

Miami-Dade County Public Schools

# Mast Academy



2017-18 Schoolwide Improvement Plan

## Mast Academy

3979 RICKENBACKER CSWY, Key Biscayne, FL 33149

<http://mast.dade.k12.fl.us/>

### School Demographics

School Type and Grades Served (per MSID File)	2016-17 Title I School	2016-17 Economically Disadvantaged (FRL) Rate (as reported on Survey 3)
High School 9-12	No	20%
Primary Service Type (per MSID File)	Charter School	2018-19 Minority Rate (Reported as Non-white on Survey 2)
K-12 General Education	No	75%

### School Grades History

Year	2016-17	2015-16	2014-15	2013-14
Grade	A	A	A*	A

*\*Informational Baseline School Grade*

**Note:** The school grades calculation was revised substantially for the 2014-15 school year to implement statutory changes made by the 2014 Legislature and incorporate the new Florida Standards Assessments. The 2014-15 school grades serve as informational baseline data that schools can use to improve in future years.

### School Board Approval

This plan is pending approval by the Dade County School Board.

### SIP Authority and Template

Section 1001.42(18), Florida Statutes, requires district school boards to annually approve and require implementation of a school improvement plan (SIP) for each school in the district that has a school grade of D or F.

The Florida Department of Education (FDOE) SIP template meets all statutory and rule requirements for traditional public schools and incorporates all components required for schools receiving Title I funds. This template is required by State Board of Education Rule 6A-1.099811, Florida Administrative Code, for all non-charter schools with a current grade of D or F (see page 4). For schools receiving a grade of A, B, or C, the district may opt to require a SIP using a template of its choosing.

This document was prepared by school and district leadership using the FDOE's school improvement planning web application located at <https://www.floridacims.org>.

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## Purpose and Outline of the SIP

The SIP is intended to be the primary artifact used by every school with stakeholders to review data, set goals, create an action plan and monitor progress. A corollary at the district level is the District Improvement and Assistance Plan (DIAP), designed to help district leadership make the necessary connections between school and district goals in order to align resources. The Florida Department of Education encourages schools to use the SIP as a “living document” by continually updating, refining and using the plan to guide their work throughout the year. This printed version represents the SIP as of the “Date Modified” listed in the footer.

### Part I: Current School Status

Part I organizes the current status of the school around five domains inspired by the 5Essentials framework: Supportive Environment, Family and Community Involvement, Effective Leadership, Public and Collaborative Teaching, and Ambitious Instruction and Learning. Questions regarding the school’s Multi-Tiered System of Supports have been embedded throughout this part to demonstrate how data is used by stakeholders to understand the needs of all students and allocate appropriate resources in proportion to those needs.

### Part II: Needs Assessment

Part II requires the school to review performance and early warning systems data in order to develop strategic goals and associated data targets (i.e., “SMART goals”) for the coming school year in context of the school’s greatest strengths and needs. An online tool was developed, which includes data visualizations and processing questions to support problem identification, problem analysis and strategic goal formulation.

### Part III: 8-Step Planning and Problem Solving for Implementation

Part III enables the school to develop implementation plans for its highest-priority goals. With the overview of the current state of the school in mind and the strategic goals identified through the needs assessment, the planning team engages in a facilitated planning and problem-solving process, through which they

- Define strategic goals and establish targets to be reached by successfully achieving the goals (Step 1)
- Identify barriers that could hinder achieving those goals and resources that could be used to eliminate or reduce barriers (Step 2)
- Select high-priority barriers they want to address initially (Step 3)
- Design implementation and monitoring plans for strategies to resolve selected barriers (Steps 4-7)
- Determine how they will monitor progress toward each goal (Step 8)

### Appendices

The following appendices, automatically-generated from content entered in Part III, are included in this document:

- Appendix 1 is a timeline of all action steps and monitoring activities
- Appendix 2 is an outline of all professional development opportunities and technical assistance items
- Appendix 3 is a report of the budget needed to implement the strategies

## Differentiated Accountability

Florida's Differentiated Accountability (DA) system, established in [section 1008.33, Florida Statutes](#), is a statewide network of strategic support, differentiated by need according to performance data, provided to districts and schools in order to improve leadership capacity, teacher efficacy, and student outcomes. Through a data-driven planning and problem-solving process, DA field teams collaborate with district leadership to design, implement, and refine strategic goals and action plans that are documented in the SIP.

### DA Regions

Florida's DA network is divided into four geographical regions, each served by a field team led by a regional executive director (RED).

### DA Categories

At the start of each academic year, traditional schools are classified for DA support in two categories based on the most recent school grades data available. Descriptions of each DA category along with the state support and interventions provided are set forth by [Rule 6A-1.099811, Florida Administrative Code](#):

- **Not in DA** - A school with a current school grade of A, B, or C; charter schools; and ungraded schools.
- **Targeted Support and Improvement** - A school with a current school grade of an initial D.
- **Comprehensive Support and Improvement** - A school with a current school grade of F or two consecutive grades of D, or a high school with a graduation rate of 67 percent or less in the most recent data release.

