co-chairs		
	Science Department Chair		
Enlist the assistance of school partners whenever	School-Site Administrators	8/8/2005	5/24/2006
possible to provide tutors and supplementary	Career Specialist		
activities.	Science Department Chair		
Require ninth and tenth grade students to conduct	School-Site Administrators	8/8/2005	4/24/2006
independent scientific research projects, which	Science Department Chair		
incorporate writing and laboratory activities using	Science Fair Coordinator		
inquiry-based thinking skills for all science classes.			
Administer practice tests for all Advanced	School-Site Administrators	8/8/2005	4/28/2006
Placement science courses.	Science Department Chair		
	Science Teachers		

# **Research-Based Programs**

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

# **Professional Development**

Data analysis Attend science-related workshops

# Evaluation

2006 FCAT Science results

### 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.)

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

#### Miami-Dade County Public Schools

District Strategic Plan

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

### GOAL 5 STATEMENT:

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

#### **Needs Assessment**

In 2004-2005 family membership in the PTSA increased 30%. As well, because MAST Academy offers a variety of activities for parents/families, we benefit from parent participation as evidenced by high attendance at extracurricular events, athletic competitions, music/drama productions, etc. Additionally, parents participate in Open House Events, Back to School Night, ESSAC, PTSA, College Fair, Dade Partners activities, Recruitment activities/breakfasts, Senior Breakfast, the school's Annual Fishing Tournament, field trips, various class activities, the Athletic Booster Club, and Coast Guard JROTC Booster.

Given a school-wide emphasis on parent involvement and communication with parents, there will be a two percentage point increase in parent participation in 2005–2006 as evidenced by PTSA membership records.

	PERSONS RESPONSIBLE	TIMI	ELINE
STRATEGIES	(Identify by titles)	START	END
Conduct a parent needs survey to discover barriers to minority parent involvement in school activities.	School-Site Administrators Career Specialist	11/7/2005	1/31/2006
Sponsor quarterly college preparations seminars.	School-Site Administrators CAP Advisor	10/3/2005	5/24/2006
Provide access to students' real-time grades and attendance on the school's website.	School-Site Administrators Microsystems Tech	10/3/2005	5/24/2006
Collect parent e-mail addresses during Back to School Night to facilitate global or targeted electronic communications.	School-Site Administrators Activities Director	9/6/2005	9/29/2006
Utilize the marquee and automated telephone calling service to inform parents of upcoming events.	School-Site Administrators Lead Teacher	8/8/2005	5/24/2006
Promote the use of the Professional Library/Parent Resource Center in the media center.	School-Site Administrators Media Specialist	8/8/05	5/24/06

### **Action Steps**

# **Research-Based Programs**

Our parent involvement program is aligned with the National PTA Standards for Parental Involvement and Family Involvement Programs.

# **Professional Development**

Professional/Parental development will be offered to parents in the following areas:

PTSA Budget Analysis EESAC Budget Analysis College preparatory options FCAT Strategies for home learning for the parents of Levels 1 & 2 students Excelsior Parent Viewer Training Constant Contact Mass E-mail Broadcast School link to PTSA website

# **Evaluation**

PTSA 2005-2006 Membership rosters.

### 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

#### Miami-Dade County Public Schools

District Strategic Plan

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

### GOAL 6 STATEMENT:

Provide a safe, clean, healthy learning environment for our students, staff and community.

### Needs Assessment

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

Given a school-wide emphasis on discipline and safety, there will be a two percentage point increase in the overall number of activities employed to promote safety and security in 2005–2006 as evidenced by the Fire Alarm Safety Inquiry Report and assembly/symposium participation rosters.

