

AMA/losco Math Science Center

**UPDATE TO FIVE YEAR STRATEGIC PLAN INCORPORATING QUALITY INDICATORS
2010 – 2011 up to 2015-2016**

Performance Effectiveness Indicator for Leadership:

Centers assess needs, leverage resources, and promote collaboration in improving mathematics and science education

Identified Leadership Needs Based on a Current Comprehensive Needs Assessment:

- Due to reduced funding, leadership services are limited to informal communication with teachers involved in our student services programs and state wide initiatives.

Center Five Year Goals for LEADERSHIP:

- L1. Effective Communication of the services available to local districts
- L2. Encourage local district to participate in statewide initiatives

FOCUS OF PROGRAMMING YEAR ONE —LEADERSHIP

L1. Effective communication of the services available to local districts		
<p>List of planned programs for Year 1</p> <p>L1.1 AMA/Iosco Math Science Center will provide teachers and administrators with information and resources through the center Web site and moodle</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <p>Are local teachers positively affected by their interactions with the center?</p>	<p>References for data gathering:</p> <p>Evaluations from professional development opportunities</p>

L2. Effective Communication of the services available to local districts		
<p>List of planned programs for Year 1:</p> <p>L2.1. AMA/Iosco MSC will continue to improve communication about available services to local districts</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <p>1. Does communication utilizing center Web site and e-mail effectively educate teachers about available services?</p>	<p>References for data gathering:</p> <p>2. Input received from administrators at monthly curriculum meetings, and from teachers during professional development.</p>

Performance Effectiveness Indicator for Professional Development:

Educators who participate in Center Professional Development reflect best instructional practices in their own settings.

Identified Professional Development Needs Based on a Current Comprehensive Needs Assessment:

- Based upon input received in recent AMA wide curriculum meetings, from administrators and teachers, professional development is needed in the implementation of content expectations, use of companion documents, instructional strategies to improve student success in mathematics and the continued implementation of technology where appropriate for improved instruction.

Center Five Year Goals for Professional Development:

PD1. Professional Development activities will reflect the needs identified by local curriculum representatives, teachers and administrative representatives.

PD2. Professional Development activities will be measured by evaluation from participants, monitoring of summative test data and by input from administrative representatives.

FOCUS OF PROGRAMMING YEAR ONE PROFESSIONAL DEVELOPMENT

<p>Goal PD1 Professional Development activities will reflect the needs identified by local curriculum representatives, teachers and administrative representatives.</p>		
<p>List of planned programs for Year 1:</p> <p>PD1.1 Continue to participate in monthly AMA Curriculum meetings to review professional development needs and progress</p> <p>PD1.2 AMA/ Iosco MSC will assist in the training and development of MMPI (Michigan Mathematics Program Improvement) teams.</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <ol style="list-style-type: none"> 1. Do AMA curriculum members feel that their input has an effect? 2. Do local MMPI building teams exist? 	<p>References for data gathering:</p> <ol style="list-style-type: none"> 1. Meeting minutes 2. Participation in MMPI professional development and MMPI Building plans have been submitted to the AMA MMPI Team.
<p>Goal PD 2: Professional Development activities will be measured by evaluation from participants, monitoring of summative test data and by input from administrative representatives.</p>		
<p>List of planned programs for Year 1:</p> <p>PD2 AMA/Iosco MSC personnel will continue to monitor results of summative test data</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <ol style="list-style-type: none"> 2. Do local districts utilize summative test data in preparing plans for future PD to improve instruction? 	<p>References for data gathering:</p> <ol style="list-style-type: none"> 2. Meeting minutes and notes.

Performance Effectiveness Indicators for Student Services:

Students impacted (directly and indirectly) by Center programs demonstrate progress toward mathematics and science literacy

Students will elect to participate in mathematics and science opportunities in greater numbers

Identified Student Service Needs Based on a Current Comprehensive Needs Assessment:

- Many of our schools lack adequate facilities and outdoor experiences to encourage further study and develop interest in mathematics and science. At the same time many of our students come from disadvantaged and/or poor homes. Student services would be provided to advance student knowledge in identified areas while providing enriching experiences which may not be available either at home or at their school.

Center Five Year Goals for Student Services:

SS1. Continue to make day visit programs available to all local schools, using the unique opportunities of Sprinkler Lake Education Center to improve student understanding of math and science.

SS2. Provide opportunities for students to explore math and science during the summer.