### DA Turnaround Status

Additionally, Comprehensive Support and Improvement schools have a turnaround status of "Implementing," based on a school's grades history, including the current school grade:

- Implementing - A school with a status of "Implementing" requires the district to submit a turnaround plan to the State Board of Education for approval and implementation. A school remains in "Implementing" status until its school grade improves to a C or higher.

### 2017-18 DA Category and Statuses for Mast Academy

DA Region and RED	DA Category and Turnaround Status
Southeast - <a href="#">LaShawn Russ-Porterfield</a>	- N/A

## I. Part I: Current School Status

### A. Supportive Environment

#### 1. School Mission and Vision

##### a. Provide the school's mission statement.

MAST Academy provides a marine setting and nurturing environment for studies leading to academic success, career preparation, an appreciation of the sea, and environment 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.

##### b. Provide the school's vision statement.

The stakeholders' vision for the MAST Academy is that the school becomes a nationally recognized leader in college preparatory and marine- related career education. Hence in our pursuit for excellence, we have a wide variety of curricular offerings that embrace our theme-based magnet programs which include Maritime, Cambridge STEM and Cambridge Global Studies.

#### 2. School Environment

##### a. Describe the process by which the school learns about students' cultures and builds relationships between teachers and students.

MAST Academy fosters a culture of community and collaboration. School-wide events create platforms for the school community to learn about student cultures as well as build relationships between teachers and students. All disciplines recognize multicultural diversity through activities focusing on cultures and tolerance. Topics integrated in the curriculum include but are not limited to History of the Holocaust, Black History Month, Hispanic Heritage Month, and Women's contributions.

The Administration and faculty work closely through Curriculum Council meetings and Department meetings to ensure school-wide and individual student's needs are met.

##### b. Describe how the school creates an environment where students feel safe and respected before, during and after school.

In order to provide a safe, caring and orderly environment, Mast Academy has the following guidelines in place:

1. All school personnel will demonstrate professionalism and common courtesy which are essential qualities that all need to demonstrate in promoting an educational environment free from disruptions, harassment, bullying and aggressive actions.
2. Expectations for positive interpersonal interaction are clearly stated through student orientations and class discussions.
3. Procedures are in place for reporting violations of bullying/harassment/dating violence/civil rights policies to student services counselors and administration. Anonymous reporting boxes are clearly labeled and placed in both buildings outside of camera view for all stakeholders to freely use.
4. All school site personnel monitor the school and report any suspicious activity to the school's administrative team.

##### c. Describe the schoolwide behavioral system in place that aids in minimizing distractions to keep students engaged during instructional time. This may include, but is not limited to, established protocols for disciplinary incidents, clear behavioral expectations, and training for school personnel to ensure the system is fairly and consistently enforced.

The following behavioral systems and procedures are in place at MAST Academy:  
Teachers are trained in and utilize classroom management strategies.  
Differentiated instruction is implemented school-wide to meet the needs of all students. Teachers will convey and review expectations for each learning activity.  
Counseling services have time allotted for the core classroom guidance instruction on developing behavior expectations.

**d. Describe how the school ensures the social-emotional needs of all students are being met, which may include providing counseling, mentoring and other pupil services.**

Our school's Leadership Team meets monthly to discuss students with barriers to academic and social success.  
Currently, MAST Academy has three counselors implementing a comprehensive counseling system. School Counselors maintain a student check-in/check-out log, utilized with students in need of positive adult interactions and positive feedback throughout the school day. The school hosts numerous activities that address social/emotional needs of students. In addition, MAST Academy implements HIP (Health Information Project). HIP is a student-facilitated program, 8 session health education for every freshman in the school. HIP focuses on prevention, knowledge and resource-sharing to ensure that all teens can be physically and emotionally safe, strong and healthy.

### 3. Early Warning Systems

The school's response to this section may address the requirements of ESSA, P.L. No. 114-95, Â§ 1114(b)(7)(A)(i) and (b)(7)(A)(iii)(III).

**a. Describe the school's early warning system and provide a list of the early warning indicators used in the system.**

MAST Academy strives to produce students who are college and career ready. MAST Academy utilizes EWS data systems to target and identify students who have attendance, behavioral or academic concerns. Decisions regarding the identification of struggling students and the support required are based on the EWS indicators . The school monitors the EWS using the following sources to identify student needs and any barriers that may prevent their success.

1. Student data from statewide and standardized assessments
2. Nine Week Report Card
3. Input from Faculty and Staff

**b. Provide the following data related to the school's early warning system**

**1. The number of students by grade level that exhibit each early warning indicator:**

Indicator	Grade Level														Total
	K	1	2	3	4	5	6	7	8	9	10	11	12		
Attendance below 90 percent	0	0	0	0	0	0	0	0	0	0	0	0	0		
One or more suspensions	0	0	0	0	0	0	0	0	0	0	0	0	0		
Course failure in ELA or Math	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Level 1 on statewide assessment	0	0	0	0	0	0	1	2	1	1	10	7	2	24	

**The number of students identified by the system as exhibiting two or more early warning indicators:**

Indicator	Grade Level													Total
	K	1	2	3	4	5	6	7	8	9	10	11	12	
Students exhibiting two or more indicators	0	0	0	0	0	0	2	2	1	3	0	0	0	8

**c. Describe all intervention strategies employed by the school to improve the academic performance of students identified by the early warning system.**

To improve the academic performance of students identified by the Early Warning System our school will:

Use effective multi-disciplinary teams in place to problem solve and create action plans.

