

Michigan Department of Education Mathematics Update

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Updates include:

- GLCE website
- GLCE testing
- High school reform
- Michigan Merit Exam



GLCE Website

- www.michigan.gov/glce
- Contents organized by grade level
 - “One-stop shopping” for teachers
- Will also have a parent section
- Please send comments and suggestions for improvement



GLCE Website

- Includes new alignment documents
- Alignment at a Glance
 - Look up expectation and find related benchmarks
 - Makes Mi-Climb easier to use with expectations
- MCF Alignment
 - Look up benchmark and find expectation
 - Adapted from original grade-span document



Page Sample

This Grade Specific packet includes the following documents:

- [Michigan Curriculum Framework \(MCF\)](#)
- [Teaching, Learning and Assessment Standards \(MCF\)](#)
- [Grade Level Content Expectations \(GLCE\)](#)
- [Content Expectations Across the Grades](#)
- [Alignment at a Glance](#)
- [MCF Alignment Document](#)



Alignment at a Glance

GRADE LEVEL CONTENT EXPECTATIONS ALIGNED TO THE MICHIGAN CURRICULUM FRAMEWORK

Mathematics Alignment At A Glance First Grade

The method used to identify standards and benchmarks is as follows:

Strand- IV

Standard- 1

Benchmark 1 = IV.1.1



GLCE Code	Standards and Benchmarks	GLCE Code	Standards and Benchmarks
NUMBER & OPERATIONS		MEASUREMENT	
Count, write, and order whole numbers		Estimate and measure length	
N.ME.01.01	I.1.1, IV.1.1, IV.1.2, IV.2.3	M.UN.01.01	II.3.1, II.3.3, II.3.4
N.ME.01.02	IV.1.1, IV.1.2, IV.2.3	M.UN.01.02	II.3.1, II.3.3
N.ME.01.03	IV.1.1, IV.2.2, IV.2.3, IV.3.1, VI.2.2		
N.ME.01.04	IV.1.1, IV.1.2, IV.3.1		
N.ME.01.05	IV.1.1, IV.3.1, II.2.1		
N.ME.01.06	IV.1.1, IV.1.2		
Explore place value		Tell time	
N.ME.01.07	IV.1.1, IV.1.2, IV.1.3, IV.3.2, V.1.3, V.2.2	M.UN.01.03	II.3.1, II.3.4
		Work with money	

MCF Aligned to GLCE

Middle School (Fifth Grade) Benchmark 1

Select and use appropriate tools; measure objects using standard units in both the metric and common systems and measure angles in degrees.

Alignment	
GLCE Code	GLCE Description
M.TE.05.09	Understand the concept of volume: -Use filling (unit cubes or liquid), and counting or measuring to find the volume of a cube and rectangular prism
G.TR.05.01	Know the meaning of angles, and solve problems: -Associate an angle with a certain amount of turning; know that angles are measured in degrees; understand that 90° , 180° , 270° , and 360° are associated, respectively, with $1/4$, $1/2$, $3/4$ and full turns
G.GS.05.02	Know the meaning of angles, and solve problems: -Measure angles with a protractor and classify them as acute, right, obtuse or straight

Middle School (Fifth Grade) Benchmark 2

Identify the attributes to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time, temperature and money.

Alignment	
GLCE Code	GLCE Description
M.UN.05.01	Know, and convert among, measurement units within a given system: -Recognize the equivalence of 1 liter, 1000 ml and 1000 cm^3 and include conversions among liters, milliliters, and cubic centimeters
	Know, and convert among, measurement units within a given system:

GLCE Website

- In the future:
 - Rest of the parent documents
 - Clarification document
 - Similar to MiClimb in that each expectation will have clarifying statements, instructional and assessment examples and vocabulary lists.
 - Plan to have available by next summer



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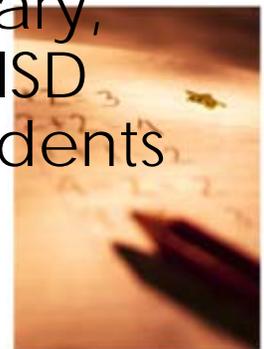
GLCE Testing

- Lots of good information is sent out via MEAP coordinators listserve
 - Directions can be found at www.michigan.gov/meap
- Updated list of core expectations and non-calculator expectations can be found at www.michigan.gov/mathematics



GLCE Testing

- New Report Format
 - Student Report
 - Information on strand and expectations within each strand
 - Separated out by core, extended, and future
 - Class Item Analysis Report
 - Broken down by strand, **domain** and expectation.
 - Other reports include school summary, demographics, feeder school and ISD summary. Broken down also by students with and without disabilities.