	PERSONS RESPONSIBLE	TIMELINE		
STRATEGIES	(Identify by titles)	START	END	
Conduct a Safe School Symposium, which will include the following components; peer mediation, conflict resolution, school violence prevention, substance awareness, bias, prejudice, harassment and safe driving.	School-Site Administrators Activities Director Student Services Chair	11/7/2005	5/24/06	
Communicate the school's commitment to school safety to parents/families via electronic mail.	School-Site Administrators	8/8/2005	5/24/2006	
Provide faculty/staff training and awareness in areas of Critical Incident Response planning; Code Red, Code Yellow, CPR/AED and the Jessica Lunsford Act.	School-Site Administrators	8/8/2005	5/24/2006	
Conduct monthly campus safety and security committee meetings and inspections.	School-Site Administrators	8/8/2005	5/24/2006	
Conduct random seatbelt checks as students enter and depart campus.	School-Site Administrators SADD Sponsor	9/6/2005	5/24/2006	

# **Action Steps**

# **Research-Based Programs**

Florida Department of Education: Safe and Healthy Schools Florida Department of Education: Best Practices – Safety & Security

# **Professional Development**

Custodial Deep Cleaning Procedures MAST Academy Custodial Cleaning Standards Handbook

# Evaluation

Cleaning and Sanitation and Property audits.

# **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.)

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			

#### Miami-Dade County Public Schools

District Strategic Plan

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

Approximately 80% of MAST students showed learning gains in reading and between 95-100% in writing. The 20% in reading and 5% in writing who did not show gains remain a concern. Web-based practice products will enable both at-home and in-class practice in writing and reading.

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.

	PERSONS RESPONSIBLE	TIMELINE	
STRATEGIES	(Identify by titles)	START	END
Require writing across the curriculum in grades nine and ten.	School-Site Administrators	8/8/2005	5/24/2006
Require submission of FCAT practice essays using web-based tools.	School-Site Administrators Language Arts Teachers	11/1/2005	2/28/2006
Encourage additional CRISS training.	School-Site Administrators Department Chairs	10/3/2005	5/24/2006
Require students to complete District practice tests.	School-Site Administrators Language Arts Teachers	8/8/2005	3/31/2006
Implement Advanced Placement Vertical Teaming.	School-Site Administrators Language Arts Department Chair	10/3/2005	5/24/2006

# **Action Steps**

# **Research-Based Programs**

Learning Express

# **Professional Development**

FCAT Explorer training Learning Express training

# **Evaluation**

User frequency and completion data from the Learning Express and 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				

#### 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			

### 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 2004-2005 Physical Fitness Test Summary indicates that 70% 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 2005-2006 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.

	PERSONS RESPONSIBLE	TIMI	ELINE
STRATEGIES	(Identify by titles)	START	END
Increase awareness of diet and its affect on general	School-Site Administrators	8/8/2005	5/24/2006
health.	Health Teacher		
	Physical Fitness Teachers		
	Culinary Operations Teachers		
Award students that improve scores on the	School-Site Administrators	8/8/2005	5/24/2006
Physical Education Test.	Health Teacher		
	Physical Fitness Teachers		
Implement motivation through awareness of Gold	School-Site Administrators	8/8/2005	5/24/2006
and Silver Star recognition.	Health Teacher		
	Physical Fitness Teachers		
Access school's fitness trail as part of a diversified	School-Site Administrators	8/8/2005	5/24/2006
physical training plan.	Health Teacher		
	Physical Fitness Teachers		
Emphasize relationships between physical fitness,	School-Site Administrators	8/8/2005	5/24/2006
health, and mental acuity.	Health Teacher		
	Physical Fitness Teachers		
	Culinary Operations Teachers		

### **Action Steps**

### **Research-Based Programs**

Not applicable.

### **Professional Development**

Training in physical fitness instructional techniques

### Evaluation

Evaluation will be based on the 2005-2006 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 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	

#### Miami-Dade County Public Schools

#### District Strategic Plan

Ensure achievement of high academic standards by all	Develop our students so that they are able to successfully	Actively engage family and community members to become our partners in raising and	Reform business practices to ensure efficiency, effectiveness	Recruit, develop and retain 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 9 STATEMENT:

All MAST Academy students will create digital portfolios.

#### **Needs Assessment**

All students in Computer Graphics classes produce digital art products. Fewer than 20% post their works to a website. Students need online gallery space to display digital art created in the Computer Graphics course.

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.