Use I-Ready, Tutorials, Mentoring assistance.

Use departmental planned discussions with administration to review data and set goals for identified students.

Use notification procedures for parents, agency and community outreach.

Create evidence-based interventions with targeted solution focused on counseling to close student need gaps related to early warning systems.

**B. Family and Community Engagement**

The school's response to this section may address the requirements of ESSA, P.L. No. 114-95, Â§ 1114(b)(2) and (b)(7)(A)(iii)(I).

**1. Describe how the school works at building positive relationships with families to increase involvement, including efforts to communicate the school's mission and vision, and keep parents informed of their child's progress.**

**a. Will the school use its Title I Parent and Family Engagement Policy (PFEP) to satisfy this question?**

No

**1. PFEP Link**

The school completes a Parental Involvement Plan (PFEP), which is available at the school site.

**2. Description**

MAST Academy strives to provide various opportunities to involve parents in school- related activities. The school uses numerous communication means to keep our families informed. Connect-ed messages as well as our school's webpage are used to disseminate information.

Our goal for the 2017 - 2018 school year PTSA Membership is to increase from 700 members to 800 members . In order to attain this goal, we will provide and schedule parent meetings and school-sponsored activities at various times whenever possible to help increase the number of parents who attend.

**2. Describe the process by which the school builds and sustains partnerships with the local community for the purpose of securing and utilizing resources to support the school and student achievement.**

MAST Academy recognizes the importance of partnering with the community to ensure that all students' developmental needs are addressed and met. MAST forms and maintains key relationships and ensures that all stakeholders share a common vision for the success of all students. The following process are implemented to build and sustain partnerships:

Establishes collaborative structures to engage all stakeholders ( EESAC, PTSA, Dade Partners).  
Encourages open dialogue about challenges and solutions.



Engages stakeholders in the use of data to facilitate an understanding of accountability and measurable results.

## C. Effective Leadership

### 1. School Leadership Team

#### a. Membership

Identify the name, email address and position title for each member of the school leadership team.:

Name	Title
Collman-Perez, Cadian	Principal
Gould, Michael	Assistant Principal
Suarez, Liliana	Assistant Principal

#### b. Duties

**1. Describe the roles and responsibilities of the members, including how they serve as instructional leaders and practice shared decision making.**

Josephine Otero - Principal,  
Dr. Michael Gould and Ms. Liliana Suarez- Assistant Principals,  
Melissa Fernandez and Barbara Quinaz - Lead Teachers,  
Andrea Pastorello - Guidance Counselor,  
Stella Crespo - Language Arts/Foreign Language Chairperson,  
Jared Lutz- Social Sciences and Fine Arts Chairperson  
Dana Yancoskie - Mathematics Chairperson,  
Christine Walker – Science Chairperson,  
Ana Plana -Life Skills Chairperson,

Each member of the committee will contribute strategies, barriers and various forms of evaluation in order to maintain or increase student achievement.

Principal: Provides a common vision for the use of data-based decision-making, ensures that the school based team is implementing MTSS/Rtl, conducts assessment of MTSS/Rtl skills of school staff, ensures implementation of intervention support and documentation, ensures adequate professional development to support MTSS/Rtl implementation, and communicates with parents regarding school-based MTSS/Rtl plans and activities.

Assistant Principal: Assists the principal to ensure the school-based team is implementing MTSS/Rtl.

Guidance Counselor: Assists with screening programs that provide early intervening services for students considered to be “at risk;” assists in the design and implementation for progress monitoring, data collection, and data analysis; provides support for assessment and implementation monitoring. Takes chief responsibility for school-home communication in this area. Provides quality services and expertise in intervention with individual students. Student Services staff link child-serving and community agencies that support students and their families facilitating each young person’s academic, emotional, behavioral and social success.

Language Arts-Foreign Language Chairperson and Social Sciences-Fine Arts: Provide guidance on the comprehensive reading plan; facilitates and supports data collection activities; assists in data analysis; provides professional development and technical assistance to teachers regarding data-based instructional planning; supports the implementation of intervention plans.

Mathematics/Science Chairperson: Facilitates and supports data collection activities; assists in data analysis; provides professional development and technical assistance to teachers regarding data-

based instructional planning; supports the implementation of intervention plans.