AMA/Iosco MSC FIVE YEAR STRATEGIC PLAN 2010 – 2011 up to 2015-2016

FOCUS OF PROGRAMMING YEAR ONE —STUDENT SERVICES

<p>Goal SS 1: Continue to make day visit programs available to all local schools, using the unique opportunities of Sprinkler Lake Education Center to improve student understanding of math and science.</p>		
<p>List of planned programs for Year 1:</p> <p>SS1 AMA/Iosco MSC will make day visits to Sprinkler Lake Education Center available to all local schools.</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <p>1. Do area schools participate in the day visits programs?</p>	<p>References for data gathering:</p> <p>1. Day visit schedule of participating schools, evaluations and student pre/posttests.</p>

<p>Goal SS 2: Provide opportunities for students to explore math and science during the summer.</p>		
<p>List of planned programs for Year 1:</p> <p>SS2 AMA/Iosco MSC will make summer science and math opportunities at Sprinkler Lake Education Center available to all local students.</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <p>1. Were summer science programs offered and did students enroll in them?</p>	<p>References for data gathering:</p> <p>1. Enrollment data from summer program and evaluations.</p>

Performance Effectiveness Indicator for Curriculum Support:

Districts will develop and implement aligned curricula in mathematics and science classrooms

Identified Curriculum Support Needs Based on a Current Comprehensive Needs Assessment:

- There is a need for science and math educators in the AMA/Iosco service area to ensure alignment of the curricula in the areas of mathematics and science to determine whether teaching, learning, and assessment is appropriate for current state content expectations and summative evaluations.

Center Five Year Goals for Curriculum Support:

CS1 AMA/Iosco MSC will continue to support local district efforts to ensure alignment of the curriculum to content expectations.

FOCUS OF PROGRAMMING YEAR ONE — CURRICULUM SUPPORT

Goal CS 1: AMA/Iosco MSC will continue to support local district efforts to ensure alignment of the curriculum to content expectations.		
List of planned programs for Year 1: CS1. AMA/Iosco MSC will continue to participate with curriculum committee activities associated with the alignment of science and mathematics content expectations.	Assessment Questions for Center Performance Effectiveness 1. Are local districts actively working to align curricula and adapt best practices?	References for data gathering: 1. Meeting minutes and notes.

Performance Effectiveness Indicator for Community Involvement:

Individuals and groups from the community understand and support the goals and activities of the Center

Identified Community Involvement Needs Based on a Current Comprehensive Needs Assessment:

- The community as a whole may have specific needs in the areas of mathematics and science education. At the same time, community members can be an important resource to the mathematics and science center in terms of demonstrating real-world use of mathematics and science in the workplace.

Center Five Year Goals for Community Involvement:

CI1.0 Family and community math science programs will be provided for the public. These programs will have hands on activities related to science, math and the environment.

CI2.0 Cooperative programs with local organizations and agencies (such as the USFS, DNR, Soil Conservation Districts, service groups, etc.) will be offered to expand student learning and awareness of STEM careers.

AMA/Iosco MSC FIVE YEAR STRATEGIC PLAN 2010 – 2011 up to 2015-2016

FOCUS OF PROGRAMMING YEAR ONE – COMMUNITY INVOLVEMENT

Goal CI 1: Family and community math science programs will be provided for the public. These programs will have hands on activities related to science, math and the environment.

<p>List of planned programs for Year 1:</p> <p>CI1. AMA/Iosco MSC will provide local communities the opportunity to participate in Math Science Family Nights.</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <p>1. Do local schools and groups choose to host Math Science Family Nights?</p>	<p>References for data gathering:</p> <p>1. Math Science Family Night schedule and participant sign in sheet and evaluations.</p>
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Goal CI 2: Cooperative programs with local organizations and agencies (such as the USFS, DNR, Soil Conservation Districts, service groups, etc.) will be offered to expand student learning and awareness of STEM careers.

<p>List of planned programs for Year 1:</p> <p>CI2. AMA/Iosco MSC will continue to collaborate with local organizations and agencies.</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <p>2. Do schools elect to participate in programs involving local agencies and organizations?</p>	<p>References for data gathering:</p> <p>2. Program schedule, evaluations and student pre/post-tests.</p>
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Performance Effectiveness Indicator for Resource Clearinghouse:

Resources provided by Centers are used to support best practices in mathematics/science education

Identified Resource Needs Based on a Current Comprehensive Needs Assessment:

- Local Science and Mathematics teachers feel a need to have AMA/Iosco MSC serve as a clearinghouse for resources making equipment and electronically available sources easier to access.

Center Five Year Goals for Resource Clearinghouse:

RC1 AMA/Iosco MSC will serve as a clearinghouse for resources to support the teaching of Michigan's content expectations for Mathematics and Science.

FOCUS OF PROGRAMMING YEAR ONE — RESOURCE CLEARINGHOUSE

<p>Goal RC 1: AMA/Iosco MSC will serve as a clearinghouse for resources to support the teaching of Michigan’s content expectations for Mathematics and Science.</p>		
<p>List of planned programs for Year 1:</p> <p>RC1.1 AMA/Iosco MSC will incorporate resource information into professional development and outreach activities.</p> <p>RC1.2 AMA/Iosco MSC will encourage local districts to include resource links in their local mathematics/science curriculum Web pages.</p>	<p>Assessment Questions for Center Performance Effectiveness</p> <ol style="list-style-type: none"> 1. Do teachers feel that adequate assistance is provided in locating resources to support instruction? 2. Are resource links available through local districts Web pages? 	<p>References for data gathering:</p> <ol style="list-style-type: none"> 1. Professional development evaluations. 2. Resources linked through local ESD and some local districts.