	PERSONS RESPONSIBLE	TIME	CLINE
STRATEGIES	(Identify by titles)	START	END
Train teacher in online posting techniques and criteria for online gallery exhibits.	School-Site Administrators Art Teacher Webmaster	10/3/2005	4/28/2006
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	10/3/2005	4/28/2006
Require Computer Graphics students to generate gallery notes for all online postings.	School-Site Administrators Art Teacher Webmaster	10/3/2005	4/28/2006
Announce launch of gallery site to families and school partners.	School-Site Administrators Art Teacher Webmaster	10/3/2005	4/28/2006
Require Computer Graphics students to create and maintain digital portfolios.	School-Site Administrators Art Teacher Webmaster	10/3/2005	4/28/2006

# **Research-Based Programs**

Not applicable.

# **Professional Development**

Technology training

# **Evaluation**

Gradebook data and 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 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				

#### Miami-Dade County Public Schools

District Strategic Plan

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

### 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 persuasive writing, 4% did not meet high standards in expository 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.

	PERSONS RESPONSIBLE	TIMELINE	
STRATEGIES	(Identify by titles)	START	END
Require writing across the curriculum in grades nine and ten.	School-Site Administrators	8/8/05	5/24/06
Require submission of FCAT practice essays using web-based tools.	School-Site Administrators Language Arts Teachers	11/7/2005	2/28/2006
Encourage additional CRISS training.	School-Site Administrators Department Chairs	10/3/2005	5/24/06
Require students to complete District practice tests.	School-Site Administrators Language Arts Teachers	8/8/05	3/31/2006
Implement Advanced Placement Vertical Teaming.	School-Site Administrators Language Arts Department Chair	10/3/2005	5/24/06

### **Action Steps**

### **Research-Based Programs**

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

### **Professional Development**

Learning Express Training Zelda Glazer Writing Institute CRISS Training

### Evaluation

Learning Express 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

#### Miami-Dade County Public Schools

#### District Strategic Plan

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

	PERSONS RESPONSIBLE	TIMELINE	
STRATEGIES	(Identify by titles)	START	END
Continue the comprehensive subject area tutorial program.	School-Site Administrators Teachers University of Miami Tutors	9/6/2005	5/24/06
Require completion of an annual internship or ethics and leadership class before graduation.	School-Site Administrators Guidance Counselors Outreach Coordinator	9/6/05	5/24/06
Review student progress towards completion of an academic major and conduct bi-annual review of student history.	School-Site Administrators Guidance Counselors	9/6/2005	2/28/2006
Conduct outreach activities including: Back-to- School Night, Academic Symposium, Captain's Calls (monthly class meetings with Principal and Student Services representatives).	School-Site Administrators Guidance Counselors	9/6/2005	5/24/06
Conduct individual and group consultation for post-secondary college plans.	School-Site Administrators CAP Advisor	9/6/2005	5/24/06
Coordinate annual Florida Bright Futures registration and eligibility evaluation.	School-Site Administrators CAP Advisor Guidance Counselors	1/3/2006	5/24/06

# **Action Steps**

# **Research-Based Programs**

The Florida Counseling for Future Education Handbook developed by the Florida State Department of Education

The College Board Connect to College Success

# **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**

FCAT passing rate, internship completion, ninety percent completion of an academic major and 100% graduation rate with student withdrawal code of W06.

# **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 2005-2006 SIP.

#### Instructional Materials:

EESAC reviewed and discussed the instructional materials specified in the 2005-2006 SIP at the October 5, 2005 meeting.

### Technology:

EESAC members participate in year round technology discussions. Technology targets in the 2005-2006 SIP were reviewed at the October 5, 2005 meeting.

### Staffing:

EESAC reviewed and discussed the staffing needs at the October 5, 2005 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 October 5, 2005 EESAC meeting.

#### **Benchmarking:**

EESAC members reviewed benchmark data at the October 5, 2005 meeting.

# School Safety & Discipline:

EESAC reviewed the school safety objective at the October 5, 2005 meeting.

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 Signatures:

Principal

EESAC Chair

UTD Steward

EESAC Parent Representative

EESAC Business/Community Representative

EESAC Student Representative, 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