Life Skills Chairperson- supports data collection activities and the implementation of school-wide plans

**2. Describe the process through which school leadership identifies and aligns all available resources (e.g., personnel, instructional, curricular) in order to meet the needs of all students and maximize desired student outcomes. Include the methodology for coordinating and supplementing federal, state and local funds, services and programs. Provide the person(s) responsible, frequency of meetings, how an inventory of resources is maintained and any problem-solving activities used to determine how to apply resources for the highest impact.**

The school-based MTSS/RtI Leadership Team will focus meetings around how we develop and maintain a continuous problem-solving system to bring out the best in our school, our teachers and our students. The team will meet quarterly and after the administration of baseline, quarterly interims and Florida Standards Assessments to engage in the following activities: Review data and link to instructional decisions; review progress monitoring data at the grade level and classroom level to identify students who are meeting/exceeding benchmarks or at moderate risk for not meeting benchmarks. Based on the above information, the team will identify professional development and resources. The team will also collaborate regularly, problem solve, share effective practices, evaluate implementation, make decisions, and practice new processes and skills. The team will also facilitate the process of building consensus, increasing infrastructure, and making decisions about implementation.

All funds that enter the school will be used towards building our magnet themes. The intent is to improve achievement by focusing on our magnet programs; Maritime and Cambridge. The funds will be used to support teaching and learning. Our Lead Teachers will plan professional development opportunities for our staff. The funds will also be used to support theme-based learning during school and help fund our two week summer orientation program for incoming 8th and 9th graders. Funds will be used to send staff to conferences and observe other schools with similar theme-based programs. In addition, these funds will be utilized to bring in specialists/consultants to help promote the magnet theme(s).

## **2. School Advisory Council (SAC)**

### **a. Membership**

Identify the name and stakeholder group for each member of the SAC.:

Name	Stakeholder Group
Josephine Otero	Principal
Julie Hood	Teacher
Fernando Carasusan	Teacher
Theresa Kralievits	Education Support Employee
Heather Hodson	Teacher
Christina Walker	Teacher
Ana Plana	Teacher
Maha Joudi	Parent
Gretchen Clark	Parent
Erica Rule	Business/Community
Jose Companioni	Teacher
Melissa Fernandez	Teacher
Heather Hodson	Teacher
Dana Yancoskie	Teacher
Katrina Orr	Education Support Employee
Allison Grossman	Parent
Michele Drucker	Parent
Judith Gamerberg	Parent
Maggie Binimelis	Parent
Kareem Joudi	Student
Luis Salazar	Student
Eric Ponce	Student
Danielle Peraza	Student
Judy Chacon	Business/Community
Carlos Pedercini	Business/Community
Panta Zadeh	Parent

#### **b. Duties**

##### **1. Provide a description of the SAC's involvement with the following activities, as required by section 1001.452(2), Florida Statutes**

The school's response to this question may address the requirements of ESSA, P.L. No. 114-95, Â§ 1114(b)(2).

##### **a. Evaluation of last year's school improvement plan**

The Educational Excellence School Advisory Council (EESAC) met to set priorities and revise strategies for the 2017-2018 School Improvement Plan. The EESAC will work cohesively to monitor strategies and utilize the Florida Continuous Improvement Model (FCIM) towards student achievement.

##### **b. Development of this school improvement plan**

The Educational Excellence School Advisory Council (EESAC) will assist in decision making which will affects instruction and the delivery of educational programs. The EESAC will also assist principals in the development of the SIP as well as the schools' budgets. The EESAC will work cohesively to

monitor strategies and utilize the Florida Continuous Improvement Model (FCIM) towards student achievement.

*c. Preparation of the school's annual budget and plan*

The projected school budget for the 2017-2018 school year was shared with the EESAC and input was collected. Currently, there is \$6781.00 in the budget. During the October 2017 meeting, updated budget information was shared and the SAC determined allocations for expenditures.

**2. Describe the use of school improvement funds allocated last year, including the amount budgeted for each project.**

The budget for the 2016-2017 school year was \$6,127.00. The funds were predominately used towards the registration fee for school-related competitions as listed below.

Robotics \$1,120.00

Middle school Robotics club for funds to purchase a vex IQ started kit and fees for a competition.- \$400.00

National Science Bowl team Registration-\$300.00

Mu Alpha Thete to participate in a regional math competition- \$175.00

We the People Competition-\$75.00

Rho Kappa's Model United Nations competition-\$125.00

FCCLA States competition-\$1400.00

Interact club for the restoration of the Hyperbolic Chamber.-350.00

Model UN -\$350.00

Science Fair- \$225.00

Performing Arts Club- \$767.50

The remaining funds totaling \$840.00 was approved for the Principal's Discretionary Funds.

**3. Verify that the school is in compliance with section 1001.452, Florida Statutes, regarding the establishment requirements and duties of the SAC.**

Yes

*a. If the school is not in compliance, describe the measures being implemented to meet SAC requirements.*

**3. Literacy Leadership Team (LLT)**

**a. Membership**

Identify the name and position title for each member of the school-based LLT or similar group, if applicable.:

Name	Title
Collman-Perez, Cadian	Principal
Pastorello, Andrea	School Counselor
Walker, Christina	Teacher, K-12
Plana, Ana	Teacher, K-12
Crespo, Stella	Teacher, K-12
Quinaz, Barbara	Teacher, K-12
Suarez, Liliana	Assistant Principal
Fernandez, Melissa	Teacher, K-12
Yancoski, Dana	Teacher, K-12
	Teacher, K-12

#### b. Duties

##### **1. Describe how the LLT or similar group promotes literacy within the school, if applicable.**

The Literacy Leadership Team will promote school wide literacy initiatives and the implementation of Common Core strategies throughout all the disciplines. These initiatives will be used to prepare students for the critical reading section of the SAT as well as help students build stronger reading skills to ensure their success in AP level courses which require college level reading skills.