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High School Reform

TO: LEA and ISD Superintendents, Directors and Authorizers of
Public School Academies

FROM: Jeremy M. Hughes, Ph.D.
Deputy Superintendent/Chief Academic Officer

DATE: July 13, 2005

SUBJ: HIGH SCHOOL ACADEMIC CONTENT STANDARDS

About a year ago, the Michigan Department of Education embraced the challenge to initiate a "high school redesign" project. Since then, the national call to create more rigorous learning for high school students has become a major priority for state leaders across the country. The Cherry Commission Report highlighted several goals for Michigan including the development of high school content expectations that reflect both a rigorous and a relevant curricular focus.

High School Reform

External Variables

- NCLB – Assessments aligned to rigorous standards
- K – 8 GLCE – response to NCLB, set the stage for transition
- Michigan Merit Exam
- National attention to high school reform – Achieve and curricular standards
- Cherry Commission – Michigan’s economic future depends on postsecondary engagement
- National Governor’s Association – Enrolled Michigan in American Diploma Project
- MDE’s High School Redesign – 7 Action Teams: Content Standards, Assessment, Promising Practices
- Request from the Practitioners – Define high school expectations



High School Reform

Academic Review

- Dr. Joan Ferrini-Mundy is chairing the mathematics group
- Review current MCF, ADP, ACT, SAT, GLCE, CTE, NCTE, NCTM, SREB, McREL, PSSM, NAEP, CB standards and expectations
- Reorganize standards
- Define end-of-HS expectations
- Produce drafts for review by SBoE (Nov 2005)
 - MDE is proposing that go to Achieve and field review
 - Board needs to look at work done so far and then give direction for next steps



High School Reform

- MDE leads sharing of drafts, products, committee membership
- National Review (Achieve) and Web/Field Review (Nov – Dec 2005)
- Review comments; final edits (Jan 2006)
- Release final document in April



High School Reform

- New, more rigorous standards and expectations for high school
- No decision yet on how these will be organized
 - Strong push to have defined courses so that a class looks the same all across the state, i.e., Algebra II is the same in Pontiac as it is in Marquette.
- Keep updated through MDE-Mathematics listserv



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Michigan Merit Examination (MME) -Content Changes

- 10th graders will take a college entrance readiness test (ELA and Math! Science & Social Studies?) for dual enrollment
- MME consists of:
 - A college entrance test (**ACT**)
 - A science & social studies assessment
 - Augmented with items to ensure assessment of the full range of the Michigan Curriculum Frameworks, and
 - So that four performance levels can be set



The Michigan Merit Exam

- Based on recently passed legislation the MEAP assessments will be replaced with a new system of high school assessments
- The content and administration of the high school tests will change
- Michigan Merit Exam phased in over 3 years



High School Assessment Design

- Assessment Administration
 - Grade 10 - When scheduled locally
 - Grades 11 and 12 - Spring (March 1-June 1) and Fall (November)
 - Two days set by State
 - Day 1 College entrance tests
 - Day 2 Michigan-developed tests
 - Make-ups: two days slated two weeks later (Saturday for the college entrance test; following Tuesday for the Michigan components)



How will MME be phased in?

- During 2005-6 school year
 - ✓ OEAA selects contractor thru competitive bids
 - Assessment designs and items developed
 - Spring 2006: MME pilot study with a sample of 11th grade students to:
 - Scale college-entrance tests and state-developed tests together to create the (MME)
 - Set standards on MME equivalent to current MEAP HST passing scores
 - NOTE: MEAP is administered to students during Fall 2005 and Spring 2006



How will MME be phased in?

- Fall 2006
 - MEAP retest for 12th graders
 - College readiness test for dual enrollment starts(?)
 - MDE & OEAA apply for federal approval of MME
- Spring 2007
 - Last MEAP test for 12th graders
 - First MME for 11th graders



How will MME be phased in?

- 2007-2008 school year and beyond
 - MEAP Gone
 - MME for all 11th and 12th graders administered in fall and spring
 - College readiness test for dual enrollment
- Pending federal approval



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