The LLT will focus on the following major initiatives this year:

Providing Professional Development

Implementing Data disaggregation

Integrating MTSS/RtI into school improvement planning.

Planning and implementing strategies to ensure continual growth in student enrollment and achievement

#### D. Public and Collaborative Teaching

The school's responses to this section may address the requirements of ESSA, P.L. No. 114-95, Â§ 1114(b)(7)(A)(iii)(IV).

##### **1. Describe the school's strategies to encourage positive working relationships between teachers, including collaborative planning and instruction.**

The Leadership Team encourages positive working relationships with teachers by participation in Department Team Meetings. Student academic and behavioral data is utilized to focus the meetings on students' academic and behavioral needs and how students might be assessed. Student improvement is monitored and instruction is modified as needed based on decisions made through collaboration.

##### **2. Describe the school's strategies to recruit, develop and retain highly qualified, certified-in-field, effective teachers to the school.**

Administration will recruit highly qualified teachers using Teacher Match and partnering with local Universities to identify possible candidates. MAST Academy will continue to establish relationships with state colleges/universities or academic institutions in order to provide advance degree program information to teachers. The school will maintain, develop, and schedule intense, sustained, and research-based professional development in pedagogy. In addition, all teaches will complete a yearly Deliberate Practice Growth Target (DPGT).

### 3. Describe the school's teacher mentoring program, including the rationale for pairings and planned mentoring activities.

Mentors and beginning teachers are paired based on department affiliation and compatibility. Our seasoned teachers are asked if they are willing to mentor a beginning teacher. If they agree, they will review school board policies and procedures, assist with curriculum planning and writing lesson plans, and guide beginning teachers through various procedures for school activities, field trips, and testing.

The mentors and beginning teachers focus on the following areas:

Overview of Mentoring and Induction for New Teachers (MINT)

Mastery of pedagogical and subject matter skills.

Knowledge of content, materials, and methods that support high standards in the curriculum areas.

Commitment to personal professional learning demonstrated by frequent participation in professional development.

## E. Ambitious Instruction and Learning

### 1. Instructional Programs and Strategies

#### a. Instructional Programs

##### **1. Describe how the school ensures its core instructional programs and materials are aligned to Florida's standards.**

Our school uses District adopted and supported instructional programs and materials to create ongoing opportunities for teachers to plan and discuss curriculum aligned to the Florida Standards. This supports a deeper level of comprehension. School leadership facilitates conversations and learning opportunities that promote dialogue to dispel misunderstandings, promote growth in instructional practice, and allow for a greater understanding of the curriculum and the standards.

#### b. Instructional Strategies

##### **1. Describe how the school uses data to provide and differentiate instruction to meet the diverse needs of students. Provide examples of how instruction is modified or supplemented to assist students having difficulty attaining the proficient or advanced level on state assessments.**

Student data is used to drive instruction, identify needs and plan for interventions. Our curriculum council disaggregates data to provide instructional and curricular support

Our school ensures every teacher contributes to literacy improvement of every student by:

- Holding meetings on a regular basis to make decisions about literacy instruction in the school.
- Student data is analyzed and compared to expectations found in the Language Arts Florida Standards (LAFS).
- Providing instruction aligned with the Language Arts Florida Standards for their grade level.
- Providing resources to support instruction (extensive classroom libraries, texts to support units of study, leveled books for small group instruction).
- Administering assessments which measure instructed standards.
- Monitoring progress at the class and grade level during Department Team Meetings.

##### **2. Provide the following information for each strategy the school uses to increase the amount and quality of learning time and help enrich and accelerate the curriculum:**

**Strategy:** Extended School Day

**Minutes added to school year:** 1,200

Teachers begin lessons with a short review of what was instructed in the previous class to assist in building memory recall. Instruction is taught in a step-by-step method. Questioning techniques are used frequently to ensure students' are grasping the lesson. Teachers act as facilitators to students, guiding them through the lesson and activities. Teachers collaborate, plan and attend professional development workshops pertinent to their discipline.

**Strategy Rationale**

Teacher collaboration, planning and professional development

**Strategy Purpose(s)**

- Teacher collaboration, planning and professional development

**Person(s) responsible for monitoring implementation of the strategy**

Collman-Perez, Cadian, pr7161@dadeschools.net

**Data that is or will be collected and how it is analyzed to determine effectiveness of the strategy**

Data is periodically reviewed and analyzed by administrators and teachers in order to drive instruction. Areas that reflect student strengths" are reinforced. However, emphasis on instruction is placed on students' areas of deficiencies.

## 2. Student Transition and Readiness

### a. PreK-12 Transition

The school's response to this question may address the requirements of ESSA, P.L. No. 114-95, Â§ 1114(b)(7)(A)(iii)(V).

**1. Describe the strategies the school employs to support incoming and outgoing cohorts of students in transition from one school level to another.**

All members of the school staff participate in collaborative learning communities that meet both informally and formally on a regular schedule.

- Collaboration occurs across grade levels, content areas, and feeder schools.
- Staff members implement a formal process that promotes productive discussion about student learning.

School personnel can clearly link collaboration to improvement results in instructional practice and student performance.

### b. College and Career Readiness

**1. Describe the strategies the school uses to advance college and career awareness, which may include establishing partnerships with business, industry or community organizations.**

MAST Academy will administer the PSAT cost free to all ninth and tenth graders, as provided by the district. All eleventh graders are also strongly encouraged to take the PSAT. MAST Academy will make additional efforts to ensure that a maximum number of ninth and eleventh graders take advantage of testing opportunities. MAST Academy, the school's EESAC, and the MAST PTSA work in partnership to maximize student exposure to this exam also. Through the leadership and student services teams, MAST Academy consistently reviews and monitors students' progress towards qualification for the Florida's Bright Futures Scholarship programs. For the 2017-2018 school year,



MAST Academy offers 9 A Level Cambridge Courses, 13 AS Level Cambridge Courses, 20 Advanced Placement courses, and four Dual Enrollment courses at MAST Academy with opportunities at one local college. All students are highly encouraged to enroll in Honors, Advanced Placement, and Dual Enrollment course opportunities to prepare for post-secondary preparation. Students are encouraged to utilize the Khan Academy tutorials for remediation and SAT preparation. All students at MAST Academy take four years of Science and Math.

***2. Identify the career and technical education programs available to students and industry certifications that may be earned through those respective programs.***

The rigors of the courses offered at MAST require challenging instruction and support to meet our high standards. Our programs, whether the Maritime or Cambridge International are designed to focus on one career of choice, with students having the opportunity to select from either our Advanced Placement courses, our AS and A Level Cambridge courses and /or college-level dual enrollment courses. The courses in each program scaffold; leading up to that career choice. This in turn assists our students to become readily prepared for their post-secondary experiences. Required executive internships provide students with practical work experience in a particular field. In addition, MAST Academy offers the following Industry Certifications: National ProStart Certificate of Achievement, Certified Food Protection Manager (ServSafe) and Mastercam Certified Programmer Mill Level 1 (CPgM1). The National Restaurant Association Educational Foundation (NRAEF) certification programs offer a professional credential achieved through completion of an in-depth course of study in the areas identified as crucial to performing job. The ServSafe training covers critical principles including personal hygiene, cross contamination, time and temperature, receiving and storage, food storage, food safety management systems, training hourly employees, sanitation, the flow of food through the operation, and sanitary facilities and pest management that is required by Florida Statute 509.039 for food service managers. Lastly, The Mastercam Certified Programmer Mill Level 1 (CPgM1) is a rigorous set of practical test that demonstrate a programmer's ability to work effectively with CAM software, overcome common issues facing today's shops, and produce high quality finished parts. Geared to 2D machining, it ensures a strong foundation in CNC knowledge.

***3. Describe efforts the school has taken to integrate career and technical education with academic courses (e.g., industrial biotechnology) to support student achievement.***

At MAST Academy, our high school students either follow a Maritime or a Cambridge International option during their four years. All of our students are allowed to select from either our Advanced Placement courses, our AS and A Level Cambridge courses and /or college-level dual enrollment courses in order to challenge themselves and to provide exploration of their interests. All students must complete four years of coursework in mathematics and science, and many complete six or more courses in each of these areas. Required internships provide applications for the students' knowledge and abilities. Students complete at least one hundred hours of community service with a focus on a particular theme or project. This instills a sense of empowerment and responsibility for students' roles in the stewardship of our marine environment and responsible citizenry. The consistent emphasis on our marine theme adds cohesiveness to our students' experience. A Cambridge Program was established in 2012 in order to accommodate residents from Key Biscayne. Although the program is open to students district-wide, students who meet criteria and are Key Biscayne residents have preference in entering the Cambridge program. The Cambridge Curriculum includes; The Cambridge Secondary 1 Program for 6th - 8th grades, The Cambridge Pre-AICE Program for 9th and 10th grades and The Cambridge AICE program for 11th and 12th grades. MAST Academy has a new building structure to accommodate the expansion of the school. School staff members guide students and parents in the course selection process. Most students complete an internship for graduation, and all the sites listed accept student interns each year, bringing our students into contact with some of the world's top scientists and researchers. As a result of our internship program, many of our students are not only exposed to but participate in marine research before graduation. For example, Marine Biology students join University of Miami researchers, boarding vessels to capture, tag, and



record data on local sharks. Project information and the movement of satellite-tagged sharks can be followed on a website, and students analyze project data. Tours of laboratories and research vessels, volunteer opportunities, and classroom visits all showcase state of the art marine research problems and the people who solve them. The Coast Guard Academy's Junior Leadership Program resides at MAST, and is supported by a nearby Coast Guard Base through field trips and direct program support. This maritime-focused local environment provides a perfect nurturing ground for our mission and vision, with an ample supply of partners from government and private industry with related expertise. Our aquatics-based physical education program features advanced swimming and water safety, life guarding, kayaking and sail boarding, and an option to earn scuba certification. The marine theme is woven throughout the curriculum, from the works of Melville and Hemingway in Language Arts, to navigation routes in history classes, to the engineering of underwater robots and a solar powered boat. Science and mathematics classes employ marine-based examples such as the use of geometry in navigation, the calculation of breathing gases for deep diving operations, or the water chemistry of reef aquaria. Marine organisms and ecosystems are used in science courses for models, case studies, and study specimens. Biology classes showcase marine invertebrates and the roles they may play in the future of health and medicine. Our waterside location is the ideal setting for a marine theme program, and it is utilized to the fullest extent.

The counselor meets with students (and often parents) to finalize subject selection. The student, parents,

and counselor will be involved in the development and maintenance of a course and graduation plan. Tenth and eleventh grade English classes have a career planning and resume development component. Academic intervention occurs with students who are failing to meet the academic standards expected of students attending MAST Academy. MAST offers two CAPE Academies, Engineering and Culinary Arts, and the students are encouraged to participate in the corresponding CTE exams. MAST also participates in a wide variety of competitions, including Engineering and Robotics competition and National Oceanic Science Bowl.

**4. Describe strategies for improving student readiness for the public postsecondary level based on annual analysis of the [High School Feedback Report](#), as required by section 1008.37(4), Florida Statutes.**

Upon review of the High School Feed back report the following strategies are implemented:

- Leadership Team reviews and provides assistance to specific students as needed.
- Provide students and parents with college readiness workshops.
- Counselors conduct classroom guidance and individual counseling sessions with students.
- Conduct informational meetings with parents to explain their role in assisting students with being ready for college.

## II. Needs Assessment

The school's completion of this part may address the requirements of ESSA, P.L. No. 114-95, Â§ 1114(b)(6).

### A. Problem Identification

#### 1. Data to Support Problem Identification

##### b. Data Uploads

Data uploads are not required by the Florida Department of Education but are offered as a tool for the needs assessment. In this section, the school may upload files of locally available data charts and graphs being used as evidence of need.

The following documents were submitted as evidence for this section:

*No files were uploaded*

## 2. Problem Identification Summary

This section is not required by the Florida Department of Education but is provided as an opportunity for the school to summarize the points of strength and areas of need that have been identified in the data.

## B. Problem Analysis Summary

This section is not required by the Florida Department of Education but is provided as an opportunity for the school to summarize the underlying "why" or root causes for the areas of need identified in the data, as determined by situational awareness of, and research conducted by, the stakeholders involved in the needs assessment.

## C. Strategic Goals

## School Improvement Goals

*The following key is intended to help readers understand how the sections of this document correspond to the steps of the 8-step planning and problem-solving framework used in the School Improvement Plan. The Quick Key numbers can help registered users go directly to the point of entry for any given goal, barrier and strategy within the online survey.*

### Problem Solving Key

**G** = Goal

**B** =  
Barrier

**S** = Strategy

 = Problem Solving Step     S123456 = Quick Key

## Strategic Goals Summary

**G1.**      If core instruction is increased in all content areas then student achievement will improve.

## Strategic Goals Detail

*For each strategic goal, this section lists the associated targets (i.e., "SMART goals"), targeted barriers to achieving the goal, resources available to help reduce or eliminate the barriers, and the plan for monitoring progress toward the goal.*

**G1. If core instruction is increased in all content areas then student achievement will improve.** 1a

 G097061

**Targets Supported** 1b

Indicator	Annual Target
ELA Achievement District Assessment	75.0

**Targeted Barriers to Achieving the Goal** 3

- Inconsistent infusion of literacy throughout the curriculum.

**Resources Available to Help Reduce or Eliminate the Barriers** 2

- Content experts
- lap top carts/ tablets
- District web-based programs
- Classroom Walkthroughs

**Plan to Monitor Progress Toward G1.** 8

The Leadership Team will review progress towards the goal and annual targets will be monitored through the collection of data.

**Person Responsible**

Cadian Collman-Perez

**Schedule**

Monthly, from 8/21/2017 to 6/7/2018

**Evidence of Completion**

Middle grades i-Ready Data and District Interim Assessment data and will reveal progress towards the goal and annual targets will be met.

## Action Plan for Improvement

*For each strategy selected in the plan to reduce a targeted barrier to a strategic goal, this section lists the rationale for that strategy (i.e., why the school believes it will reduce the barrier) and the action steps that have been identified as necessary to implementing the strategy, including details such as the point person, timing and duration, and evidence of completion. At the end of each set of action steps is the plan for monitoring the implementation and effectiveness of the respective strategy.*

### Problem Solving Key


**G** = Goal

**B** =  
Barrier


**S** = Strategy

 = Problem Solving Step     S123456 = Quick Key

**G1.** If core instruction is increased in all content areas then student achievement will improve. 1

 G097061

**G1.B1** Inconsistent infusion of literacy throughout the curriculum. 2

 B261110

**G1.B1.S1** Administration will meet with appropriate departments to plan professional development activities and develop effective strategies that will be used throughout content classes. 4

 S276469

### **Strategy Rationale**

To increase instruction in all content areas in order to improve student achievement.

### **Action Step 1** 5

Administration will meet with appropriate departments to plan the professional development to develop effective strategies that will be used throughout content areas.

#### **Person Responsible**

Cadian Collman-Perez

#### **Schedule**

Monthly, from 8/21/2017 to 6/7/2018

#### **Evidence of Completion**

Agenda and Sign- in sheets

### **Action Step 2** 5

Administration will meet with the LLT Team to analyze student achievement data and use this data to drive instruction.

#### **Person Responsible**

Cadian Collman-Perez

#### **Schedule**

Monthly, from 8/21/2017 to 6/7/2018

#### **Evidence of Completion**

Meeting Agenda and Minutes

### Action Step 3 5

Department teachers will plan collaboratively to develop activities and best practices that focus on infusing literacy.

**Person Responsible**

Cadian Collman-Perez

**Schedule**

Monthly, from 8/21/2017 to 6/7/2018

***Evidence of Completion***

Classroom Walkthroughs

### Action Step 4 5

Administration will promote print-rich classroom environments.

**Person Responsible**

Cadian Collman-Perez

**Schedule**

Weekly, from 8/21/2017 to 6/7/2018

***Evidence of Completion***

### Plan to Monitor Fidelity of Implementation of G1.B1.S1 6

Monitor the fidelity of professional development sessions and implementation of effective strategies identified.

**Person Responsible**

Cadian Collman-Perez

**Schedule**

Monthly, from 8/21/2017 to 6/7/2018

***Evidence of Completion***

Administrators will monitor student data and provide instructional feedback during walkthroughs

**Plan to Monitor Effectiveness of Implementation of G1.B1.S1** 7

The administrators will monitor for effectiveness by conducting classroom walkthroughs

**Person Responsible**

Cadian Collman-Perez

**Schedule**








Weekly, from 8/21/2017 to 6/7/2018

***Evidence of Completion***

Administrators will monitor for effectiveness utilizing walkthrough observations and lesson plans



## IV. Implementation Timeline

Source	Task, Action Step or Monitoring Activity	Who	Start Date (where applicable)	Deliverable or Evidence of Completion	Due Date/ End Date
<b>2018</b>					
G1.MA1  M400621	The Leadership Team will review progress towards the goal and annual targets will be monitored...	Collman-Perez, Cadian	8/21/2017	Middle grades i-Ready Data and District Interim Assessment data and will reveal progress towards the goal and annual targets will be met.	6/7/2018 monthly
G1.B1.S1.MA1  M400619	The administrators will monitor for effectiveness by conducting classroom walkthroughs	Collman-Perez, Cadian	8/21/2017	Administrators will monitor for effectiveness utilizing walkthrough observations and lesson plans	6/7/2018 weekly
G1.B1.S1.MA1  M400620	Monitor the fidelity of professional development sessions and implementation of effective...	Collman-Perez, Cadian	8/21/2017	Administrators will monitor student data and provide instructional feedback during walkthroughs	6/7/2018 monthly
G1.B1.S1.A1  A372496	Administration will meet with appropriate departments to plan the professional development to...	Collman-Perez, Cadian	8/21/2017	Agenda and Sign- in sheets	6/7/2018 monthly
G1.B1.S1.A2  A372497	Administration will meet with the LLT Team to analyze student achievement data and use this data...	Collman-Perez, Cadian	8/21/2017	Meeting Agenda and Minutes	6/7/2018 monthly
G1.B1.S1.A3  A372498	Department teachers will plan collaboratively to develop activities and best practices that focus...	Collman-Perez, Cadian	8/21/2017	Classroom Walkthroughs	6/7/2018 monthly
G1.B1.S1.A4  A372499	Administration will promote print-rich classroom environments.	Collman-Perez, Cadian	8/21/2017		6/7/2018 weekly

## V. Professional Development Opportunities

*Professional development opportunities identified in the SIP as action steps to achieve the school's goals.*

**G1.** If core instruction is increased in all content areas then student achievement will improve.

**G1.B1** Inconsistent infusion of literacy throughout the curriculum.

**G1.B1.S1** Administration will meet with appropriate departments to plan professional development activities and develop effective strategies that will be used throughout content classes.

### **PD Opportunity 1**

Administration will meet with appropriate departments to plan the professional development to develop effective strategies that will be used throughout content areas.

#### **Facilitator**

Ruth Gutierrez, PD Liaison

#### **Participants**

All teachers

#### **Schedule**

Monthly, from 8/21/2017 to 6/7/2018

## VI. Technical Assistance Items

*Technical Assistance opportunities identified in the SIP as action steps to achieve the school's goals.*

## VII. Budget

1	G1.B1.S1.A1	Administration will meet with appropriate departments to plan the professional development to develop effective strategies that will be used throughout content areas.	\$0.00
2	G1.B1.S1.A2	Administration will meet with the LLT Team to analyze student achievement data and use this data to drive instruction.	\$0.00
3	G1.B1.S1.A3	Department teachers will plan collaboratively to develop activities and best practices that focus on infusing literacy.	\$0.00
4	G1.B1.S1.A4	Administration will promote print-rich classroom environments.	\$0.00
Total:			\$0.00